YOUNG PEOPLE, SOCIAL INCLUSION AND DIGITALISATION

Emerging knowledge for practice and policy

Youth Knowledge #27

Youth Partnership

Partnership between the European Commission and the Council of Europe in the field of Youth

EUROPEAN UNION

COUNCIL OF EUROPE

CONSEIL DE L'EUROPE

YOUNG PEOPLE, SOCIAL INCLUSION AND DIGITALISATION

Emerging knowledge for practice and policy

Editorial team
Dan Moxon (Chief editor)
Adina Marina Șerban
Dunja Potočnik
Nuala Connolly
Lana Pasic
Veronica Ștefan

Youth Knowledge #27
Council of Europe and European Commission

The opinions expressed in this work, commissioned by the partnership between the European Commission and the Council of Europe in the field of youth, are the responsibility of the authors and do not necessarily reflect the official positions of either of the partner institutions, their member states or the organisations co-operating with them.

Cover design: Documents and Publications Production Department, Council of Europe
Layout: Jouve, Paris
Cover photo: Shutterstock

Council of Europe Publishing
F-67075 Strasbourg Cedex
http://book.coe.int

ISBN 978-92-871-8650-8

Printed at the Council of Europe

Contents

Introduction

Dan Moxon, Adina Marina Șerban, Dunja Potočnik, Lana Pasic and Veronica Ștefan

This publication is part of the Youth Knowledge series produced by the partnership between the European Commission and the Council of Europe in the field of youth; it follows on from the symposium Connecting the Dots: Young People, Social Inclusion and Digitalisation, held in Tallinn in 2018. The symposium explored the intersection between social inclusion of young people and digitalisation, reflecting especially on how digitalisation affects young people's lives, and what the role of youth policy, youth work and youth research can be in this respect. Alongside the knowledge book, a study entitled *Social inclusion, digitalisation and young people* (Șerban et al. 2020) has also been published. These various activities together can be seen as part of an emerging realisation that there is a need to focus on social inclusion as part of the digitalisation and youth agenda.

Social inclusion and young people

It is important to stress what we mean, and what we don't mean, by social inclusion in this book. We might start with the general idea that inclusion is somehow the reverse of exclusion. We might say that inclusion is about ensuring that people are not excluded from accessing education, healthcare, employment, affordable housing, a political voice, leisure activities, culture or many other things. We might then go on to say that inclusion is also linked to human rights, because human rights provide the basic minimum list of entitlements that any one person or group should have access to. We might also say that inclusion is linked to equality, because if some people have substantially less access to the world's resources than others, they are still somehow excluded.

If we consider how this might apply to young people, we must make a distinction between the social inclusion and the general inclusion of young people. These two concepts are sometimes mixed up in our multilingual European youth sector community. In this book we have tried to distinguish between them. Discussing the general inclusion of young people asks questions about the differences between generations. Exploring this leads us to consider why young people in general are more excluded from life opportunities than older generations – for instance, why they may have more precarious employment or less political influence. This type of exploration is a conversation about intergenerational inequality.

Discussing social inclusion and young people is about patterns of exclusion, inequality or denial of rights, and the way they vary between different social groups of young people. Focusing on social inclusion asks us to consider why young people with disabilities often have fewer employment and education opportunities than young people who are not disabled. It asks why young people who grow up in social care may be more likely to end up in the criminal justice system than those who don't. Or why young people from ethnic minority backgrounds may have poorer education

outcomes than majority ethnic groups. Social inclusion of young people is about the intersection of youth with other social categories. Discussing this requires an understanding that young people are not a homogeneous group, because youth as a category is intersected by other categories such as gender, sexuality, disability, rurality, ethnicity and religion. All of these topics are important, but this book is specifically focused on social inclusion and young people in the context of digitalisation.

Linking social inclusion and young people with digitalisation

In Chapter 1, Şerban and other members of the editorial team report the findings of the study on social inclusion, digitalisation and young people. This study explores policy developments relating to those three issues. Throughout Chapter 1, we identify policy initiatives (for all ages and not just for youth) that have often focused on what we might call access to the digital world. This recognises that some communities or people, perhaps as a result of living in poverty or lack of broadband infrastructure in their location, are simply less able to access digital tools and platforms. Alongside this question of access, digitalisation policy agendas have also focused on the need to educate the population to use digital tools. The goal of these initiatives is particularly to prepare society for the many digital forms of work in the future, and so the importance of training young people in these advanced digital tools is stressed within digitalisation policy. In Chapter 2, Leisti and Jaakola give an example of this form of work, exploring the role that Digitalents Helsinki plays in supporting young people who are marginalised in the labour market, helping them to access new forms of digital learning and high-tech work.

Perhaps because of the focus on connectivity within the wider digitalisation policy agenda, the youth sector and youth policy have had limited consideration of the intersection between social inclusion and digitalisation agendas. In fact, we have uncritically assumed that using digital tools would automatically promote social inclusion. Many believe that through technology we can extend the reach of youth programmes to be more inclusive. The mantra is repeated: as long as all young people can connect, we can imagine that offering youth opportunities online means that we will be offering them to all young people – so exclusion is no more!

However, as Banari (Chapter 3) along with Gombás and her colleagues (Chapter 4) highlight, access to the digital world is about more than just having a broadband connection. Just like physical spaces and traditional forms of information, modern applications and digital tools can easily exclude young people with disabilities if they are not designed to be accessible to people of all needs. Banari makes a powerful rights-based case that inclusion requires that digital technologies are designed with the purpose of being accessible and usable by people with disabilities. Gombás and her colleagues draw on their own experiences as visually impaired people to explore how access to a "screen without sight" can both include and exclude.

But social inclusion itself is about more than just accessibility. Delap, co-writing with a group of young queer activists about their experiences of the online world, shows in Chapter 5 how there is not one single online space or digital world to be connected to. Instead there are multiple virtual communities and spaces. Just like physical spaces, some online spaces can be filled with hate speech and discrimination,

while others can be enabling and affirming. Social inclusion means considering which of these virtual communities are dominant, and how that might be related to the exclusion and marginalisation of particular groups of young people. As one of the authors of this chapter says, the internet is "inherently a straight place". Panaghrahi, in Chapter 6, drawing from work in India, highlights the political consequences of this. He explores how lack of digital knowledge in minority languages can be part of the exclusion and political suppression of communities and groups in the physical world, which is something Europe can learn from in our multilingual society.

Salaj and McQuillan in Chapter 7 build upon this, highlighting how artificial intelligence, which is increasingly central to digital technologies, contains inbuilt value systems derived from the culture of the predominantly white American male billionaires that control them. They argue that the use of these technologies in policies and services for youth can inadvertently sustain discrimination and that a more democratic approach to their control is needed. Finally, in Chapter 8, Street and her colleagues show that the digital world itself may begin to exacerbate or cause harm and marginalisation. They explore the relationship between digitalisation and young people's mental health, noting the very real risks that occur for young people online, and they also challenge misconceptions.

That is not to say that digitalisation only offers the possibility of further exclusion for young people from marginalised groups. In this book there are many examples of how digital tools and technologies have facilitated social inclusion. Briggs, in Chapter 9, explores the way WhatsApp is used by refugees coming to Europe, both to provide support to each other and to stay in touch. He illustrates how, as a researcher looking to understand the needs of refugees, he needed to gain access to these virtual communities to do so. In Chapter 10, Curwen explores a similar mode of interaction, observing the ways that young people use the chat app Yik Yak, and she questions how online identities and anonymity might affect the way we offer virtual support to young people. She emphasises that for many young people it is easier to turn to peers online rather than use institutional support. Pérez-Caramés and colleagues, in Chapter 11, explore the ways in which young Spanish migrant communities use online communities as a source of support and interaction during their movements across Europe.

What is striking about all of these chapters is both how much emphasis there is on peer-to-peer support and how communities of young people are decoupled from geography. Both of these things have profound implications for the youth sector. Firstly, rather than seeing youth workers and youth programmes as providers of support to marginalised young people, we might begin to see them as curators of online spaces and communication channels, through which young people can provide support to each other. In that sense, the potential of digitalisation to empower large numbers of marginalised groups of young people begins to be revealed. However, this means that we might begin to talk of youth workers as community managers or online moderators, as much as being people who run programmes or educate.

Secondly, as shown in the work by Pérez-Caramés and her colleagues, as well as the contributions by Delap and his co-authors, these virtual communities of marginalised young people are not necessarily organised to align with the physical geographies

of place and nation. Identifying as a migrant or an LGBTQ+ young person can take precedence over physical location when a virtual community comes together. This has deep implications for youth policy. If digital spaces and virtual communities of marginalised young people are not always defined by the boundaries of the physical world, they are also not always aligned to the geopolitical boundaries of youth policy. The geographical borders within which various states, municipalities and institutions of Europe create and apply youth policies are less relevant in the virtual world. This poses deep challenges for youth policy and programmes: how do we create and resource effective policies for communities that are spread across multiple political boundaries?

We asked all authors in this volume to consider the implication of their work in relation to youth policy and practice, and there are some who focused on this directly. In Chapter 12, co-written between young people and youth workers, Taylor and his colleagues consider how using digital tools in rural areas forced them to challenge their ideas about the power balance between youth workers and young people. Schmidt and colleagues, in Chapter 13, explore the pedagogical approaches necessary to enable young people with disabilities to learn coding. In Chapter 14, Bohnenkamp and Findeisen draw on their work in a university setting to argue that there is a need to shift from education in digital skills to digital ethics.

Taking all of these complex discussions into account, two important chapters close this volume. In Chapter 15, Connolly and Kenny propose ways in which states may draw on the existing knowledge base to realise their rights-based obligations in a range of ways with holistic collaborative approaches to digital policy development. In Chapter 16, Siurala considers what all this means for the management and development of digital youth work.

However, while the volume may be closed by Chpater 16, this topic is not complete. There are many more stories of inclusions and exclusions to tell that are not covered within this book. If inclusion is the goal that the youth sector sets itself, there will always be more young people to include. There will always be more groups of young people whom we did not yet reach, more groups of young people within our societies, communities and nations who are more marginalised and excluded from their rights than others, and more excluded than you and I are. Digital tools, if used correctly, might help us be more inclusive but we should always consider inclusion as an ongoing quest.

So, while this knowledge book highlights some of what is known about the intersection between social inclusion and digitalisation, it is not comprehensive. But, if we are committed to social inclusion, we must also commit to the idea that knowledge is incomplete and partial. Knowledge is produced by someone, or some group. We are proud to present a platform through which various authors have presented their perspectives on social inclusion and digitalisation. But we caution the reader that each of these chapters is expressed from the position of the authors who write them, from their world views and rooted in their experience. From their position they see some, but not all, of the exclusions and inclusions of the digital world. The very nature of exclusion means that there will be others whose voices we have not heard, or who see the digital world differently.

Chapter 1

An overview of social inclusion, digitalisation and young people

Adina Marina Șerban, Dan Moxon, Dunja Potočnik, Lana Pasic and Veronica Ștefan

Introduction

This chapter looks at the current effects of digitalisation on social inclusion and how the two concepts might be understood and interlinked within the youth sector. It is based on a research study in 2019 by the same group of authors, which looked at social inclusion, digitalisation and young people (Șerban et al. 2020), and the intersection of these themes across Europe.

Within the youth field, social inclusion is a concept better understood than digitalisation, because of the long-term commitment of European institutions and youth organisations to this topic, which encompasses a broad range of sub-topics, such as employment, education, employability, health or participation. Digitalisation, on the other hand, is a fairly recent topic – to society at large and to the youth sector in particular. It refers to the use of digital tools and opportunities, but also to the social phenomenon of the increasing importance of digital technology, mass communication and online spaces and communities. Digitalisation has spontaneously made its way into youth work, and its presence and use in the youth sector has grown significantly over the last few years. Now accepted as part of the sector's practice, it has often been assumed that digital tools offer a panacea for reaching out to include more young people, especially those ones considered hard to reach because of different social, geographical or economic conditions, disabilities, physical constraints or cultural barriers. Yet social inclusion, as it relates to the digital world, is about more than just access to technology and can be considered a complex, multidimensional concept.

To understand social inclusion it is of crucial importance to recognise that some groups of young people, such as those with migrant backgrounds, might encounter limited access to some life chances and opportunities when compared to others. The EU-Council of Europe youth partnership's study on barriers to social inclusion, *Finding a place in modern Europe* (EU-Council of Europe 2015b), refers to five areas of possible inclusion or exclusion: education, the labour market, living, health and participation. The five areas of social inclusion can be referred to as "safety nets" since they provide basic resources and prerequisites for the fulfilment of everyday needs. However, some of the above-mentioned groups of young people are either facing difficulties using these safety nets or are having quite unstable safety nets,

which leave them socially excluded compared to other young people. Ultimately, the social inclusion of young people cannot be understood solely by reference to youth as a homogeneous population. A full understanding of inequality, marginalisation and exclusion of different demographic sub-groups of young people is necessary.

In contemporary youth practice, digital means of social inclusion can be understood as another dimension of such safety nets, but only if the potential risks and opportunities for youth of digitalised social inclusion are very carefully considered. The rapid growth of internet access, connectivity and reliance on technology has not only determined the swift development of the digital world; it has also determined a new landscape for inequality, caused by varying access to digital tools and instruments as well as exclusion or inclusion within online spaces and communities. Technological change has had profound implications on young people's development and social integration. It requires them to quickly build the skills and competences needed for the digital era. Yet, "being digitally competent is more than being able to use the latest smartphone or computer software — it is about being able to use such digital technologies in a critical, collaborative and creative way" (European Commission 2017).

The first part of this chapter looks at existing digital policies at the European level before exploring their intersection with youth policy and the social inclusion of marginalised young people, produced through a documentary analysis of the various European supranational policy-making bodies. This is then followed by an analysis of national youth policies and youth sector practice at national and local level. This analysis is based on an open questions survey, including correspondents from the European Centre for Knowledge on Youth Policy (ECKYP) and other core stakeholders from the European youth sector. Overall, 38 respondents from 23 countries responded to the questionnaire. While this represents a small sample size, the aim of the analysis is to provide a snapshot of the relevant practices in the youth sector and to explore how digital tools are used to promote social inclusion across Europe.

Review of relevant policies at European and national levels

In this section, by reviewing the relevant documents, we explore essential concepts such as digital accessibility and digital inclusion, looking for digital means of youth social inclusion. We analyse the questionnaires and those existing practices at the national and local level which have the potential of being replicated in other contexts.

Relevant policies at the European Union Level

The European Union (EU) emphasises that Europe needs digitally smart people in order to successfully undergo digital transformation (European Commission 2016). Digital transformation involves the active inclusion of young people, ensuring that they are fully prepared to take advantage of digitalisation. It is argued that European governments understand both the changing realities shaped by digitalisation and the need for a policy framework that will facilitate the use of opportunities and regulate the potential risks of this new context.

When it comes to European policy on youth and digitalisation, the agenda has two dimensions. First, the digitalisation agenda, driven primarily by the EU, which

at times refers to young people but not through a separate agenda; this is a plan for all EU citizens. Second, the youth policy agenda, driven by both the EU and the Council of Europe, which is now increasingly focused on promoting digital tools in the youth sector. In both dimensions, the relationship between social inclusion and digitalisation has the potential of becoming one of the key topics in the near future but is not always directly addressed.

Until the present, European bodies have generally looked at the social inclusion of young people through the social investment approach (Eurofound 2015). They have mainly focused on reducing the barriers to access – such as reducing bureaucratic procedures or paperwork. Moreover, the new policies and programmes have aimed to facilitate access through applications to different youth programmes and projects for socially disadvantaged youth, for which purpose digital tools have been seen as essential.

Since 2010 many EU countries have engaged in developing frameworks and policies addressing digitalisation and new technologies. The EU took responsibility for harmonising and co-ordinating these efforts, first in 2010 with the adoption of the Digital Agenda for Europe (European Commission 2010b), later intensified in 2015 with the Digital Single Market for Europe (European Commission 2015), when digitalisation was highlighted as the second top priority out of the 10 identified for the 2014-2019 Commission plan, and finally in 2020, with the new EU digital strategy, Europe Fit for the Digital Age, closely linked with the EU flagship initiative – the European Green Deal, aiming to build on previous policy efforts by putting the citizen at its centre. One of the three pillars is focused on "Technology that works for the people", including actions that address investment in digital competences and the development of artificial intelligence that respects people's rights and is designed to earn their trust (European Commission 2020b).

Overall it has been noted that the biggest budgets and most important priorities have been mostly related to connectivity or internet infrastructure. It is only in recent years that more visibility has been given to education and inclusion, as 43% of EU citizens still lack basic digital skills (European Commission 2019b).

The EU Digital Single Market included as a priority "An inclusive e-society – The Commission aims to support an inclusive Digital Single Market in which citizens and businesses have the necessary skills and can benefit from interlinked and multilingual e-services, from e-government, e-justice, e-health, e-energy or e-transport". In this context the EU has included as a specific priority within EU funding (EU Social Fund, Regional funds or Erasmus+) the development of skills necessary in this new digital era.

From the EU perspective, digital inclusion is mainly focused on making information and communication technologies (ICT) more accessible and using ICT to reduce marginalisation. Lately, policy and programmes have been developed with the aim of increasing the participation rate of disadvantaged people in public, social and economic activities through social inclusion projects. In the field of youth, it is also relevant that the Commission, through its programmes and policies, acts to address the needs of young people with a great focus on young people in NEET (not in education, employment or training) situations. A new skills agenda for Europe (European Commission 2016) highlighted the need for member states to set up national digital

strategies by mid-2017 and to have efficient measures put in place so that the skills required by the labour market, including digital skills, can be developed within their education systems.

While the EU's digital agenda is not youth-specific, it provides a key backdrop and discourse that has framed much of initial discussion about social inclusion, digitalisation and youth. This discourse brings in two dimensions that inform thinking about social inclusion in youth policy: firstly, the importance of making access to the internet and internet services more equitable, and secondly the importance of developing digital skills in order to be included in the employment market. These dimensions can both be seen in the work of the European Commission's 2016 expert group on "risks, opportunities and implications of digitalisation for youth, youth work and youth policy" which focused on reviewing the "digital natives" discourse and looking at the challenges that young people face in the online world and at the impact of the internet and social media on youth participation and youth work. In addition, the study on youth participation in democratic life (European Commission 2013) went on to highlight how the digital divide created by access to the internet and social media for young people from disadvantaged backgrounds also leads to the "voice divide" on digital platforms.

Within this overarching context, the youth policy agenda has focused primarily on the use of digital tools in the youth sector. It is argued that as young people's needs and interests change – and particularly as they embrace the online world – youth work should also evolve. This requires youth workers to develop their digital skills to be able to conduct smart youth work and understand the issues that youth face online. The EU Council's resolution on encouraging the political participation of young people in democratic life in Europe (Council of the EU 2015) states the need for transparent and easy-to-communicate actions and policies in terms of inclusivity and equal access for all young people, including the development of digital tools for political participation.

In addition, smart youth work methodologies are designed to align with the European Digital Competence Framework for Citizens (European Commission 2017) and the Digital Education Action Plan (European Commission 2018b). Online participation is also seen as enabling and empowering, as promoted by the EU Youth Strategy 2019-2027, which invites EU member states to "explore and promote the use of innovative and alternative forms of democratic participation, e.g. digital democracy tools, and facilitate access in order to support youth participation in democratic life and engage young people in an inclusive way, while being aware that some young people do not have access to the internet and digital technologies, or the skills to use them" (European Commission 2018c). The central idea is that usage of digital media revolves around their functions as enabling, capacitating and empowering agents. These functions of digital media are backed by their two most powerful characteristics – anonymity and protection of identity. Young people are strongly attracted by the anonymity of digital media, especially when it comes to their use in leisure-time activities.

Engaging, Connecting and Empowering Young People: A New EU Youth Strategy (European Commission 2018c) underlines all the challenges and risks that young people are facing in contemporary societies. But it also states that "this generation

is the best educated ever and among the most creative in using Information and Communication Technologies and social media". Member states are invited to adapt digital opportunities and to create the framework for youth workers to use the technology alongside their pedagogical practices to increase access and help young people cope with digital means.

In addition, steps should be taken to encourage the participation of marginalised youth in democratic life through digital tools. The policy documents mentioned above suggest that decision makers should be transparent about their actions and use more social media tools to communicate with young people. The development of digital skills was also extensively promoted through the EU programme in the field of youth – Erasmus+ 2012-2018 and through the EU Youth Dialogue. One of the key actions that could address the digital divide is the European Solidarity Corps Programme, which aims to "enhance the engagement of young people and organisations in accessible and high-quality solidarity activities with a view to contributing to strengthening cohesion, solidarity and democracy in Europe, with particular effort to the promotion of social inclusion" (European Parliament 2018).

The Council of Europe

The Council of Europe has worked extensively on ensuring a safer internet for children and young people. The Council of Europe's Internet Governance Strategy (2012-2015) attaches importance to the rights of internet users, while the Council of Europe Strategy for the Rights of the Child (2016-2021), reinforced by Recommendation CM/Rec(2018)7 of the Committee of Ministers to member States on Guidelines to respect, protect and fulfil the rights of the child in the digital environment (Council of Europe 2018), focused on children's rights on the internet. The documents are in line with the Guide to Human Rights for Internet Users (Council of Europe 2014) that has a dedicated section for children and young people.

Recommendation CM/Rec(2017)4 of the Committee of Ministers of the Council of Europe on the access of young people from disadvantaged neighbourhoods to social rights (Council of Europe 2017a: 18-19) acknowledged that – as one of the means of accomplishing youth social inclusion – all young people should have equal access to public amenities, including post offices, community centres, youth work centres, employment services and ICT.

Council of Europe Recommendation CM/Rec(2018)7 on Guidelines to respect, protect and fulfil the rights of the child in the digital environment (Council of Europe 2018) calls upon the member states to ensure that policies and initiatives are informed by rigorous and up-to-date evidence about young people's experiences in the digital environment. It should be done in order to map existing opportunities and risks for young people, identify emerging trends and guide the targeting of policy and resources to ensure young people's well-being in the digital environment.

Joint efforts: the EU-Council of Europe youth partnership

In 2018 the EU-Council of Europe youth partnership organised the symposium Young People, Social Inclusion and Digitalisation, in Tallinn, Estonia, to discuss the

intersection between social inclusion of young people and digitalisation. The event produced a set of conclusions in the report Connecting the Dots (EU-Council of Europe 2018b), indicating that the digital reality further increases inequalities and exacerbates the accumulation of advantages and disadvantages, so we need to better understand the reality of digitalisation in young people's lives, the implications for the youth sector and the adaptions required from youth work and youth policy in order to be better prepared to face the challenges and exploit the opportunities that current and new digital tools and trends offer. Furthermore, the EU-Council of Europe youth partnership has produced extensive knowledge on the theme of social inclusion, in particular: the Youth Knowledge book *Social inclusion for young people: breaking down the barriers* (EU-Council of Europe 2007), the follow-up to the study Mapping of Barriers to Social Inclusion of Young People in Vulnerable Situations, titled *Finding a place in modern Europe* (EU-Council of Europe 2015b), the outcomes of the seminar on the role of youth work in supporting young people in vulnerable situations (EU-Council of Europe 2014), Beyond Barriers: a youth policy seminar on social inclusion of young people in vulnerable situations in South East Europe (EU-Council of Europe 2015c), *T-Kit 8: Social Inclusion* (Council of Europe 2017b) and the knowledge stemming from the symposium on Youth Participation in the Digitalised World (EU-Council of Europe 2015a). In addition, the symposium (Un)Equal Europe in 2016 explored the increasing inequalities among young people due to social, geographic or economic reasons and the polarisation of society with respect to accumulation of advantages and/or disadvantages.

The Youth Department of the Council of Europe's seminar Artificial Intelligence and its Impact on Young People, in December 2019, discussed approaches to and understandings of artificial intelligence (AI), its impact on young people and the role of the youth sector in working with AI. In 2016, the EU organised an expert group on "Risks, opportunities and implications of digitalisation for youth, youth work and youth policy", under the Work Plan for Youth 2016-2018, which produced *Developing digital youth work. Policy recommendations, training needs and good practice examples for youth workers and decision-makers* (European Commission 2019a: 6).

In general, European youth policy for both the EU and the Council of Europe has presented the use of digital tools as a solution to inclusion. It is generally assumed that digital tools are, by design, more inclusive and provide an advantage for the youth sector in reaching young people from marginalised backgrounds. But it may not be the case for all groups of young people (see for example Chapter 4 by Gombás et al. and Chapter 5 by Moxon et al., in this volume) and this assumption requires greater critical scrutiny and further research.

National policies relating to youth, digitalisation and social inclusion

Respondents to the survey (n=38) provide examples of national policies and initiatives that address digitalisation and connect with young people's skills, inclusion or online safety in 23 different countries. The examples highlight efforts made by various governments to advance the digital agenda and promote digital skills, particularly in formal education (including by updating national curricula or supporting teachers'

skills), to support infrastructure development, to ensure schools' access to internet and to develop digital public services. Unsurprisingly, considering that this is a new topic in the field, most answers relate to social inclusion policies and to measures that indicate fairly limited use of new technologies. The examples highlight practices where digitalisation is used as a tool to reach out to young people or cases where digital instruments are put in place for reasons of innovation or for the general advancement of society.

Across the responses, there are countries where clear and well-defined national policies and initiatives – addressing digitalisation and connections with young people's skills, inclusion or online safety – have been put in place, such as Albania (through the National Policy for the Protection of Children and Youth Online) or Estonia, as well as countries where the available European grant schemes have allowed the development of pilot initiatives, such as Belgium (Pilot initiative Erasmus+ Virtual Exchange).

In other countries, such as Croatia, Greece, Ireland, Malta and Serbia, the subject of digitalisation mainly resides with the formal education system, linking ICT, STEM (science, technology, engineering, mathematics) and digitalisation. In the case of more recently adopted national youth strategies, there are references to digitalisation and inclusion of young people, even if they are not shaped as separate pillars (e.g. Greece).

There are also some examples of local policies targeting the advancement of digitalisation and the development of digital skills, as in the case of Tartu Municipality in Estonia where citizens can engage online using ICT and smart solutions in decision making in the city. Furthermore, it is clear that various public institutions across Europe have successfully developed online tools which allow for more transparent and faster approaches that could foster the social inclusion of young people – from the online platforms that monitor and support young people (the Estonian tool that monitors young people at risk of exclusion and provides early intervention measures) to the participation platforms for young people and youth organisations (Greece) or overall monitoring related to the process of digitalisation (Austria).

Overall, there are very few examples of national youth policies directly addressing both social inclusion and digitalisation. That is not necessarily to say that the digitalisation agenda omits social inclusion, but that social inclusion generally remains a peripheral consideration. This is a direct contrast to the national youth policies' approach, where social inclusion is not generally accepted as being a core value or consideration in any new programme or policy.

Social inclusion, digitalisation and young people: relevant practices across Europe

In addition to the policy dimension, 15 respondents identified youth sector practices that were relevant to social inclusion and digitalisation. These encompassed two dimensions:

1. Digital tools and online platforms available to young people and youth workers, or other platforms used by public institutions with the aim of fostering social inclusion.

2. Educational digital programmes and opportunities for:
    a. young people, including marginalised groups,
    b. youth workers and teachers.

Most of the examples presented were open access platforms accessible to those who are already familiar with ICT and who do not necessarily question the accessibility of these instruments – neither in terms of abilities nor knowledge. Not all of these platforms are directly targeting marginalised young people in order to promote social inclusion, but they are certainly a useful tool towards achieving that goal – particularly in the areas of education, mental and sexual health, cyber bullying and the rights of minorities. Youth workers and other youth practitioners have started to use some of these platforms, trying to improve the outreach of their projects and initiatives.

Most of the platforms identified had been developed by NGOs or private entities, while some were created by governmental bodies. The majority of them are designed exclusively for young people, addressing topics such as education, mental and sexual health, cyber bullying or rights of minorities. While many of these digital tools are mostly available through websites, a large majority also include mobile versions or applications and are accompanied by complementary means of communication, such as chat rooms, instant messaging apps, e-mails or phone lines. With most of the identified practices, young people were the beneficiaries rather than co-creators of the developed platforms, which makes it difficult to evaluate the extent to which these tools directly cater for young people's needs and interests, particularly those youth at risk of exclusion.

In terms of topics that the platforms cover, the practices can be clustered into six main categories:

1. Educational and professional guidance platforms, which help young people to engage in educational programmes, gain ICT skills, self-assess their skills and knowledge, identify and apply for jobs, and engage in gamified activities that reward involvement in various activities.
2. Information and counselling platforms are designed to raise awareness and provide guidance on a number of issues relevant to young people, from emotional well-being, self-esteem and the rights of young people (particularly those belonging to communities of ethnic minorities, refugees, immigrants, LGBTQIA+) to social problems and relationship issues (couples, friendship, family).
3. Health-related platforms range from mental health (addressed to young people in emotional crisis, depression and suicidal behaviour), substance and alcohol abuse, sexual activity or HIV services. Many of these platforms include 24/7 assistance, where young people can receive tailored support. In some cases they ensure the anonymity of the young person, in order to provide an open and safe space for sharing.
4. Platforms specifically targeted at marginalised young people are designed to support people of all ages with different disabilities, and not only youth, and enhance their capacity to participate in society. Such examples include mobile applications that guide visually impaired people (with voice information for their better orientation outdoors), light or motion detectors, scanning and

reading apps, or even Web platforms for physically disadvantaged people, which provide information about events that are accessible for them.

5. Online safety platforms are particularly addressed to children and teenagers, aiming to empower and protect them from the risks associated with online activity. They particularly deal with issues related to cyberbullying, illegal and harmful content or behaviour, and hate speech. Most of these platforms are accompanied by helplines or other online reporting mechanisms. These tools can be used by young people or by the adults around them to report online abuse.
6. Dialogue and consultation platforms and permanent websites have been developed, following the implementation of the EU Youth Strategy, by national youth councils and other youth organisations, as means of facilitating the EU Youth Dialogue and Structured Dialogue.

In summary, it can be concluded that, while the digital tools being developed by the youth sector clearly do address topics and themes that are relevant to the social inclusion of young people, social inclusion is not necessarily at the heart of their design, development and purpose. That is to say, the accessibility needs of young people from marginalised backgrounds are not necessarily their main focus, and nor are the platforms specifically targeted at or developed for marginalised groups, who also have a limited role in their development.

Conclusion

Digitalisation is vital and inevitable in young people's future: they use digital tools and instruments to communicate, to learn or to exchange information, for leisure and entertainment, having a deep appreciation of digital practices and of the opportunities these practices can offer them. Digital tools can help them find creative solutions to the challenges they face in the digital age. But the digital age does not have the same set of benefits for all young people. Those groups of young people facing fewer opportunities due to their social, economic or geographical background, and young people from minority groups, are still facing obstacles in benefiting from the opportunities that the digital world offers. The analysis and conclusions from the study indicate that the state authorities and youth NGOs are still behind in offering an inclusive online participatory frame for all young people.

The state authorities have developed digital tools and instruments that are either targeted at the formal education system or are aiming to improve young people's access to employment opportunities. However, these do not encompass the full "safety net" perspective. Moreover, very few of the initiatives target young people directly. Even if certain measures are in place, they are provided for all citizens and do not take into account the particular needs and interests of young people. Youth NGOs are slowly moving towards smart youth work services, but they are still at the stage of training their youth work professionals in entering the digital world.

Consequently, the initiatives that are placed at the intersection between the two themes – social inclusion and digitalisation – are still at their very early stages. The policy analysis and the practices identified show that different platforms were developed and policy processes were put in place to reach out to young people at

risk of social exclusion. Because many young people still live in environments that cannot support their access to the digital world – neither in terms of connectivity nor in terms of safety on the internet – there is a clear need for policies and practices that would leverage the possibilities of the digital world to support the most disadvantaged and vulnerable young people. There is also a growing need to develop cross-sectoral co-operation activities that would make young people's voices heard, particularly those who have been marginalised in both online and offline discussions.

Finally, young people from vulnerable backgrounds are often perceived as the beneficiaries of the implemented processes rather than having an active role in decision making. Cross-sectoral co-operation would also require that policies aiming to ensure social inclusion through digitalisation would be developed not only for young people, but also together with them, in order to respond to their needs and interests. Overall there is a generalised assumption that digital tools can provide a solution to inclusion, but further critical examination of this claim is required in light of practice. However, there is a clear need to place social inclusion at the centre of all digitalisation initiatives.

References

2nd European Youth Work Convention (2015), *Declaration of the 2nd European Youth Work Convention: Making a world of difference,* available at www.alliance-network.eu/wp-content/uploads/2014/05/The-2nd-European-Youth-Work-Declaration_FINAL-2015.pdf, accessed 3 December 2019.

Council of Europe (2014), Recommendation CM/Rec(2014)6 of the Committee of Ministers to member States on a Guide to human rights for Internet users, available at www.coe.int/en/web/freedom-expression/committee-of-ministers-adopted-texts/-/asset_publisher/aDXmrol0vvsU/content/recommendation-cm-rec-2014-6-of-the-committee-of-ministers-to-member-states-on-a-guide-to-human-rights-for-Internet-users-adopted-by-the-committee-of-?_101_INSTANCE_aDXmrol0vvsU_viewMode=view/, accessed 26 March 2020.

Council of Europe (2015), Internet Governance Strategy 2016-2021, available at https://rm.coe.int/16806aafa9, accessed 7 December 2019.

Council of Europe (2016a), Strategy for the Rights of the Child (2016-2021),available at https://rm.coe.int/168066cff8, accessed 7 December 2019.

Council of Europe (2016b), Recommendation CM/Rec(2016)7 of the Committee of Ministers to member States on young people's access to rights, available at https://rm.coe.int/1680702b6e, accessed 25 July 2020.

Council of Europe (2017a), Recommendation CM/Rec(2017)4 of the Committee of Ministers to member States on the access of young people from disadvantaged neighbourhoods to social rights, available at https://rm.coe.int/1680717e78, accessed 22 July 2020.

Council of Europe (2017b), *T-Kit 8: Social Inclusion*, revised edition, Călăfăteanu A. M. and García López M. A. (eds), available at https://pjp-eu.coe.int/en/web/youth-partnership/t-kit-8-social-inclusion, accessed 10 July 2020.

Council of Europe (2018), Recommendation CM/Rec(2018)7 of the Committee of Ministers to member States on Guidelines to respect, protect and fulfil the rights of the child in the digital environment, available at https://rm.coe.int/guidelines-to-respect-protect-and-fulfil-the-rights-of-the-child-in-th/16808d881a, accessed 7 December 2019.

Council of the European Union (2012), Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012H1222(01)&from=EN, accessed 8 December 2019.

Council of the European Union (2015), Council Resolution on encouraging political participation of young people in democratic life in Europe, available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A42015Y1215%2802%29, accessed 25 July 2020.

Council of the European Union (2017), Council conclusions on smart youth work, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XG1207(01)&from=ET, accessed 7 December 2019.

Council of the European Union (2018), The European Union Youth Strategy. Resolution of the Council of the European Union and the Representatives of the Governments of the Member States meeting with the Council on a framework for European cooperation in the youth field, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:42018Y1218(01)&from=EN, accessed 8 December 2019.

Council of the European Union (2019), Council Conclusions on digital youth work, available at www.consilium.europa.eu/media/41437/st14300-en19.pdf, accessed 5 December 2019.

DFID [Department for International Development, UK] (2010), DFID Global Social Exclusion Stocktake Report Annexes, available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/67708/annxs-glob-soc-excl-stcktke-rpt.pdf, accessed 7 December 2019.

EU-Council of Europe youth partnership (2007), *Social inclusion for young people: breaking down the barriers*, Colley H., Boetzelen P., Hoskins B. and Parveva T. (eds), Council of Europe Publishing, Strasbourg, available at https://pjp-eu.coe.int/documents/42128013/47261623/2007_Social_inclusion_young_people.pdf/21619732-2bd9-437e-aefb-3d6f63fb4d8a, accessed 8 December 2019.

EU-Council of Europe youth partnership (2014), Mapping of barriers to social inclusion for young people in vulnerable situations: *Finding a place in modern Europe*, available at https://pjp-eu.coe.int/en/web/youth-partnership/mapping-on-barriers-to-social-inclusion, accessed 8 December 2019.

EU-Council of Europe youth partnership (2015a), symposium: Youth Participation in a Digitalised World, available at https://pjp-eu.coe.int/en/web/youth-partnership/digitalised-world, accessed 8 December 2019.

EU-Council of Europe youth partnership (2015b), *Finding a place in modern Europe,* available at https://pjp-eu.coe.int/documents/42128013/47261689/Finding-09-2015.pdf/a1045d8f-a4c7-4889-b1a1-e783e470858b, accessed 7 December 2019.

EU-Council of Europe youth partnership (2015c), seminar: Social Inclusion of Young People in Vulnerable Situations in South East Europe, available at https://pjp-eu.coe.int/en/web/youth-partnership/mostar, accessed 10 July 2020.

EU-Council of Europe youth partnership (2018a), *Inclusion*, available at https://pjp-eu.coe.int/en/web/youth-partnership/inclusion, accessed 7 December 2019.

EU-Council of Europe youth partnership (2018b), symposium: Connecting the Dots: Young People, Social Inclusion and Digitalisation, Tallinn 26-28 June 2018, *Policy Brief,* available at https://pjp-eu.coe.int/documents/42128013/47262517/policy+brief+symposium+2018.pdf/0da67029-e0c4-071d-6957-4f5809d066f2, accessed 7 December 2019.

Eurofound (2015), *Social inclusion of young people*, Publications Office of the European Union, Luxembourg.

European Commission (2010a), The European Social Fund and social inclusion, available at https://ec.europa.eu/employment_social/esf/docs/sf_social_inclusion_en.pdf, accessed 7 December 2019.

European Commission (2010b), A digital agenda for Europe. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, available at https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN:PDF, accessed 25 July 2020.

European Commission (2011), Protecting children in the digital world, available at https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0556:FIN:en:PDF, accessed 7 December 2019.

European Commission (2012a), Social inclusion of youth at the margins of society, available at https://ec.europa.eu/research/social-sciences/pdf/policy_reviews/social-inclusion-of-youth_en.pdf, accessed 8 December 2019.

European Commission (2012b), European strategy for a better internet for children. Communication from the Commission, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0196&from=EN, accessed 8 December 2019.

European Commission (2013), *European youth: participation in democratic life*, Flash Eurobarometer 375, report available at https://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_375_en.pdf, accessed 10 July 2020.

European Commission (2015), Digital single market, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0192&from=EN, accessed 8 December 2019.

European Commission (2016), A new skills agenda for Europe working together to strengthen human capital, employability and competitiveness, available at https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-381-EN-F1-1.PDF, accessed 6 December 2019.

European Commission (2017), The digital competence framework for citizens, available at https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-21-digital-competence-framework-citizens-eight-proficiency-levels-and-examples-use, accessed 8 December 2019.

European Commission (2018a), Developing digital youth work: policy recommendations, training needs and good practice examples, available at https://op.europa.eu/en/publication-detail/-/publication/fbc18822-07cb-11e8-b8f5-01aa75ed71a1, accessed 2 December 2019.

European Commission (2018b), Digital education action plan, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0022&from=EN, accessed 4 December 2019.

European Commission (2018c), Engaging, Connecting and Empowering Young People: A New EU Youth Strategy, available at https://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-269-F1-EN-MAIN-PART-1.PDF, accessed 7 December 2019.

European Commission (2018d), Study on the impact of the internet and social media on youth participation and youth work, available at https://op.europa.eu/en/publication-detail/-/publication/372f659f-5e39-11e8-ab9c-01aa75ed71a1/language-en, accessed 5 December 2019.

European Commission (2018e), on Digital Education Action Plan. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0022&from=EN, accessed 8 December 2019.

European Commission (2019a), *Developing digital youth work – Policy recommendations, training needs and good practice examples for youth workers and decision-makers* – expert group set under the European Union Work Plan for Youth (2016-2018), available at https://op.europa.eu/en/publication-detail/-/publication/fbc18822-07cb-11e8-b8f5-01aa75ed71a1, accessed 8 December 2019.

European Commission (2019b), The Digital Economy and Society Index (DESI) 2019, available at https://ec.europa.eu/digital-single-market/en/news/digital-economy-and-society-index-desi-2019, accessed 10 July 2020.

European Commission (2020a), *A Europe fit for the digital age*, available at https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age_en, accessed 10 March 2020.

European Commission (2020b), Communication: Shaping Europe's digital future, available at https://ec.europa.eu/info/sites/info/files/communication-shaping-europes-digital-future-feb2020_en_4.pdf, accessed 10 March 2020.

European Committee for Social Inclusion (2004), *A new strategy for social cohesion*, available at www.coe.int/t/dg3/socialpolicies/socialcohesiondev/source/RevisedStrategy_en.pdf, accessed 8 December 2019.

European Parliament (2018), Regulation of the European Parliament and of the Council laying down the legal framework of the European Solidarity Corps and amending Regulation (EU) No. 1288/2013, Regulation (EU) No. 1293/2013 and Decision No. 1313/2013/EU.

Eurostat (2015), *Being young in Europe today*, available at http://ec.europa.eu/eurostat/statistics-explained/index.php/Being_young_in_Europe_today, accessed 8 December 2019.

Haddon L. and Livingstone S. (2014), "The relationship between offline and online risks", in: Von Feilitzen C. and Stenersen J. (eds), *Young people, media and health: risks and rights*. International Clearinghouse on Children, Youth and Media, Göteborg.

Haddon L., Livingstone S. and the EU Kids Online network (2012), *EU Kids Online: national perspectives*, London School of Economics and Political Science, London, available at http://eprints.lse.ac.uk/46878/1/__lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Content_EU%20Kids%20Online_EU%20Kids%20Online%20national%20perspectives_2014.pdf, accessed 5 December 2019.

ICDL [International Computer Driving Licence] Foundation (2015), Position paper: "The fallacy of the 'digital native'. Why young people need to develop their digital skills", available at www.icdleurope.org/policy-and-publications/the-fallacy-of-the-digital-native/, accessed 3 July 2020.

Institute of Museum and Library Services (2011), University of Washington Technology & Social Change Group, International City/County Management Association, *Building digitally inclusive communities: a guide to the proposed framework*, Institute of Museum and Library Services, Washington DC, available at www.imls.gov/assets/1/AssetManager/DIC-FrameworkGuide.pdf, accessed 7 December 2019.

James C. (2009), "Young people, ethics, and the new digital media – a synthesis from the GoodPlay project", The John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning, Chicago.

Khan S. (2009), *Topic guide on social exclusion*, Governance and Social Development Resource Centre, Birmingham.

Kovacheva S. (2014), EU-Council of Europe youth partnership policy sheet on "Social inclusion" [Erasmus + Inclusion and diversity strategy in the field of youth], available at https://pjp-eu.coe.int/documents/42128013/47261683/Social+inclusion+by+Siyka+Kovacheva/651cf755-ca79-486d-9648-5ae89542650b, accessed 4 July 2020.

Levente S. and Nagy A. (2011), "Online youth work and eYouth — a guide to the world of the digital natives", *Children and Youth Services Review*, Vol. 33, No. 11, pp. 2186-97, available at www.researchgate.net/publication/251530625_Online_youth_work_and_eYouth_-_A_guide_to_the_world_of_the_digital_natives, accessed 3 December 2019.

McLoughlin S. (2018a), *Connecting the dots: young people, social inclusion and digitalisation: Compendium of practices,* available at https://pjp-eu.coe.int/documents/42128013/47262517/FINAL+compendium.pdf/b25a3fd4-a377-29c0-80b8-45ac21108ad2, accessed 1 December 2019.

McLoughlin S. (2018b), *Connecting the dots: young people, social inclusion and digitalization. Reflection paper*, available at https://pjp-eu.coe.int/documents/1017981/10840552/Reflection+paper+final.pdf/41dde555-5701-7822-25d4-ae27b5561d92, accessed 8 December 2019.

Prensky M. (2001), "Digital natives, digital immigrants", *On the Horizon* Vol. 9, No. 5, pp. 1-5.

Prensky M. (2004), "The emerging online life of the digital native. What they do differently because of technology, and how they do it", available at www.marcprensky.com/writing/Prensky-The_Emerging_Online_Life_of_the_Digital_Native-03.pdf, accessed 3 July 2020.

Șerban A. M., Ștefan V., Potočnik D. and Moxon D. (2020), *Young people, social inclusion and digitalisation* [research study], Council of Europe, Strasbourg, available at https://pjp-eu.coe.int/documents/42128013/47261689/Study-SID-07-04-draft.pdf/2af54871-4567-617e-3128-c2ec1fde795f, accessed 25 July 2020.

United Nations (2019), *The age of digital interdependence,* available at www.un.org/en/pdfs/DigitalCooperation-report-for%20web.pdf, accessed 7 December 2019.

World Bank (2013), *Inclusion matters,* available at https://openknowledge.worldbank.org/bitstream/handle/10986/16195/9781464800108.pdf?sequence=1&isAllowed=y, accessed 7 December 2019.

Chapter 2

A new era of digital learning in Digitalents Helsinki: youth participation in the labour market through high-tech projects

Karoliina Leisti and Vesa Jaakola

Introduction

Digitalisation has changed the way people work and it has had an impact on the way we see the future of work. The Council of the European Union has called, through its Conclusions on "Young People and the future of work" (2019), for action on the urgent need to ensure that young people go through a smooth school-to-work and work-to-work transition and to ensure that jobs should create the basis for rewarding career possibilities and upward social mobility, instead of limiting access to certain jobs or education. In Finland, as in other European countries, low-skilled young people encounter difficulties in accessing the labour market (OECD 2019). Uneducated and undereducated young people, whose skills have not been developed to match the new labour market requirements, might face problems when trying to get a job or trying to change their current job.

One of the trends affecting the future of work is the technological revolution. The World Economic Forum (Schwab 2016) has called for action to ensure that all citizens across all cultures, nations and income groups understand the need to master the fourth industrial revolution (4IR) and its challenges to civilisation. The future of work requires people with the competences to solve both low- and high-skilled tasks and also competences and skills related to problem solving (OECD 2016). Insecure forms of employment may entail further polarisation of the wage structure into high-paying and low-paying jobs (ibid.). The main beneficiaries are high-skilled workers in cognitively demanding jobs, who are well equipped to make use of the benefits offered by new technology (Kurer and Gallego 2019: 7). There is a need to create better and more equal ways of increasing the number of people who benefit from technological development. Otherwise there is a danger of increased inequalities in the future.

Simultaneously, there is a global need for information and communication technology specialists. According to Eurostat (2019a), over 90% of people with ICT education have a job, and most of them are highly educated men over the age of 35. In the EU, the landscape of work where ICT skills are required is changing. The availability of skilled labour constitutes another challenge that has already been realised in some industries. Employment rates have not increased proportionally to company turnover. Open job positions and the recruiting problems that companies face have increased more than unemployment has decreased. In 2017, 8% of businesses in the EU reported having recruited or tried to recruit ICT specialists (ibid.). The youth unemployment level has remained at more than 16% in the EU 28 area (Eurostat 2019b). The high youth unemployment rate does reflect difficulties in finding jobs. The know-how of young job seekers does not match the needs and requirements of employers. The availability of skilled labour is a common concern among companies.

There is a need to share best practice at the European level in order to improve the situation of young employees. ICT facilities should be an integral part of every young person's learning to reduce the digital divide and should seek to target the groups most likely to be affected, like young women, girls and young people with disabilities (European Youth Forum 2019: 59). This chapter aims to tackle the current lack of digital skills of young people by looking at a very particular project: Digitalents Helsinki.

Digitalents Helsinki

The EU Youth Guarantee is a commitment to ensure that all young people under the age of 25 receive – within a period of four months of becoming unemployed or leaving formal education – an offer of employment, continued education, traineeship or apprenticeship (Youth Guarantee 2019). The Global Competitiveness Report 2018 (Schwab K. 2018) states that investing in technology requires also investing in digital skills development. Digital competence is defined as a creative, critical and secure way to handle ICT in order to achieve work, employment, learning, leisure, inclusion and social inclusion goals (Napal Fraile et al. 2018: 2).

Different European bodies, national institutions and local organisations have started developing projects and programmes aiming to invest in the development of young people's digital skills. In Finland, one of the successful initiatives has been Digitalents Helsinki. The aim of the project is to increase the digital working life skills of young people and create a novel start-up accelerator for companies. Through the activities, participants are equipped with the required know-how that the labour market asks for. The focus is on future areas of work such as digital media design, software development, open licence platforms, server-based technology development, augmented reality and virtual reality.

The Digitalents Helsinki project started in 2017. It got most of its funding from the Innovations Fund of the City of Helsinki. The idea for the innovation funding is to develop new city-level concepts that can be redeveloped to become part of City of Helsinki services. Priority for the funding is given to projects that promote the development of the business ecosystem or the creation of the platform economy in Helsinki. The Digitalents Helsinki project also has other resources from the City of Helsinki departments for Economic Development, Culture and Leisure (Youth

Services) and Education (Vocational Education). Because Digitalents Helsinki is seen as part of youth work in Helsinki, it has certain premises funded by the Youth Act.

In Finland, youth work is determined by the Youth Act (Youth Act 2019). The act defines youth as young people under 29 years. Youth work in this context means supporting young people's development, independence and participation in society. The objectives of the Youth Act are promoting young people's social inclusion and their opportunities to influence and participate in society. The Digitalents Helsinki model puts into practice the objectives of the Youth Act by supporting, promoting, improving and equalising unemployed people's situation through high-impact technological projects and by using methods like participatory work, empowerment, sustainable development and multicultural work.

The innovation behind Digitalents Helsinki, and the concept it is built on, is improving young workers' working life skills, know-how and well-being in the field of ICT and digital media careers by co-operating with ICT and digital media companies in high-tech development projects and doing client work while responding to companies' labour needs. There is a need to open a path for people entering the workforce for the first time. It has also been concluded that young people need to be equipped with specific competences in robotics, software development, data science, artificial intelligence and digital media.

The goals and funding for Digitalents Helsinki were based on three actual needs. First: there was no specific space in Helsinki permanently dedicated to meeting the needs of digital developers, which focused on career path development and creating networks. Second: young people did not have enough opportunities to acquire training in digital and technological environments, and employment (in cultural sectors, in particular) had declined. Third: hobbyists and employed young people lacked opportunities to collaborate on projects in groups based in the business park with industry professionals and volunteers serving as mentors.

The target group of the project are young people 18 to 29 years old, who mostly come through the City of Helsinki employment services or the Education Division. Their participating status is either that of temporary employee or trial worker. Temporary employees work for eight months, receiving a monthly salary. Trial workers are still in a phase of testing a potential career, and participation for them is more educational.

Digitalents: the method in practice

The process starts with recruiting the young employees or trial workers. The model for finding and contacting the unemployed youth who could be potential employees has been developed with the youth unemployment officers in the City of Helsinki and the Digitalents Helsinki organisation. Unemployed young people receive a text message or a direct e-mail about vacancies and then have the opportunity to send their curriculum vitae (CV), portfolio or some other additional material directly to the Digitalents teams. Another way of entering the job is via the Digitalents Academy, where vocational education officers are in charge of recruitment. The platform has been designed for those young people interested in starting and developing a career in ICT or in digital media. Young people who are chosen to be part of the

project are then employed and their salaries are supported by the City of Helsinki. The young employees receive a monthly salary that is competitive with an open labour market salary.

All the recruited young people have a long job interview where their orientation and motivation planning starts. The working period lasts a maximum of eight months. The professional development goals are set by the young employees themselves. Throughout the eight months, the employees work in teams (digital media, ICT or software development), with three to six months in the Digitalents Academy (work trials).

During the working period, employees and trial workers are introduced to work practices. Reflective discussions – about the work, working life skills and career paths that are in line with young people's own goals – are held during the work period. During the work period, the young employee will also be interviewed by the human resources personnel in order to proceed to the social mapping process. If necessary, the young person is given support in social empowerment and operational capacity, and in life skills development – for example, in personal financial management. Client work by companies and the City of Helsinki plays a key role in learning. Young people's work and projects are evaluated together by clients and team leaders to achieve a high-quality and successful project or production.

The competences development process and the measurement of well-being and empowerment are constantly being taken in a more systematic direction. During the course, qualified career coaches work with young people to draft a CV, job applications and job-related social media profiles like LinkedIn to match today's working life requirements. Every employee has a constant search for new jobs or a place to study. At the end of the eight-month cycle, final evaluations are made and support is provided in the follow-up paths.

The main elements of the Digitalents Helsinki community are a good, safe and welcoming place to work along with reflective discussion between workers and team leaders that supports their goals and keeps a good working flow going. An important part of the work is implementing the means to find the most challenging and workable client demands, which include customer quality control and methods like braintrust and Scrum Sprint reviews. Career coaching and job packages are a vital part of the process: job application workshops, CV improvements, pitching exercises, job interview practice and social media profiles make the job applicants' skills visible. The Digitalents Helsinki organisation itself acts as a learning environment with modern technologies, project and version control systems. The organisation is constantly being developed in the direction of product management, where young people learn modern working methods and processes in their own work environment.

Working methodologies

Carol Dweck, a professor of psychology at Stanford University, presents two types of mindset: fixed mindset and growth mindset (Dweck 2016). Growth mindset supports learning and developing one's skills, while fixed mindset supports more proving one's skills over and over again and thinking that qualities are carved in stone. Normally

these two types of mindset are not that clear and people can have both sides, but the idea of mindset can help young people to develop their skills. Digitalents Helsinki has created a model of knowledge and learning in which the motivation is based on the young person and their goals and mindset.

The young people's goals are important tools for the team leader and for the teacher, who also facilitates the way the team does client work or assignments. Young people have goals like: learn ICT technologies, build confidence in their work, gain social confidence and be bolder in discussions, deepen understanding of different aspects of audiovisual production, learn new things about future innovations, develop content production skills in areas that are unfamiliar like virtual and augmented reality and the gaming industry, networking and learning to think in a more creative way.

The personal goals of young employees help team leaders, teachers and careers advisors to plan and design, together with each team worker, what kinds of tasks will most challenge the person's motivation-based fast learning. Learning by doing happens with mentoring from the team leader and with the help of peer support from colleagues and the other team members. The whole method of learning in Digitalents Helsinki includes the idea that learning happens at its own pace and that setbacks in the learning process are accepted. People with the growth mindset know that it takes time before a person's full potential is developed (Dweck 2016: 28).

Experimenting and innovating

Young experts, different types of resource and broad networks meet in the Digitalents Helsinki community, creating a beneficial platform for open innovations. Open innovation has been addressed many times in EU funding programmes like Horizon 2020 (Horizon 2019). Finland, among the other Nordic countries, has been leading innovation projects in Europe. According to the European innovation scoreboard, their innovation performance continues to improve (European innovation scoreboard 2019). Innovation is also a complex and dynamic social process, so there is value in connecting theory with practice, and effective policy requires policy makers to have a comprehensive understanding of what might work in theory and what is working in practice (Bogers et al. 2018).

The excitement of the new technology, like the opportunities offered by robotics in combination with cameras, sensors, speech recognition, big data, analytics, AI, mobile and cloud technology, geotagging and biometrics (Wirtz et al. 2018), is affecting European employees. New technology needs new kinds of knowledge and understanding. The labour market is changing rapidly, and to make most of the opportunities there are several ways to increase the co-operation between societies and people. It is essential to keep humans at the core of the process when designing user-friendly services.

A digitalised world stands upon various information systems and the ease of daily life is often dependent on their reliable operation. The ICT industry has lots of open vacancies, but thousands of jobs have disappeared from the traditional media industry. The supply of media content has translocated and new jobs are increasingly freelance. The media industry has experienced big technological changes in

recent years. In addition to traditional platforms, media content can now be shared by anyone and can be consumed in various ways. Simultaneous to the increasing amount of media content, demand has also increased for high-quality products and user experiences. There is a need for reshaping traditional media careers and implementing ideas from open innovation culture. The development of dynamic, open innovation business models with the expansion of open innovation culture, and the expansion of the feedback loop of an open platform business model, could definitely respond to the existing challenges of the labour market (Lee et al. 2018).

The big questions in the near future will have to do with working hours, workplaces, employment and changes in the underlying business logic of companies. There will be technological, socio-economic, geopolitical and demographic developments, and the interactions between them will generate new kinds of jobs and occupations while partly or wholly displacing others. The new skill sets are needed in old and new occupations in most industries and they will transform how and where people work (World Economic Forum 2016). Working remotely can include working between realities, such as virtual reality meetings and conferences.

Innovations and innovative work flow are at the core of Digitalents Helsinki. The projects made with ICT companies have developed the know-how of young people. Digitalents Helsinki teams have worked together with a company partner Futurice and its social responsibility programme – called the Chillcorn fund – in funding the social robotics project. From the perspective of the participating youth, the aim was to study an open licence 3D printable model of a humanoid robot. The second idea was to develop an actual robot that could serve autistic children or elderly people. During the project it became clear that, since there were not that many materials available about social robotics, everything examined through the project could be turned into learning material for schools, for teachers to implement in classrooms and for anyone interested. This is how the young people turned to producing the learning material on social robotics for teenagers, as a side effect of their own learning (Kotilainen et al. 2020).

Learning by doing is implemented in challenging projects within Digitalents Helsinki. The job offers come from clients, sponsors or the City of Helsinki. The productions and projects can be software development, system administration, videos, demos, Web pages or visual design. Meaningful work gives young people a feeling that they have an important role in society. They feel needed and gain the work experience required to go forward in their lives. Some young people that already have the needed technological skills might lack working life skills or – more specifically – job-hunting skills. Through collaborative projects with sponsors and clients, Digitalents Helsinki challenges young professionals to raise their level of expertise by supporting development processes and projects that bear learning and tools to proceed to the personal assessment of their skills. The digital tools are utilised in different phases of the development projects: project management, version control, preparation, design, execution, publishing, documentation and assessment. Additionally, young employees' own reflective learning materials are produced from the learning experience. Digital applications are created for identifying and developing personal competence and the learning is designed based on young people's own goals and plans for the future.

The Digitalents Helsinki concept has been developed during almost three years of activity as a pragmatic, goal-driven and successful model for supporting young people's ICT and digital media careers. As a result, people have gained a job from the open labour market or a place to study. The success rate of the project has been 70%.

Social support for young employees

Through the above-mentioned actions, young people have made progress in their career paths. In addition, the need for social empowerment became an important factor in achieving sustainable working life skills. The need for the social empowerment of young people, the need for improvement of their working life skills and the lack of young people's well-being have all been identified. In terms of well-being, the eating habits of the young project participants were quite unhealthy (use of energy drinks, number of meals, inability to cook and irregular eating rhythm) and, at times, a lack of sleep and exercise would affect their general well-being. All of these areas play a major role in managing work and keeping a regular daily rhythm. As measures to promote the above, Digitalents Helsinki organised, in co-operation with NGOs and the City of Helsinki, lectures about mental health and opportunities to meet in person with a sports counsellor and nutritionist. Young people also had a talk from the guest speakers about the need for sleep and the importance of rest.

Young people took part in afternoon workshops, where they discussed the important facts about entering the labour market and labour force. In terms of social interaction, concerns were raised about whether the workplace could be self-contained or whether something else had to be presented. Young people were considering whether they could suddenly begin working eight hours per day and they were worried whether they could tell anyone at work if they become tired or burned out. In terms of skills, young people wondered whether they could do what the employer required. The future seemed overshadowed by uncertainty about the post-payment period, in particular the question: Will I ever get a job that matches my skills?

Facing these issues and reacting to the supporting information and workshops strengthened young people's work and working capacity and prepared them for the open labour market or for further studies. Many young people have work-related content knowledge, but social empowerment and interaction skills are also challenging for young people. Digitalents Helsinki treats each person as a unique individual. Team leaders have the role of managing the ICT and digital design work and seeing that it is done in a manner that offers the young person a good portfolio and supports their learning. Career planners help to find a job or a place to study and youth workers help to ease the mental stress about the past and the future. The whole organisation has the same task: to find the next step for each of these young people.

Conclusion

Digitalents Helsinki has been visited by many European digital youth professionals. The guests' feedback has been related to the innovative, unique and inspiring model put in place. Their highly supportive feedback was determined by the fact that youth work professionals appreciated how the City of Helsinki divisions co-operate together

but also by the way that ICT companies co-operate and develop the required ICT know-how in youth. The key factors in promoting youth employment and access to postgraduate studies are Digitalents Helsinki's good business collaboration, Digitalents Academy teaching activities, on-the-job learning in demanding projects, reflections with team leaders and the support of the mentors in the production process; all the productions are monitored by results and quality, career coaching, social empowerment and youth involvement in work projects that support their employability skills, such as initiative, sociability, conscientiousness, punctuality and business-oriented thinking. The Digitalents Helsinki community uses the growth mindset framework to motivate and support employees to learn. Specific work steps to achieve results include enabling young people to learn at work, job search coaching, CV preparation, job interview coaching, self-assessment, making young people's skills visible, support for personal development of young people, negotiations with companies about ICT career paths, close co-operation with the youth employment services, reflective discussions by young people and creating a career model for young people.

There is a need for re-educating millions of young Europeans in the near future, but there is also a need to find new ways to motivate people to learn and keep their digital competences updated (Napal Fraile et al. 2018: 2). The very practical cross-sector co-operation between ICT companies and the public sector could ensure that all citizens have access to participating in and benefiting from technological development and innovation. Such co-operation also means creative and reflective ways to learn. When the organisation itself is supporting a safe environment for sharing, it creates the atmosphere where workers have goals and motivation to challenge their knowledge. Attitude is a key factor in fast and very effective skills development. Learning by doing is a method that strengthens positive self-esteem and provides guidelines on how to succeed.

The model of Digitalents Helsinki has similarities to the sustainable business model (SMB). The fourth industrial revolution (Schwab 2016) is bringing waves of innovation, strongly charged to generate new business (Lee et al. 2018). At the same time there is growing interest in how the business model concept can be used to investigate business-based solutions for ecological and social problems and practitioners. There is an increasing interest in transforming business models for new technologies and social innovations into hybrid and non-profit organisations (Lüdeke-Freund and Dembek 2017). At this moment Digitalents Helsinki is facing a new phase of the project. For two and a half years, we have been busy creating a model to support youth employment and the careers of young people in a holistic way. With the end of the innovation funding, the project is in the process of developing into a permanent model of working with unemployed young people in the ICT and digital media sector. To conclude, in the words of one young woman who worked for eight months in Digitalents Helsinki:

> To me Digitalents Helsinki means that even after months of job hunting, there was still someone who had faith in me and gave me the chance to show my working motivation. Being turned down time after time cast such a heavy shadow that even someone like myself, optimistic and cheerful, felt the need to separate myself from the rest of the world. … The various projects have given me the chance to improve my skillset and belief in my own work. (L.R., aged 25)

References

Autor D. H. (2015), "Why are there still so many jobs? The history and future of workplace automation", *Journal of Economic Perspectives* No. 29, pp. 3-30.

Bogers M., Chesbrough H. and Moedas C. (2018), "Open innovation: research, practices and policies", *California Management Review*, Vol. 60 No. 2, pp. 5-16, available at 10.1177/0008125617745086.

Council of Europe and European Commission (2010), *Youth employment and the future of work*, ed. Evans J. and Shen W., available at https://pjp-eu.coe.int/documents/42128013/47261722/YK10_Youth_employment.pdf/6640c44d-e46c-42c8-bd29-e382c3b29c16, accessed 25 November 2019.

Council of the European Union (2019), Council conclusions on "Young people and the future of work" (draft), available at https://data.consilium.europa.eu/doc/document/ST-8754-2019-INIT/en/pdf, accessed 25 November 2019.

Dweck C. (2016), *Mindset: the new psychology of success* (updated edition), Random House, New York.

European Commission (2018), *Coordinated plan on artificial intelligence*, available at https://ec.europa.eu/knowledge4policy/publication/coordinated-plan-artificial-intelligence-com2018-795-final_en, accessed 13 August 2019.

European Commission (2019), *Young people and the future of work*, available at https://data.consilium.europa.eu/doc/document/ST-8754-2019-INIT/en/pdf, accessed 25 November 2019.

European innovation scoreboard (2019), available at https://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en, accessed 26 August 2019.

European Youth Forum (2019), *The future of work and youth*, available at www.youthforum.org/future-work-and-youth, accessed 25 November 2019.

Eurostat (2019a), *1.3 Digital skills for a digital world,* available at https://ec.europa.eu/eurostat/cache/infographs/ict/bloc-1c.html, accessed 13 August 2019.

Eurostat (2019b), *Youth unemployment figures 2008-2018,* available at https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Youth_unemployment_figures,_2008-2018_(%25)_T1.png, accessed 13 August 2019.

Helyer R. (2015), "Learning through reflection: the critical role of reflection in work-based learning (WBL)", *Journal of Work-Applied Management*, Vol. 7, No. 1, pp. 15-27, available at https://doi.org/10.1108/JWAM-10-2015-003, accessed 4 July 2020.

Horizon (2019), Horizon 2020, available at https://ec.europa.eu/programmes/horizon2020/en, accessed 4 September 2019.

Kotilainen S., Okkonen J., Vuorio J. and Leisti K. (2020), "Youth media education in the age of algorithm-driven social media", in Frau-Meigs D., Kotilainen S., Pathak-Shelat M. et al. (eds), *Handbook of media education research*, John Wiley & Sons, Chichester.

Kurer T. and Gallego A. (2019), "Distributional consequences of technological change: worker-level evidence", *Research & Politics* 2019, available at https://doi.org/10.1177/2053168018822142, accessed 4 July 2020.

Lee M., Yun J.J., Pyka A. et al. (2018), "How to respond to the fourth industrial revolution, or the second information technology revolution? Dynamic new combinations between technology, market, and society through open innovation", *Journal of Open Innovation: Technology, Market, and Complexity* Vol. 4, No. 3, pp. 21-3.

Lüdeke-Freund F. and Dembek K. (2017), "Sustainable business model research and practice: emerging field or passing fancy?", *Journal of Cleaner Production*, No. 168, pp. 1668-78.

Napal Fraile M., Peñalva-Vélez A. and Medióroz Lacambra A. (2018), "Development of digital competence in secondary education teachers' training", *Education Sciences*, Vol. 8, No. 3 [MDPI] 2p. 104, available at https://doi.org/10.3390/educsci8030104, accessed 4 July 2020.

Navigatorn-Ohjaamo [One-Stop Guidance Center] (2019), *Moving on in your life: guidance for persons under 30 years of age*, available at https://ohjaamot.fi/etusivu [in Finnish, Swedish and English], accessed 21 August 2019.

OECD (2016), *Automation and independent work in a digital economy*, available at www.oecd.org/els/emp/Policy%20brief%20-%20Automation%20and%20Independent%20Work%20in%20a%20Digital%20Economy.pdf, accessed 27 November 2019.

OECD (2019), *Investing in youth: Finland*, Investing in Youth series, OECD Publishing, Paris, available at https://doi.org/10.1787/1251a123-en, accessed 4 July 2020.

Opetushallitus [OPH] (2019), available at www.oph.fi/fi/koulutus-ja-tutkinnot/perusopetuksen-opetussuunnitelman-ydinasiat, accessed 4 September 2019.

Schwab K. (2016), *The fourth industrial revolution*, World Economic Forum, Cologny/Geneva.

Schwab K. (2018), *The global competitiveness report 2018*, World Economic Forum, Cologny/Geneva.

Weber E. (2017), *Employment and the welfare state in the era of digitalisation*, CESifo Forum, ISSN 2190-717X, ifo Institut - Leibniz-Institut für Wirtschaftsforschung an der Universität München, München, Vol. 18, No. 4, pp. 22-7.

Wirtz J. Patterson, P.G., Kunz, W.H. et al. (2018), "Brave new world: service robots in the frontline", *Journal of Service Management*, Vol. 29, No. 5, pp. 907-31, available at https://doi.org/10.1108/JOSM-04-2018-0119, accessed 4 July 2020.

World Economic Forum (2016), *The future of jobs: employment, skills and workforce strategy for the Fourth Industrial Revolution*, Global Challenge insight report, World Economic Forum, Geneva.

Youth Act 2017 [Finland] (2019), available at https://minedu.fi/en/legislation-youth, accessed 23 August 2019.

Youth Guarantee [EU] (2019), available at https://ec.europa.eu/social/main.jsp?catId=1079&langId=en#navItem-2, accessed 14 August 2019.

Chapter 3

Digitalisation and ICT as a guarantee for the social inclusion of young people with disabilities

Roman Banari

Introduction

People with disabilities often face various barriers, including social exclusion. In a modern, technology-dependent society, the phenomenon of exclusion is exacerbated by the challenges of accessing information and communication technology (ICT). Inaccessible technology – that which is not designed to cater for a range of sensory, mobility and learning abilities – presents a significant barrier for young people with disabilities. Access to technology is an important factor in determining how youth with disabilities engage in the development of their community and participate in the labour market or in decision-making processes at national or local level. If accessible to vulnerable groups, ICTs have the potential to improve their lives and to contribute to their social inclusion. Within the youth sector, digitalisation is a powerful tool for youth organisations to further develop inclusive and accessible environments for young people with disabilities, but insufficient attention has been given to making digital tools in the youth sector fully accessible.

This chapter aims to present the challenges for youth with disabilities related to accessible technology and to provide an insight into how they can benefit from ICT in order to be included in participatory processes, education and the labour market. Moreover, we present ways in which ICT and digitalisation can influence the life of youth with disabilities, describing both opportunities and challenges. We begin the chapter by outlining the human rights basis for the inclusion of young people with disabilities in the digital world, in order to stress the importance of recognising the fundamental right of young people with disabilities to access online services and digital tools. Following this, we explore the various ways that ICT can be made more accessible to young people with disabilities, before discussing the implications of this for the youth sector. The chapter concludes with recommendations for ensuring that youth with disability can be included and can participate effectively in developing the youth sector at local and national level, with a road map to move the ICT accessibility agenda forward and a set of priority actions to be undertaken by all stakeholders.

The rights of people with disabilities and associated violations

From a human rights perspective, and considering the international legal framework for the rights of persons with disabilities, no one should be excluded from using ICTs and e-services in education, political life and cultural activities. In places where ICT has been integrated into key public services, this access has even more important implications for social inclusion and economic growth. The UN's 2030 Agenda for Sustainable Development pledges to "leave no one behind". It is an ambitious plan of action of the international community working towards a peaceful and prosperous world, where the dignity of an individual person with equality among all is applied as the fundamental principle, cutting across the three pillars of the work of the United Nations: Development, Human Rights and Peace and Security. Within this framework, it is clear that youth with disabilities should have the ability to access information through ICT and benefit from its opportunities.

In addition, as part of a series of international human rights treaties, nation states which have signed conventions committing them to ensure respect for the principle of equality, non-discrimination and fair treatment of all persons should therefore provide citizens with access to their political, economic and social rights. Equal treatment of all persons in society and promoting and creating opportunities for social inclusion of people with fewer opportunities should be primary objectives of governments that promote democracy and human rights. Most importantly, the UN Convention on the Rights of Persons with Disabilities (United Nations 2006) has been ratified by 180 states across the world. The aims of the convention were (and are) to promote the rights of persons with disabilities, to urge the international community to end discrimination, to remove barriers and to ensure equal participation for all persons with disabilities.

Yet, in spite of the progress made since its adoption, many persons with disabilities still experience the violation of their fundamental rights on a regular basis. According to the 2018 *Fundamental Rights Report* of the EU Agency for Fundamental Rights, discrimination and unequal treatment in Europe continue to affect different social groups, with disability status cited as one of the most frequent grounds for discrimination. Persons with disabilities continue to face grave disadvantages and challenges in achieving their right to education, labour, healthy lives, social inclusion and participation in the political and social life of their community.

Similarly, according to the UN Report on Disability and Sustainable Development Goals (United Nations 2019), persons with disabilities and their families are more likely to be subjected to hunger and poverty and they continue to face barriers to economic, social and political inclusion. In the health field, persons with disabilities continue to experience unmet health needs and barriers to accessing health services. They also report poorer health and mental health. In the field of education, the findings confirm that persons with disabilities encounter multiple barriers to education and they are nearly always worse off than persons without disabilities: the former are less likely to attend school, they are less likely to complete primary or secondary education, they have fewer years of schooling, and they are less likely to possess basic literacy skills. When it comes to gender equality, the existing data confirm that many women and girls with disabilities face multiple discrimination

and barriers to their full and equal inclusion in society and development (ibid.). At the same time, many persons with disabilities live without access to electricity, thus compromising the ability to operate the assistive technology they need for independent living and ultimately hindering their participation in society. Finally, discrimination continues to be a major cause of exclusion of people with disabilities and impedes them from pursuing equal participation in society, a political life and participation in decision-making processes. Some groups of persons with disabilities, such as women with disabilities, indigenous persons with disabilities and persons with intellectual and psychosocial disabilities, face multiple disadvantages and discrimination.

We can conclude that people with disabilities face barriers in accessing their rights to participate actively in political, social and economic life in many countries. It can be argued that some of the barriers include the lack of accessible infrastructure adapted to the needs of people with disabilities, and particularly limited access to adapted ICT. Furthermore, a potential solution to many of the problems of youth with disabilities which were mentioned before could be to develop the digital tools that would actively contribute to the social inclusion of youth with disabilities in political and decision-making processes of the community, education, training, the labour market and leisure.

However, if we speak about ICT as the solution for social inclusion of youth with disabilities, it is necessary to mention that according to the UN Report on Disability and Sustainable Development Goals (United Nations 2019), although digital technologies have been spreading, not all people with disabilities have been able to partake in the benefits of using ICT. The report emphasises that digital gaps remain large between people with and without disabilities. In some countries, the gap between persons with and without disabilities is 30% for internet use, 10% for access to the internet in the household, and 5% for radio and TV use. Furthermore over 60% of national online portals are not accessible for persons with disabilities. This digital gap persists because many technologies are not accessible or affordable for persons with disabilities. According to the UN report, the limited data suggest that in developing countries households with persons with disabilities are half as likely to afford internet costs, and less likely to be able to afford radio, TV and a mobile phone. Yet access to ICT is recognised as crucial for the independent living and inclusion of persons with disabilities and is thus imperative for achieving all sustainable development goals.

Most European countries have plans and policies to include people with disabilities in the process of mainstream development using ICT. At the same time, ICT and other digital utilities play a key role in building inclusive and accessible cities. But unfortunately, these technologies are not used properly in order to make cities and human settlements inclusive and sustainable for persons with disabilities in accordance with UN Sustainable Development Goal 11 – making cities inclusive, safe, resilient and sustainable – and as a consequence to create the conditions for participation and social inclusion of people with disability, using ICT and digitalisation. Just as we would recognise that persons with disabilities are impeded from fully enjoying their life and livelihood when physical and social barriers exist within a city, such as inaccessible transport or lack of adequate housing, so inaccessible ICT should be viewed in the same light. Consideration should be given to including accessible ICT,

including mobile applications, government websites, public kiosks and automated teller machines, as part of accessible urban development plans. ICT offers a great opportunity for promoting national action plans and strategies for development, using accessible ICT to enable social inclusion in education, labour, participation and health, and contributing to social inclusion for people with disabilities.

ICTs have become the leading medium for communicating, transacting, informing, educating and entertaining all over the world. Usage of technologies such as television, radio and telephones, especially mobile telephones, has become a basic and indispensable feature in the lives of people across the globe. Subscriptions to mobile services worldwide were estimated to total seven billion at the end of 2015 (United Nations 2016). Researchers have now developed technologies to help people with disabilities, taking into account all the elements of accessibility, safety, comfort and communication of the environment. New technologies have started to produce changes at all levels of society and have influenced the activities of state institutions in promoting the social inclusion of people with fewer opportunities, including people with disabilities, and youth. At the same time, because of multiple disadvantages, persons with disability still face barriers and difficulties in accessing and using the fast-developing technology.

Despite such difficulties, ICTs can still serve as critical enablers that allow persons with disabilities to realise full and effective opportunities to participate, on the basis of equality, in all aspects of society and development. In this regard, ICTs have the potential to make significant improvements in the lives of persons with disabilities, allowing them to enhance their cultural, political, economic, civic, community and family life, in this way contributing to the respecting of their rights and freedoms, which are recognised and guaranteed by the Convention on the Rights of Persons with Disabilities (CRPD) and other international treaties as well as relevant national frameworks. Moreover, ICT can help persons with disabilities to ensure their socio-economic development, empowering them to have greater access to new knowledge, practices and experiences, alongside access to independent living.

Information and communications technologies as a tool for social inclusion of youth with disabilities

In order to avoid the problems related to the inaccessibility of ICT, there are a few principles that should be taken into consideration in the process of its development. Firstly, ICT needs to be accessible and easy to use for all persons. Everybody ought to be able to access ICT that can help facilitate communication in different cultural, educational and professional situations. Secondly, particular forms or approaches to ICT should reflect the goal of fostering greater participation and inclusion. Where possible, technologies ought to be designed to be as inclusive as possible for everybody, as opposed to further development of certain technologies that would only be used specifically by youth with disabilities. Finally, another principle relates to the level of independence and control that persons with disabilities have in using ICTs. Indeed, all people, including those with disabilities, have personal preferences for particular technologies and ought to be able to choose the ICT that best serves them.

So, in order to design accessible ICT, it is essential to consider the user perspective in all aspects – from the way equipment is designed to its use and placement.

The e-Accessibility Policy Toolkit for Persons with Disabilities defines accessibility as "a measure of the extent to which a product or service can be used by a person with a disability as effectively as it can be used by a person without any disabilities" (Magennis n.d.). In this way, we can speak about the most popular ICT tools and channels for information and connection between people, things such as mobile phones, television and radio, computers and internet, e-publishing, e-skills and e-conference, and applying accessibility standards to their use, in order to ensure social inclusion of people with disabilities. Across these tools and channels, four primary areas should be taken into consideration. These are handsets (e.g. tactile indicators, screen readers, text-to-speech software and screen magnifiers, voice recognition, auto text and touch screen), software (e.g. Android's screen reader Talk Back, Windows Eyes with Microsoft Office), services (digital libraries for the visually impaired, mainstream services such as multimedia and text messaging, video conferencing, captioning) and content.

Accessibility standards such as Web Content Accessibility Guidelines (WCAG 2008) and the new ISO/IEC standard for WCAG 2.0 – ISO/IEC 40500:2012 – can be used as a framework for the accessible development of digital tools. They identify four principles for website accessibility that might also be applied elsewhere, namely that a website should be:

- perceptible: users should be able to perceive the content through the senses – sight or hearing – either through the browser or with assistive technology such as screen readers;
- operable: users should be able to interact with all controls and perform all functions through the keyboard, mouse or a supportive device;
- understandable: users should understand the function/content and how to use it;
- robust: a wide range of technologies and user agents should be able to access the content.

In addition, universal design principles (National Disability Authority n.d.) can be considered. For example, there are two main areas that can make TV viewing accessible to people with visual and hearing impairments, namely the equipment (simple and easy to use) and the programme content (captions/subtitles, tele-text, sign language interpretation, audio description). These ideas, while originally intended for television, could also be applied to other digital formats.

Finally, we might consider the way in which digital tools extend the possibility of inclusion in other aspects of life. One of most important tools that facilitates the participation of youth with disability in the decision-making process is e-publishing of public documents. This tool provides easier access in terms of reading law proposals that are out for public consultation, and thus enables young people with disabilities to have better access to public information and the opportunity to become more involved in decision making. Therefore, such standards should be implemented by government institutions and within education systems. There are several standards

for document accessibility such as Daisy and e-Pub, even basic HTML or text, which are completely accessible to persons using assistive technology.

Smart cities and their role in social inclusion of youth with disabilities

While the process of creating a more inclusive digital environment for people with disabilities is usually seen as a transformation of the informational infrastructure (internet and computers, phones and TV), it is important to take it a step further towards a holistic approach. Such an approach is actually integrated in the concept of digital or smart cities. This concept has been adopted to highlight the importance of ICT since the 1990s, but the origins of the faith in technology, and of the techno-urban development professed by the advocates of the smart city, go further back in modern history. In literature the term "smart city" is used to specify a city's ability to respond as promptly as possible to the needs of citizens through smart technology and to meet their demands. Based on the principles of universal design and ICT, smart cities tend to be more inclusive of the needs of people with different types of disability, in this way creating the prerequisites for their efficient participation through a wide range of digital networks and software applications that facilitate multiple aspects of the social and economic life of cities: commerce, transactions, security, health, education, work, leisure, transport and others.

As a result of the ICT and digitalisation used in smart cities, the life of people with disability has improved considerably: metro, trams and buses are 100% accessible; participation has improved due to the accessible websites with information on decision-making processes and use of e-participation tools; there is accessible information about infrastructure, for example information about which pedestrian crossings have audio guidance for the visually impaired and the location of disabled parking spaces; or, in the cultural sector, people with disability can discover where operas are performed with audio description and programmes are available in large print, Braille or easy-to-read format.

In order to make cities more inclusive and adapted to the needs of people with disabilities, local public authorities and businesses should take into consideration the factors that contribute to their integration in society using ICT and digitalisation. Possible ways for ensuring the social inclusion of people with disabilities in cities using ICT could be:

- the application of a wide variety of digital and electronic technologies to the city and its communities;
- the application of ICT to give an uplift to life and the working environment in the region;
- the embedding of such ICT within government systems;
- the territorialisation of practices that bring people and ICT together, in order to foster innovation and enhance the knowledge that such practices offer.

The idea of promoting inclusiveness of people with disabilities by using ICT in the development of urban and rural areas is essential from the perspective of human rights and non-discrimination. In the process of urbanisation, all actors whose

services are used by the whole population, especially people with disabilities, have to ensure accessibility of their services matched to the individual needs of people, and ICT offers good opportunities and perspectives in this regard. Having an inclusive society for all without discrimination will increase the prosperity of those countries where everybody can participate actively in the development of their community.

ICTs supporting social inclusion of persons with disabilities

This section gives an overview of how ICTs can facilitate the social inclusion of persons of disabilities. Some of these solutions can be prioritised and delivered by governments, through policies focused on social inclusion of persons with disabilities and allocation of relevant funding for the ICT solutions, while others may be delivered by civil society organisations or associations working with persons with disabilities. In reality, many of the innovations and solutions are driven and provided by the private sector and the ICT industry.

ICTs for people with learning disability

For young people with learning disability, government policies can prioritise investment in their independence and autonomy by developing infrastructure where they can easily orientate themselves and understand the texts and information to which they have access in virtual life or in the city. In order to ensure that people with learning disability will be able to understand the content of information that is addressed to the general population, we have to provide alternative forms of communication in easy-to-read formats (with easy-to-understand symbols). Easy Read information is designed for people with a learning disability who like clearly written words with pictures to help them to understand. Easy Read format consists of pictograms, symbols and icons to assist the user and it can be used in providing ICT services, such as telephone services, online services, transport and information services.

ICTs for youth with hearing impairments

Since ICTs are constantly developing, there are now services that can be valuable to the social inclusion of deaf and hearing-impaired persons. ICTs offer tools such as written online content, supplemented with images and text messages, on mobile phones. This form of accessibility of information offers unprecedented information access to people with hearing disabilities. These technologies are enabling the hearing-impaired to become active participants in a global conversation, as opposed to being passive recipients of a broad range of media. The rise of social networking has facilitated social inclusion to the extent that differences in hearing ability should not be a barrier to online communication between those who have a hearing disability and those who do not. However, online communications are evolving in a direction that is less text-centric than it used to be, so it is important to ensure that hearing-impaired persons do not become excluded from full participation in online activities. In many cases, there are technologies that can ensure access to

audio-based content, but it will take sustained effort and awareness to ensure that these technologies can be effectively used in developing countries.

At the same time, some good examples of inclusive solutions for hearing-impaired persons include the provision of text versions of podcasts and the transcription of video files into text, which enable services such as closed captioning of internet videos. YouTube, for example, has the ability to auto-generate closed captions from the speech in a video and encourages those who post videos to edit captions for clarity and to remove any transcription mistakes. This is an example of how a private sector body responds to demand through creative ICT solutions. Moreover, machine-learning-based AI technologies can be used to automate significant portions of the acoustic model development process, such as through Microsoft's Custom Recognition Intelligent Services, in order to customise Microsoft's speech-to-text engine.

ICT for youth with visual impairments

For people with visual impairments, smartphones and specialised apps hold significant potential for facilitating their everyday life. A smartphone camera, in combination with printed QR codes, can provide an audio indication to assist in identifying items around the house or in public spaces. For example, the KNFB Reader app provides a text-reading capability using a smartphone. It can take a picture of text on a sheet of paper and use optical character recognition to convert it to an audio stream to which the user can listen. The easy-to-use KNFB Reader app converts any text to speech or Braille, instantly and accurately. Its text-to-speech and text-highlighting tools make it valuable for blind, low-vision, dyslexic and other print-disabled users.

Voice recognition software, such as Dragon Naturally Speaking, is another tool designed to recognise voice commands and dictation from a single individual. Development of more general-purpose acoustic models for voice recognition is a significantly more difficult task. The software has three primary areas of functionality: voice recognition in dictation, with speech transcribed as written text; recognition of spoken commands; and text-to-speech, speaking the text content of a document. Different computers in a networked environment can access voice profiles, although the audio hardware and configuration must be identical to those of the machine generating the configuration. The Professional version allows creation of custom commands to control programs or functions not built into Naturally Speaking.

Screen Magnifier software can increase the size of displayed information up to 36 times, so it is a necessary app for those with low vision. Braille equipment and Braille printers offer another alternative for the social inclusion of people with disability. These allow printing of simple texts and graphics from electronic format to Braille format, by creating embossed dots on a thick, very durable paper. Another innovation among ICTs is BLITAB, the world's first tactile tablet for blind and visually impaired people. The invention is smart tactile technology that can also be used in various products and smart body applications. BLITAB is the first tablet that allows blind and visually impaired users to learn, work and play with one mobile device, and to have real-time digital access to information.

One other new technology designed for persons with disabilities to enhance their civic participation is the Ballot marking device (BMD), which creates accessible voting machines. The device permits voters to mark a paper ballot. A voter's choice is usually presented on a screen in a similar manner to a direct-recording electronic machine, or perhaps on a tablet. However, a BMD does not record the voter's choices in its memory. Instead, it allows the voter to mark the choices on screen and, when the voter is done, prints the ballot selections. The resulting printed paper ballot is then either hand counted or counted using an optical scan machine (Disability Voting Coalition 2018).

ICT for people with physical disabilities

Augmentative and Alternative Communication devices enable people with severe physical or speech difficulties to communicate with others in conversation or to input text to a computer. They can be used with eye-tracking equipment in the most severe cases. Devices in this category include speech-generating devices, producing electronic voice output, allowing the individual to communicate. These portable electronic devices allow users to select letters, words and messages, alone or in combination, to be spoken aloud in a pre-recorded or computer-generated voice (text-to-speech). Further assistive technology includes "switching devices" – specially adapted hardware that can be used to control a computer when paired with appropriate software, which may replace the keyboard and mouse. These devices vary from simple mechanical buttons to more advanced setups such as blink sensors. Finally, the Eyegaze Edge is an eye-operated communication and control system that empowers people with disabilities to communicate and interact with the world by controlling a computer using just their eyes. By looking at control keys or cells displayed on a screen, a user can generate speech either by typing a message or selecting pre-programmed phrases. Eyegaze Edge Systems are being used to write books, attend school and enhance the quality of life of people with disabilities all over the world.

In addition to existing interactive and accessible services provided by new technologies such as standards-based internet protocol television (IPTV), another new development in broadcasting will make access services available via integrated broadcast-broadband (IBB) systems. As with IPTV, IBB content delivery via broadband telecommunication networks allows the representation of access service exactly according to the needs of the persons with disabilities without causing any disturbance to those who do not need these services. In this case, the access services can be displayed (video, images, sound, text, graphics and data) either on the main screen (or the main loudspeakers) or on a second screen (normally a type of tablet PC). By means of the second screen, persons with disabilities are individually served even when watching TV together with their friends or their family.

ICT, youth sector and youth with disabilities

As mentioned before, ICT and digitalisation have great potential for the development of the youth sector. Very often, youth with disabilities or their representatives are not involved in youth activities and programmes for various reasons, such as stereotypes, lack of resources to adapt events to the individual needs of youth with

(hearing, visual or mental) disabilities and lack of accessible infrastructure for those with limited mobility. At the same time, youth with disabilities are often excluded from participation in decision making because public participatory processes are not fully inclusive and the information provided in the process of consultation is not in an accessible format for young people with disabilities.

ICTs can contribute to developing a more inclusive youth sector, where youth with disabilities will have equal and easy access to youth activities, with the possibility of participating in the democratic life of the country, using different e-platforms for accessible education, information and participation in decision-making processes, in the comfort of their home. Today, ICTs can serve as a bridge for youth with disabilities to participate efficiently and be actively involved in socio-democratic life. We can make the youth sector more inclusive by utilising new technologies in the design and development of youth programmes and activities, but first it is essential to redefine the approach to youth sector development and to prioritise the use of ICT in the functions of youth organisations and related institutions. In this process, it is necessary to develop apps and software adapted for people with disabilities which will facilitate their inclusion in youth activities. In this way, new opportunities will be opened for the integration of young people with disabilities into the activity of youth organisations, as volunteers, workers or beneficiaries of their services.

Therefore, youth organisations and related institutions must make their information accessible in accordance with WCAG and ISO standards on accessibility, which will ensure that youth with disabilities can access and understand the information provided. Firstly, however, they have to ensure that their Web pages will be understood by people with a learning disability, using easy-to-read or audio format for people with visual impairment or mental disabilities. Secondly, they must ensure that all information provided online has been adapted to the needs of persons with disabilities by providing reading/audio alternative versions of the material.

Moreover, since the internet tends to be less text-centric, it is crucial to ensure that youth with hearing impairment do not become excluded from full participation in online activities. Thus, it is vital to provide the text version of podcasts and the transcription of video files into text. The youth sector generally, including youth organisations and institutions, needs to start to incorporate in their activities those devices and tools that can recognise voice commands and dictation, in order to create alternatives for those with mobility impairments that make it challenging to work a keyboard or mouse. Similarly, in order to strengthen the presence of blind, low-vision, dyslexic and other disabled users in the youth sector, it is essential to utilise the easy-to-use KNFB Reader app, which has the ability to convert any text to speech or Braille, instantly and accurately. Alternative forms of communication via tablets which have as a component the Braille format for reading and writing could also be introduced for wider use within the youth sector.

ICTs have tremendous potential for use within government or public administration. Good governance has to be developed as an aspect of democracy, taking into consideration the accessibility standards of participatory platforms (e.g. "e-governance" or "e-democracy"). In this way, states can promote the active participation of youth with disability in the democratic life of the community or country. In light of the lack

of accessible infrastructure for people with disabilities, a deficit which limits considerably their activity and inclusion in society, it is important to develop programmes and youth activities in a way that will allow youth with disability to constructively use their time at home. Accessible platforms for the participation of such young people in the decision-making process could be developed. These platforms are a way to include youth with disabilities in developing the youth sector. However, it is important to note that these platforms are not a sustainable solution for youth with disabilities, but a transitional solution until they have access to infrastructure which will allow them to participate directly in the decision-making processes. Thus, the participatory e-platforms have to be considered as complementary opportunities for the participation of youth with disability but should not serve as a way of replacing the work on providing physical infrastructure (accessibility of buildings, roads and public transport, among others).

Conclusion

Developing an inclusive youth sector that caters for those young people with fewer opportunities is directly connected to the developing trend of inclusive ICTs. Governments and all stakeholders in the youth sector need to use all ICT opportunities. Moreover, universal accessibility in the information, communication and technology sector holds unparalleled promise and opportunity for youth with disabilities, giving them the ability to be included as active members of society. ICT creates new opportunities for information and communication for and with youth with disabilities. It builds a bridge for them to be included in the activities which are happening in the youth sector, creating the prerequisites for their social inclusion and active participation in society.

The inclusiveness and universal design approach in ICT development is critical for the social inclusion of people with disability and it has to be a priority for government agencies and private industry wishing to address the current needs and anticipate future needs of youth with disabilities. By recognising the importance of the rights of youth/persons with disabilities and their social inclusion through assistive technology, the world is just beginning to strengthen relevant policies, strategies and programmes along with general public awareness. In order to ensure that the youth sector is utilising ICT for social inclusion, it is necessary to have a common ground for advocacy and promotion of particular approaches in order to ensure that the youth sector is accessible for all without discrimination. These actions will vastly contribute to the development of an inclusive and sustainable youth sector where no one is left behind because of their disabilities or social background.

ICT can offer significant potential to make our societies more inclusive of young people with disabilities, but a number of steps must be taken to ensure that the digital agenda does not develop in a way that excludes them. For the youth sector this may mean engaging in advocacy work, to make policy makers more aware of the accessibility agenda, and the need to provide low-cost assistive technologies to young people with disabilities. More broadly the youth sector can consider mainstreaming the use of universal design principles in the digital tools it adopts or develops, as well as providing training for both youth workers and young people on the use of assistive technologies.

References

Deakin M. and Al Waer H. (2011), "From intelligent to smart cities", *Intelligent Buildings International*, Vol. 3, No. 3, pp. 140-52.

Disability Voting Coalition (2018), "Ensuring the accessibility of voting systems in Pennsylvania: Report and recommendations", available at www.paddc.org/wp-content/uploads/2018/10/PADDC-VotingSystemsReport2018.pdf, accessed 4 July 2020.

EU Agency for Fundamental Rights (2018), *Fundamental Rights Report 2018*, available at https://fra.europa.eu/en/publication/2018/fundamental-rights-report-2018, accessed 12 July 2020.

EU Agency for Fundamental Rights (2019), *Fundamental Rights Report 2019*, available at https://fra.europa.eu/sites/default/files/fra_uploads/fra-2019-fundamental-rights-report-2019_en.pdf, accessed 4 July 2020.

Magennis M. (n.d.), e-Accessibility Policy Toolkit for Persons with Disabilities, International Telecommunications Union, available at www.e-accessibilitytoolkit.org/toolkit/eaccessibility_basics/accessibility_and_the_purposes_of_icts, accessed 4 July 2020.

Narasimhan N. and Leblois A. (2012), *Making mobile phones and services accessible for persons with disabilities*, International Telecommunications Union, available at www.itu.int/en/ITU-D/Digital-Inclusion/Persons-with-Disabilities/Documents/Making%20Mobile-English.pdf, accessed 4 July 2020.

National Disability Authority (n.d.), "Universal design principles", available at http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/, accessed 4 July 2020.

Quarless D. (2016), "ICT for people with disabilities", available at www.cepal.org/en/notes/ict-people-disabilities, accessed 4 July 2020.

United Nations (2006), Convention on the Rights of Persons with Disabilities, available at www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html, accessed 4 July 2020.

United Nations (2012), United Nations Expert Group Meeting on Building Inclusive Society and Development through Promoting ICT Accessibility: Emerging Issues and Trends (Tokyo, Japan, 19-21 April 2012), available at www.un.org/development/desa/disabilities/about-us/expert-group-meetings/united-nations-expert-group-meeting-on-building-inclusive-society-and-development-through-promoting-ict-accessibility-emerging-issues-and-trends-tokyo-japan-19-21-april-2012.html, accessed 4 July 2020.

United Nations (2013), *The ICT opportunity for a disability-inclusive development framework*, available at www.itu.int/en/action/accessibility/Documents/The%20ICT%20Opportunity%20for%20a%20Disability_Inclusive%20Development%20Framework.pdf, accessed 4 July 2020.

United Nations (2015), *Transforming our world: the 2030 agenda for sustainable development*, available at https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf, accessed 4 July 2020.

United Nations (2016), Division for Social Policy Development (DSPD) and United Nations Department of Economic and Social Affairs (DESA), *Toolkit on disability for Africa: information and communication technology (ICT) and disability*, available at www.un.org/esa/socdev/documents/disability/Toolkit/ICTandDisability.pdf, accessed 4 July 2020.

United Nations (2019), *Disability and development report – realizing the sustainable development goals by, for and with persons with disabilities*, available at www.un.org/development/desa/dspd/2019/04/un-disability-and-development-report-realizing-the-sdgs-by-for-and-with-persons-with-disabilities/, accessed 4 July 2020.

WCAG [Web Content Accessibility Guidelines] 2.0. (2008), available at www.w3.org/TR/2008/PR-WCAG20-20081103/ [for 2012 version, see www.w3.org/TR/WCAG20/], accessed 4 July 2020.

WebAIM (n.d.), "Constructing a POUR website: putting people at the center of the process", available at https://webaim.org/articles/pour/, accessed 4 July 2020.

Examples of ICT tools designed for people with disabilities

BLITAB – the innovative tablet for the blind, available at https://starts-prize.aec.at/en/blitab-the-innovative-tablet-for-the-blind/, accessed 4 July 2020.

Creating Speech-Driven Applications with Cognitive Services and LUIS, available at www.microsoft.com/developerblog/2016/11/01/creating-speech-driven-applications-with-cognitive-services-and-luis/, accessed 4 July 2020.

Dragon NaturallySpeaking, available at https://en.m.wikipedia.org/wiki/Dragon_NaturallySpeaking, accessed 4 July 2020.

Eyegaze Edge screen, available at https://eyegaze.com/products/eyegaze-edge/, accessed 4 July 2020.

KNFB Reader app, available at https://knfbreader.com/, accessed 4 July 2020.

Speech-generating devices [article], available at https://en.wikipedia.org/wiki/Speech-generating_device, accessed 4 July 2020.

Voting Equipment [article], available at www.ncsl.org/research/elections-and-campaigns/voting-equipment.aspx, accessed 4 July 2020.

Chapter 4

Digitalisation for the empowerment of individuals with visual impairment or blindness

Judit Gombás, Mária Magdolna Flamich and Mária Rita Hoffmann

All three authors of this chapter have a congenital visual impairment (VI) and are legally blind. We all have shorter or longer experience using Braille, or different assistive devices, and living without and with computers. All three of us are academics, and are entitled to lifelong learning. We decided to write this chapter because, thinking back on our lives, we believe we could not have achieved so many of our goals without digitalisation.

Introduction

The appearance and rapidly growing use of information and communication technology have essentially changed people's lives. In 21st-century Europe, we accomplish our daily tasks with the help of a computer. The list of things we use ICT and the internet for is endless: we buy goods online, read news and search for people with the same interests. Today's professional discourses have shifted from a former, more simplistic focus on access to the internet, towards a more comprehensive web of cultural, economic and social factors (Van Deursen and Van Dijk 2014), in which the development of digital skills is a primary goal (Eynon and Geniets 2015).

For those who do not need them for their daily work, computers and smart devices may not be much more than commodities but, for individuals with disabilities, digitalisation provides increased self-sufficiency and independence: "Independent living requires that the built environment, transport and information are accessible, that there is availability of technical aids, access to personal assistance and/or community-based services" (ENIL 2012). For individuals with VI, technology has opened up the world. Blind and low-vision users are able to do things they had not even dreamt of. Although access to information is still challenging (Argyropoulos et al. 2019), people with VI are provided with independent access to many times more information than before computers appeared in their daily lives. "In short, the personal computer has revolutionised access to text by visually impaired people" (Douglas et al. 2001: 29).

Young people nowadays are generally seen as having been naturalised in a world of technology, which they navigate with innate confidence (Oblinger and Oblinger 2005), although digital inequalities and the urgent need for bridging these inequalities are often underlined. Young people with VIs, like sighted young people, wish

to be part of the net culture, want to have an up-to-date knowledge of IT and seek to belong to different online communities.

In this chapter, the essentials of both traditional and modern tools of assistive technology (AT) are briefly introduced, bearing in mind that teachers, youth workers and other professionals working with mixed-ability groups of young people are often unfamiliar with how children and young people with VIs can cope with daily tasks. First, a short overview of tactile writing systems is given, followed by an introduction to some accessible technical solutions (screen reading and screen magnification software) and accessible smartphone features, which make it possible to use ICT with limited or no sight. Finally, we examine in what ways technology promotes independence, power and social inclusion for young people and adults with VIs. Digitalisation has immensely improved the chances of equal opportunities for people with VI. By supporting young people with VI in getting hold of computers and smart devices, and facilitating their ICT education, we increase their chances of good-quality education and meaningful employment, which may also prevent them from segregation and isolation.

Background

Visual impairment is a broad and very complex phenomenon. The International Classification of Diseases 11, devised by the World Health Organization (WHO), differentiates distance and near VI. There are four subcategories of distance VI.

- Mild – presenting visual acuity worse than 6/12
- Moderate – presenting visual acuity worse than 6/18
- Severe – presenting visual acuity worse than 6/60
- Blindness – presenting visual acuity worse than 3/60

Near VI means presenting near visual acuity worse than N6 or M.08 with existing correction (WHO 2018).

Visual impairment may be congenital or acquired during childhood or adulthood. According to WHO statistics, 80% of all eye diseases worldwide are preventable, and globally the main cause of VI is uncorrected presbyopia, i.e. inability to focus in near vision, caused by aging (Holden, Tahhan and Jong 2015). According to the European Blind Union (EBU), the estimated number of blind and partially sighted citizens, in geographical Europe, is over 30 million, 90% of whom are over the age of 65 (EBU n.d.).

The Convention on the Rights of Persons with Disabilities, launched by the United Nations in 2006, has eight guiding principles. Full and effective participation and inclusion in society, equality of opportunity and "accessibility are the three guidelines, which directly support the provision of digitalisation for all" (see Chapter 3 in this volume). In addition, Article 7 of the CRPD obliges states parties to "take all necessary measures to ensure the full enjoyment by children with disabilities of all human rights and fundamental freedoms on an equal basis with other children" (United Nations 2006). The European Disability Strategy 2010-2020 pays special attention to accessibility, and access for all to information in particular (European Commission 2010).

What do we mean by assistive technology? In the US, the Individuals with Disabilities Education Improvement Act of 2004 defines AT as follows: "Any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities." In practice, any software, hardware or adapted tool, except for surgical implants, may be regarded as AT, if it facilitates the education and everyday life of individuals with disabilities (Georgia Department of Education n.d.). For people with VIs, AT includes non-electronic aids (e.g. spectacles, handheld and stand magnifiers, white cane, braillers and Braille frames for writing) and electronic aids (CCTVs – closed circuit televisions, screen readers, talking household appliances, talking watches and clocks). All assistive tools listed here are equally important. For a person with low vision, for instance, reading a newspaper on the train might be easier with a handheld magnifier than with any electronic device. It is important to be aware that, although technology offers solutions for many difficulties, there is so far no modern aid that can replace, for example, a white cane or glasses. The challenges of ICT use and ICT availability vary, of course, depending on numerous factors, such as age, geographical location, SES (socio-economic status) and the severity and onset of the VI.

Access to information and education for children with VI is a worldwide concern. Children with disabilities, all over the world, are more likely to live in poverty, face exclusion and stigmatisation, and have poor health, limited access to education and fewer economic opportunities when they grow up (Borg et al. 2015). The discussion paper by Borg and colleagues shows that access to AT makes a critical impact on the lives of children with disabilities and strongly contributes to their independence and social inclusion. There are no worldwide standards defining at what age children with VI should start familiarising themselves with assistive aids. Cutter (2014), for instance, suggests that the use of the long white cane should start as soon as the baby is able to grab on the cane, sitting in an adult caretaker's arms. It is obvious that an early introduction of AT, together with age-appropriate introduction of IT, creates the basis for becoming an efficient user of all kinds of supportive technology. It is therefore evident that an early focus on developing IT skills improves, later in life, young people's learning and work capacity, and their inclusion in their communities.

Tactile literacy

The beginnings of institutional education of blind children date back to the 18th century. The first school for blind pupils was established, in France, in 1784, by Valentin Haüi. It was clear to teachers that education is impossible without literacy. In the 19th century, various tactile reading media appeared in parallel in the United States and in Europe. Originally, embossing Latin letters meant simply carving them in wood or shaping letters from bent pieces of wire, and the letters were then organised into words (Cooper 2006). This was obviously easy to read for sighted people, but proved to be inefficient to read for blind users: the smaller the letters were, the harder it was for the fingertips to feel the lines. And that led to the invention of raised-line systems. It is common for these systems to use characters that resemble ink-print Latin letters, but are simplified for easier tactile recognition.

For about 50 years, Boston Line Type, a raised-line writing system, developed by Samuel Gridley Howe, was the dominant and official medium of literacy for blind Americans, until 1908. Dr William Moon, a blind Englishman, introduced a similar raised-line tactile writing system almost at the same time as his American counterpart, in 1845. Moon characters bear a strong resemblance to ink-print Latin letters. The Royal National Institute of the Blind (RNIB) in Great Britain still prints books in moon code for blind people. By contrast, another US teacher of blind students, William Bell Wait, was convinced that a dot-based system would be easier to feel. He invented the New York Point, a system of raised dots that was also used in many schools for the blind in the US. Since Louis Braille (1809-1852) was not the only person to experiment with dot-based tactile writing, how did Braille finally conquer the world and outlast other dot-based writing systems? It is actually the code which best fits our sensory system. Braille characters, which are two dots wide and three dots high, are most suitable in size and shape for human fingertips.

The appearance of tactile reading and writing systems was clearly essential in the education of blind children. Literacy opened up the path to information and culture. The first collections of tactile books appeared in US libraries in the second half of the 19th century, and the first talking books were available for visually impaired readers in 1934 (NLSBPH 2019). During the 20th century, students with severe VIs, both in segregated schools and in inclusive settings, were taught Braille. But there was a constant hunger for information, an urgent necessity for tactile study material in schools, demand which Braille printing houses proved to be unable to satisfy. A great difficulty with all tactile reading is mass production. During the 20th century, though blind children and adults had constantly increasing access to written information through tactile and audio books and magazines, the amount of information they acquired was still very limited in comparison to sighted individuals.

Digital solutions promoting literacy for individuals with visual impairment

Assistive technology for low-vision users

The technological innovations of the 20th century have brought access to ink print for those who have some degree of sight, but need magnification. For individuals with low vision, regardless of their age, optical rehabilitation is an important part of VI-specific education. The most-used optical devices are handheld magnifiers, standing magnifiers and closed circuit televisions (CCTV). CCTVs provide special magnification solutions, so they promote enhanced reading performance and reading duration for those with severe VI, thus being among the most popular digital magnification devices for students with VI. However, there are several disadvantages: high cost, big size, poor portability or the need to move the aid from classroom to classroom (Gothwal et al. 2018). Irvine and colleagues (Irvine et al. 2014) found that many people with low vision do not use special aids in public, hoping not to be identified as a person with vision problems. In the lives of young people with VI, this is an issue, which requires special attention from parents, teachers and rehabilitation professionals.

Modern screen magnification provides complex access options. There are slight differences depending on the type of aid or software used, but the following settings are rather common: the text may be manipulated in terms of foreground/background contrast and colours, font size and brightness. For some people, reading white or yellow letters on a dark background gives higher contrast than reading dark letters on a light background, the generally used format. It is also important that obscuring task-light is prevented while reading a back-lit screen, a problem that often occurs when reading from a printed sheet of paper (Douglas et al. 2001). Today's CCTVs and screen magnification software provide similar accessibility features. ZoomText, developed by Freedom Scientific, is screen magnification software for the PC, with a wide range of zooming options.

Access to the screen without sight

The first text-to-speech engine was IBM Screen Reader, invented by Jim Thatcher and Jesse Wright (himself blind), mathematicians at IBM. The IBM Screen Reader for DOS was launched in 1986. This first version was used exclusively used by IBM staff members, because at that time accessibility was not considered a major market factor (AccessWorld 2004). Nowadays, the most common screen readers worldwide are JAWS (Job Access with Speech) for Windows, by Freedom Scientific, and NVDA, by NV Access. Both apps operate in multiple languages, depending on the user's needs. With a screen reader, it is possible to read and write documents or surf the internet. The greatest difference between these two programs is that while a single licence for JAWS costs 1 000 US dollars, NVDA is free. Yet JAWS is the market leader. A study of screen reader preferences among individuals with VI in India (McCarthy, Pal and Cutrell 2013) found that 57% of all the respondents admitted that they had used pirated versions of JAWS. The three experts, based on their research on the use of AT in India, emphasise that, in low- and middle-income countries, open source softwares like NVDA are the only legal access to computing. There is little research on screen reader preferences and internet use among individuals with VI living in Europe. WebAIM conducted a worldwide research study of computer and smartphone use among individuals with VI (WebAIM 2019) and found that 58% of all respondents were US citizens, while 27% were residents of Europe. Although research responses were not categorised on the basis of residence, there are important tendencies in ICT usage that may be assumed to be valid for Europe. The survey found that 40.6% of all respondents use NVDA as their primary screen reader, while 40.1% prefer JAWS. While there is growing interest in free screen readers, Freedom Scientific, in partnership with local entities, made JAWS available for all users with a VI in Colombia (2014) in co-operation with the Colombian Government, in Spain (2016) in partnership with ONCE, the national organisation of Spanish blind people, and in Hungary (2018) together with the IT Foundation for the Visually Impaired.

Nowadays, touch screen technology is common, but it is a frequent barrier for individuals with VI. It is used in household appliances – it is, for instance, almost impossible to buy a cooker with buttons. Unlike these gadgets, a growing number of smartphones and tablets are designed to be accessible for all. Apple is a pioneer in digital accessibility, being the first manufacturer to incorporate accessibility features in their smart products. VoiceOver is the built-in screen-reading solution of IOS. The use of VoiceOver, together

with some specific hand gestures, provides access for individuals with VI. The use (i.e. frequency, individual preferences, accessibility) of smart devices among people with VI is not yet deeply investigated (Griffin-Shirley et al. 2017), but in developed countries a growing number of individuals with VI use them. WebAIM found that 69% of respondents used VoiceOver as their primary smartphone/tablet platform, while only 27.5% reported Android use (WebAIM 2019). As 27% of respondents were residents of Europe, these numbers may be regarded as guidelines in European mobile text-to-speech preferences. Android and iOS are under constant development, facilitating users with VI in many areas of life. With the help of screen reading, maps can be used, promoting independent navigation in the streets. There are smartphone applications, developed specifically for assisting blind people, e.g. colour and light detectors, or apps which recognise banknotes. Apple has developed a unique international initiative, www.applevis.com, giving Apple users with VI an opportunity to share their experience with the products, and find answers to their iOS-related questions.

Both JAWS and iOS facilitate not only audible screen reading, but also tactile screen access, via a refreshable Braille display connected to the PC or smart device. This smart device allows one line or part of a line from the screen to be read in Braille. The line of Braille cells contains pins which rise and fall, depending on the characters (i.e. the combination of dots in the cell). It is important to note, that although refreshable Braille displays offer a modern solution for real reading, with real Braille text available, there is a clear preference for using screen-reading software. One of the reasons is the high cost of these devices. It is also indisputable that screen readers provide a much faster reading speed than reading Braille (Argyropoulos et al. 2009). Since the first screen readers started spreading, there has been ongoing discussion over the role of Braille and tactile writing in general. While Braille is considered to represent competence, independence and equality (Schroeder 1996) and many argue that there is no literacy without being able to read print, either tactile or ink, Gerber points out that screen readers and AT provide access to information to all those who, for any reason, are unable to read print (Gerber 2003). It is evident that computers also offer a solution for the problem of availability of printed Braille, which is often cited as a problem with Braille (Keil 2004). Papadopoulos et al. (2009) in their research found that braillists perform better in spelling tests than those individuals who use other media – large print, CCTV or screen magnification.

Internet use among young people with visual impairment

Access to the internet has the power to fill information gaps in the lives of individuals with VI. The World Wide Web Consortium (W3C) develops different Web standards, such as HTML, and the W3C Web Access Initiative has created support materials to help Web content developers all over the world understand and implement accessibility. W3C published the Web Content Accessibility Guidelines (WCAG) 2.0 and 2.1, to provide clear and easy-to-meet standards. In the EU, several measures have been taken to promote access for all to the internet. The EU Web accessibility policy requires that "All the official websites of the EU institutions should follow international guidelines for accessible web content. This means that texts, images, forms, sounds, etc. should be accessible and understandable by as many people as possible without discrimination" (European Union 2017: §1).

The EU's European Internet Inclusion Initiative (EIII) empowers policy makers and public bodies to become increasingly inclusive and to provide accessible public services. Members of the European Parliament approved a proposal that online public services be accessible for all, and emphasised that "in our increasingly digital world, accessibility is very much a human right". Yet, over 167 million European citizens have difficulty accessing the internet (European Parliament 2014). The EU Directive on the accessibility of websites and mobile applications of public sector bodies called for not only inclusive websites, but also accessible mobile applications, underlining that ICT usage promotes overcoming exclusion (European Parliament 2016).

It is a positive and important step forward that access for all to the internet has become part of legislation, and is a focus of policy makers. However, scientific research on blind and low-vision young people's access, and their habits of internet use, is very limited. It is a multidisciplinary field of study, with sociological, educational and special educational, technological and rehabilitation aspects. Most of the related research investigates topics such as the usability of particular software or hardware, IT in the classroom or challenges which users with VI face due to poor access to the internet, while the personal experiences of young people on digitalisation are rarely heard.

In the context of digitalisation and young people, it is a priority to focus attention on possible hazards and the protection of children and young people. It is especially important for vulnerable groups. Cyber bullying is a general concern mentioned in discourses of young people and the internet, with children and young people with disabilities being at higher risk (Kowalski and Fedina 2011). While it is important to work consciously for the proper education of young people with VI on how to prevent and handle any form of bullying, it is, at the same time, vital not to discourage them from the online world, as it has much to offer in accessible information. Thanks to the internet, young people with VI connect with each other more easily than ever before. Online platforms are suitable for them in sharing news about innovations and supporting each other in challenging situations.

There are some innovative, international initiatives, all of which aim at supporting digital access and networking for people with VI. The European Blind Union launched the EBU Access Cast in 2018. In the monthly episodes, the latest technological innovations of accessibility and new products are introduced, by blind and low-vision expert users. The International Camp on Communication and Computers (ICC) has a history of 25 years in teaching IT skills to students with VI, aged 16-21, all over Europe. VIEWS International, an NGO based in Belgium, is an umbrella organisation encompassing 23 member states in Europe and neighbouring regions. VIEWS has for many years been active in international youth projects, with a focus on encouraging young people with VI to live more actively, learn foreign languages, travel and even volunteer abroad. Members may share information and keep connected via the VIEWS International Facebook page or the VIEWS mailing list. Similar initiatives can be found all over Europe and beyond: forums for students with VI, forums for parents of children with VI and also forums for parents with VI. Getting connected, sharing experience with people who face similar challenges and gaining access to the power of a supporting community all offer a different sort of support than teachers or rehabilitation experts offer.

Conclusion

Information is power. The EU Directive on the accessibility requirements of products and services (European Union 2019) aims at eliminating barriers to the free movement of accessible services and products, and increasing access to relevant information within member states. Getting access to information at any time promotes independence. The ability to keep up with peers and new opportunities of connecting have a great impact on social inclusion.

The intersection of digitalisation and VI is a complex interdisciplinary field of research that involves information technology, rehabilitation sciences, special and inclusive education, and even sociology. It is obvious that the constant and rapid development of digitalisation, together with the growing demand for access for all to computers, urges teachers, habilitation and rehabilitation service providers to promote and provide comprehensive education in AT and ICT. AT is a key to the successful and inclusive education of children with VI (Borg et al. 2015). It is therefore crucial that teachers be educated in AT. Several studies (Abner and Lahm 2002; Corn and Wall 2002; Zhou et al. 2012) have found that teachers report their AT competences as low, and they are open and motivated to learn about AT. As Jones et al. point out, it is not only teachers of the visually impaired and therapists who need to be knowledgeable about AT, because students with VI attending mainstream schools spend most of their time with their general teachers (Jones 2019). Studies on AT should therefore be part of general teacher training (Smith et al. 2009; Argyropoulos et al. 2014), especially because this area of knowledge is valuable not only for VI students. For instance, the use of screen-reading software may enhance everyday learning and memorising for students with dyslexia.

Various studies report (Irvine et al. 2014; Gothwal et al. 2018) that low-vision students often avoid using special optical aids for fear of standing out among their age group. At any age, but especially among young people with VI, looking different is an inconvenience, and it may be hard to accept that they need assistive aids in their everyday lives, but the benefits of access to AT are endless. "An educated child with a disability supported by AT will have greater opportunities for employment, resulting in less dependence on welfare and social security measures" (Borg et al. 2015: n.p.). McCarthy et al. found that the regular use of AT in adulthood meant a significant increase in the person's social networks, productivity and economic options (McCarthy et al. 2013). Efficient use of AT and ICT shows positive correlations with finding a job (Wolffe and Kelly 2011). Network 1000, a large-scale project in Great Britain, investigated the employment of individuals with VI (N=1007) and, with closer research on a subsample (N=250) of the Network 1000 Project, researchers found that individuals with early onset of their VI were more likely to find a job than those with later onset of VI (Pavey, Douglas and Corcoran 2008). AT must therefore be emphasised during rehabilitation. With good AT and digital competences, those with a later onset of their VI are assumed to be able to adapt to their new life situation more quickly. Participation in education and work provides, of course, multiplied contact opportunities with other people.

It is obvious that age-appropriate, comprehensive education on ICT and AT empowers young people with VI and blindness to face all the challenges of life, including

those of education, work or social and leisure-time activities, more easily than members of earlier generations, who did not have technology at hand. Familiarisation with digital solutions must start as early as possible, since technology is changing and developing day by day. Armed with digitalisation, young people with VI may achieve the fullest of their potential, but they must be able to keep up to date with innovations. It must therefore be a priority for policy makers to provide access for all individuals with VI, regardless of age, gender, race and residence, to have access to IT and AT. As Mary Pat Radabaugh, Director of the IBM National Support Centre for Persons with Disabilities, has said: "For most people, technology makes things easier. For people with disabilities, technology makes things possible" (Assistive Technology Australia, n.d.).

References

Abner G. and Lahm E. (2002), "Implementation of assistive technology with students who are visually impaired: teachers' readiness", *Journal of Visual Impairment & Blindness*, No. 96, pp. 98-105.

AccessWorld (2004), *A history of accessibility at IBM*, American Foundation for the Blind, available at www.afb.org, accessed 15 July 2019.

Anti-Bullying Alliance (n.d.), *Cyber bullying and SEN/disability*, available at www.anti-bullyingalliance.org.uk, accessed 15 July 2019.

Argyropoulos V. S., Sideridis G.D., Kouroupetroglou G. and Xydas G. (2009), "Auditory discriminations of typographic attributes of documents by students with blindness", *British Journal of Visual Impairment*, Vol. 27, No. 3, pp. 183-203.

Argyropoulos V., Nikolaraizi M., Tsiakali T. et al (2014), "Collaborative action research approach promoting professional development for teachers of students with visual impairment in assistive technology", *Journal of International Special Needs Education*, Vol. 17, No. 1, pp. 33-43.

Argyropoulos V., Padeliadu S., Avramidis E. et al. (2019), "An investigation of preferences and choices of students with vision impairments on literacy medium for studying", *British Journal of Visual Impairment*, Vol. 37, No. 2, pp. 154-68.

Assistive Technology Australia (n.d.), *What is assistive technology*?, available at https://at-aust.org/home/assistive_technology/assistive_technology, accessed 15 July 2019.

Borg J., Berman-Bieler R., Khasnabis C. et al. (2015), *Assistive technology for children with disabilities: Creating opportunities for education, inclusion and participation*, World Health Organization, available at www.unicef.org/disabilities/files/Assistive-Tech-Web.pdf, accessed 15 July 2019.

Cooper H. L. (2006), *A brief history of tactile writing systems for readers with visual impairment and blindness*, Texas School for the Blind and Visually Impaired, available at www.tsbvi.edu, accessed 10 July 2019.

Corn A. L. and Wall R. S. (2002), "Access to multimedia presentations for students with visual impairments", *Journal of Visual Impairment & Blindness*, Vol. 96, No. 4, pp. 196-211.

Cutter J. (2014), *Independent movement and travel in blind children. A promotion model*, Information Age Publishing, Charlotte NC.

Douglas G., Kellami E., Long R. and Hodgetts I. (2001), "A comparison between reading from paper and computer screen", *British Journal of Visual Impairment*, Vol. 19, No. 1, pp. 29-34.

ENIL [European Network on Independent Living] (2012), Definitions, available at https://enil.eu/independent-living/definitions/, accessed 13 July 2020.

EBU [European Blind Union] (n.d.), *Facts and figures*, available at www.euroblind.org, accessed 12 July 2019.

European Commission (2010), *European Disability Strategy 2010-2020*, available at https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0636:FIN:en:PDF, accessed 30 September 2019.

European Parliament (2014), "MPs vote to make online public services available for everyone". Press release, available at www.europarl.europa.eu/news/en/press-room/20140220IPR36573/meps-vote-to-make-online-public-services-accessible-to-everyone, accessed 30 September 2019.

European Parliament (2016), Directive on the accessibility of websites and mobile applications of public sector bodies, available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.327.01.0001.01.ENG&toc=OJ:L:2016:327:TOC, accessed 30 September 2019.

European Union (2017), Web accessibility policy, available at https://europa.eu/european-union/abouteuropa/accessibility_en, accessed 30 September 2019.

European Union (2019), EU directive 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services, available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.151.01.0070.01.ENG&toc=OJ:L:2019:151:TOC, accessed 30 September 2019.

Eynon R. and Geniets A. (2015), "The digital skills paradox: how do digitally excluded youth develop skills to use the internet?", *Learning, Media and Technology*, Vol 41, No. 3, pp. 1-17.

Georgia Department of Education (n.d.), *The definition of assistive technology*, available at https://ttaconline.org/Resource/JWHaEa5BS7466G3vCCrU8g/Resource-georgia-project-for-assistive-technology-gpat#:~:text=The%20mission%20of%20GPAT%20is,assistive%20technology%20devices%20and%20services, accessed 12 July 2019.

Gerber E. (2003), "The benefits of and barriers to computer use for individuals who are visually impaired", *Journal of Visual Impairment & Blindness*, Vol. 97, No. 9, pp. 536-50.

Gothwal V. K., Thomas R., Crossland M. et al., (2018), "Randomized trial of tablet computers for education and learning in children and young people with low vision", *Optometry and Vision Science*, Vol. 95, No. 9, pp. 873-82.

Greaney J. and Reason R. (2006), "Braille reading by children: is there a phonological explanation for their difficulties?", *British Journal of Visual Impairment*, Vol. 18, No. 1, pp. 35-40.

Griffin-Shirley N., Banda D.R., Ajuwon P.M. et al. (2017), "A survey on the use of mobile applications for people who are visually impaired", *Journal of Visual Impairment & Blindness*, Vol. 111, No. 4, pp. 307-23.

Holden B. A., Tahhan N., Jong M. et al. (2015), "Towards better estimates of uncorrected presbyopia", *Bulletin of the World Health Organization*, Vol. 93, No. 10, p. 667.

Irvine D., Zemke A., Pusateri G. et al. (2014), "Tablet and smart phone accessibility features in the low-vision rehabilitation", *Neuroophthalmology*, Vol. 38, No. 2, pp. 53-9.

Jones B. A., Rudinger B., Williams N. et al. (2019), "Training pre-service general educators in assistive technology competencies for students with visual impairments", *British Journal of Visual Impairment*, Vol. 37, No. 1, pp. 29-39.

Keil S. (2004), "Teaching Braille to children", *British Journal of Visual Impairment*. Vol. 22, No. 1, pp. 13-16.

Kowalski R. and Fedina C. (2011), "Cyber bullying in ADHD and Asperger syndrome populations", *Research in Autism Spectrum Disorders*, Vol. 5, No. 3, pp. 1201-8.

McCarthy T., Pal J. and Cutrell E. (2013), "The 'voice' has it: screen reader adoption and switching behavior among vision impaired persons in India", *Assistive Technology*, Vol. 25, No. 4, pp. 222-9.

NLSBPH [National Library Service for the Blind and Physically Handicapped] (2019) *History*, available at www.loc.gov/nls/about/organization/history/, accessed 14 July 2019.

Oblinger D. and Oblinger J. (2005), *Educating the net generation*, available at www.educause.edu/ir/library/PDF/pub7101.PDF, accessed 12 July 2019.

Papadopoulos K. S., Arvaniti E. K., Dimitriadi D. I. et al. (2009), "Spelling performance of visually impaired adults", *British Journal of Visual Impairment*, Vol. 27, No. 1, pp. 49-64, available at https://journals.sagepub.com/action/doSearch?target=default&ContribAuthorStored=Gkoutsioudi%2C+Vasiliki+G, accessed 3 July 2020.

Pavey S., Douglas G. and Corcoran C. (2008), "Transition into adulthood and work — findings from Network 1000", *British Journal of Visual Impairment*, Vol. 26, No. 2, pp. 202-16.

RNIB [Royal National Institute for the Blind] (n.d.), "Moon", available at www.rnib.org.uk, accessed 10 July 2019.

Schroeder F. K. (1996), "Perceptions of braille usage by legally blind adults", *Journal of Visual Impairment & Blindness*, Vol. 90, No. 3, pp. 210-18.

Smith D. W., Kelley P., Maushak N. J. et al. (2009), "Assistive technology competencies for teachers of students with visual impairments", *Journal of Visual Impairment & Blindness*, Vol. 103, No. 8, pp. 457-69.

United Nations (2006), Convention on the Rights of People with Disabilities, available at www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-7-children-with-disabilities.html, accessed 12 July 2019.

Van Deursen A. and Van Dijk J. (2014), "The digital divide shifts to differences in usage", *New Media & Society*, Vol. 16, pp. 507-26.

WebAIM (2019), Screen reader user survey, available at https://webaim.org/projects/screenreadersurvey8/, accessed 30 September 2019.

WHO [World Health Organization] (2018), *Visual impairment and blindness*, available at www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment, accessed 10 July 2019.

Wolffe K. and Kelly S. M. (2011), "Instruction in areas of the expanded core curriculum linked to transition outcomes for students with visual impairments", *Journal of Visual Impairment & Blindness*, Vol. 105, No. 6, pp. 340-9, available at https://psycnet.apa.org/record/2011-12441-003.

Zhou L., Ajuwon P. M., Smith D.W. et al. (2012), "Assistive technology competencies for teachers of students with visual impairment: a national study", *Journal of Visual Impairment & Blindness*, Vol. 106, No. 10, pp. 597-608.

Chapter 5

LGBTilisation: learning from the experiences of young LGBTQIA+ people online

Dan Moxon, John Delap, Eli, Seán, Kajetan Koperski, Millica, Hélène Mariaud, Lukas Reußner and Roberta

Introduction

This chapter explores how the digital world helps or hinders the development of young people's LGBTQIA+ identities and how young LGBTQIA+ people are using digital tools to create online communities and engage in social advocacy. The chapter ends with a set of recommendations for the youth sector, proposing how to effectively consider LGBTQIA+ youth in the development of digital youth policy and practice. LGBTQIA+ stands for lesbian, gay, bisexual, transgender, queer or questioning, intersex and asexual or agender. The + denotes that this list is not exhaustive, and that the term can also refer to people who do not fit into these specific categories.

The chapter builds on an increasing body of knowledge that relates to LGBTQIA+ young people's lives online. It has been established that the potential anonymity of the internet can provide the possibility of protection from stigma and the ability to circumvent real world barriers such as lack of support networks (DeHaan et al. 2013). Online peer networks are known to provide young people with the potential for building social capital (Putnam 2001; Steinfeld et al. 2008) as well as the opportunity to develop virtual safe spaces for young LGBTQIA+ people (Lucero 2017). In effect, digitalisation allows the development for LGBTQIA+ young people of virtual communities (Miño-Puigcercós et al. 2019) similar to those described by Pérez-Caramés for Spanish migrants (in Chapter 11 of this volume).

This chapter is a piece of collaborative writing which aims to give space to young LGBTQIA+ people to directly author their experiences and consider how that might relate to youth policy and youth work. Seven of the nine authors of this chapter are young people who identify as LGBTQIA+ in some way. This includes young people who identify as gay or bisexual men, lesbian or bisexual women, and trans men

and trans women;[1] they are from a variety of countries including Poland, Ireland, Italy, France and Serbia. Some of these authors have included full biographies (in the contributors' section at the end of this book), while others have chosen to contribute anonymously.

The initial desire to create this chapter stemmed from a commitment to producing knowledge from the generational standpoint (Alanen and Mayall 2001; Mayall 2002) of young people, and in this case its intersection with LGBTQIA+ standpoints. Utilising knowledge that comes from the situated positions (Haraway 1998) of different social groups is essential to developing effective policy and services for those groups (Croft and Beresford 1989). Building on the knowledge of young people themselves when creating youth policy or programmes helps both to uphold a rights-based commitment to their participation in the development of youth policy and programmes, and also to ensure that policy and programmes can be more effective (Head 2011). This chapter can be considered as a text created on a participatory basis, where the intention was to enable the young people involved to redirect and influence the resources (Larkins et al. 2014) deployed by the publishers to produce this book. Alongside this, it recognises that the "voice" of the young people is multilayered and relational, and that there is a need to utilise dialogical approaches when constructing participatory knowledge (Spyrou 2018).

To create the chapter, Dan (one of the book editors) and John (an educator and activist specialising in work with LGBTQIA+ young people) invited seven young people (Kai, Millica, Eli, Seán, Hélène, Roberta and Lukas) from across Europe to create a text which, they felt, highlighted important messages about LGBTQIA+ youth and digitalisation that would be relevant to the youth sector. Some of the young people were known to John beforehand, and some were friends of friends contacted via Facebook posts and passed on via e-mails. The process for creating the chapter was agreed iteratively by the entire group as the project progressed, rather than being specified in advance.

In the end, the method of drafting relied heavily on digital tools. First, the group met over video chat to discuss and agree on the main themes. During this process we collectively created a series of questions based on these themes and agreed that John, the most experienced facilitator, would interview the group with these questions in a series of future video chats. Two more video chats were held, with separate spaces for people who identified as men and people who identified as women. (Unfortunately, we did not successfully identify anyone who was agender, intersex or non-binary to participate in this project.) The video chats were transcribed by a professional transcriber, and shared as collective online documents which everyone could edit and add to.

Throughout this stage we used WhatsApp groups to stay in touch and discuss the text, and it was agreed that Dan, as the most experienced writer, was best placed to merge and edit the two transcriptions into a single text. This combined

1. We do not dispute the right of trans men and women to identify simply as men or women, but in the context of this work it is necessary to use the terms trans women and trans men to draw attention to trans experiences and identities.

transcription was re-shared with the group as an online document, and individuals then extensively edited and commented on the document until all were happy with the text. That text forms the middle section of this chapter, presented in the form of an edited interview, based on the participants' original dialogue. Towards the end of this process a third video chat was held, where all contributors discussed and agreed what could be learned by the youth sector from this text. A summary of this discussion was made and drafted by Dan, forming the conclusion of this chapter, and an introduction was also added to the text. All contributors were then able to edit and revise these sections.

Being LGBTQIA+ online

The experiences of LGBTQIA+ people in online communities

JOHN: I think a good place to start this discussion is to ask: what sort of experiences do young LGBTQIA+ people have in online spaces?

HÉLÈNE: In my late teenage years when I started to realise I was bi, it was quite a strange experience. I was quite involved in some blogging communities in France that teenagers were doing at the time. In those communities, which were not LGBTQIA+ centred at all, it was about any kind of hobby you could have. I found a lot of kind of hate speech but not maybe like directly towards LGBTQIA+ people as in like sending [attacking] them directly, but a kind of unsafe environment. But in another way it's quite interesting because, when you look up information on LGBTQIA+ issues, I think that helped. If you go to more specific kinds of online communities, there was a way to find accurate information or to find a kind of safe place. That was quite useful and then later on it's been also very helpful.

JOHN: These groups that you speak of, which led to community in France and Belgium, is it more likely that these groups that you find in your life, Hélène, were in French or in English?

HÉLÈNE: It really depends, like mostly, at the beginning, it was mostly in English, I have to say; even when I was a teenager and I started looking up information, etcetera, it was more in English because in French I didn't find a lot of things actually. But I have a feeling that over the past years and months it's changing.

ROBERTA: Once I started looking for them online I found plenty of things, mainly in English but also in Italian. But the thing is that maybe you had to look harder for information regarding trans and queer and bisexual issues, while gay and lesbians are more common.

JOHN: That's interesting. And Milli, can I ask you a version of the same question? Now that you're plugged in to LGBTQIA+ positive spaces, did you also find senses of community from online spaces as well, like Hélène said? And if you did, what language did you find the community in?

MILICA: No, I would say no. Maybe actually a bit in some way in Italian, but personally it's not that important to me. I think I prefer meeting people, talking to them and sharing personal experiences. There is more space for this community, even on the

internet, but as I say maybe online is like 20% of how I feel and what I need. So 80% I prefer meeting other people personally.

SEÁN: In Ireland because there is such a strong religious population and so many people feel connected to that, on online forums you'll find a lot of people quoting the Bible at you or people telling you that your lifestyle or your sexuality is an abomination. If you were to click on a public link on Facebook and see comments, if it was anything LGBTQIA+ related, you see comments from people, complete strangers, saying things as abhorrent as "Ireland shouldn't have faggots". I think that's the experience I've had online and that's something that frustrates me, goes back to me thinking that and believing that LGBTQIA+ spaces are hard to come by online because it's inherently a straight space but yeah, so that's my experience of online LGBTQIA+ spaces.

JOHN: In the German language do you witness online hate speech on internet forums or comments?

LUKAS: There are various places in German online communities where you can observe hate speech. But if you are in an Instagram bubble, and you are just following LGBTQIA+ content, you are almost never stumbling across any hate speech. In other open non-LGBTQIA+ communities it is very likely to encounter hate speech comments if you post LGBTQIA+ related stuff. For example, several members of our youth organisation (diversity München) told us that if they post queer content in their school-related social media groups, there are often various negative comments from classmates. Our youth organisation also had to deal with some accounts who started commenting with hate speech on our social media posts.

JOHN: And online in the Polish language, is there?

KAJ: Yes, there's a lot of hate in the Polish internet and I'm actually trying to avoid Polish sites because I feel like 90, 95% of people are negative and very hateful. Of course, we are creating this bubble in some groups and places, for example on support groups on Facebook where there are mostly LGBTQIA+ people who are kind, supportive and they understand each other's problems. But the outside world, the cis-het[2] internet, is not a good place and most people are ignorant at least. The best thing you can find is someone just knowing nothing about LGBTQIA+ people so they are not hateful because they just don't know that transgender or gay people even exist. But it's still very negative and hate speech is pretty common to the level that nobody really cares anymore. I mean of course transgender people get hate comments but we're not targeted as much as gay folks yet and I think it's mostly because people are not aware of our existence.

What sort of online spaces are LGBTQIA+ people creating?

JOHN: So Kaj and Lukas, you both mentioned that there are places on the internet where you can kind of put yourself in a little box and see really nice supportive things. What sort of spaces are LGBTQIA+ people creating online?

2. Cis-het is short for cisgender, heterosexual. Cisgender refers to someone whose sense of personal identity and gender corresponds with their birth sex.

LUKAS: In Germany there is a huge online community for gay/bi tenagers called "dbna", which is an abbreviation of the German phrase *du bist nicht allein* ("you are not alone"). In contrast to hookup apps like Grindr, dbna is more about finding like-minded people. For example, other teenagers who are also struggling with their feelings and don't know how to address this to their families. Many current and former members of our youth organisation have found us on dbna, and later took the courage to visit us in person. The situation is often different, when it comes to open social media platforms like Instagram. On Instagram, people tend to create a bubble of queer-friendly content around them. The content on Instagram is often very superficial and lacks in-depth discussions on queer-youth issues. However, those in-depth discussions sometimes happen in private chats on platforms like Instagram. In my experience as a youth leader, I have noticed several times that Instagram is used as a substitute for self-confirmation. Especially when the self-confirmation is missing in the personal environment of queer teenagers.

HÉLÈNE: It might be a bit funny to say but pages on social media, you can find them sharing information in serious ways but also in a kind of fun way, by memes or other stuff. This really helps, because it's a sense of community that comes from these kinds of pages or groups. You have all those things where people are getting together and not taking things very seriously, but sharing their own experiences on a more light side, but also you can still find support if you need it.

KAJ: There was this very small kind of Facebook group for transgender people, created a long time ago by one trans woman, there were not many people and they were cross-dressing people as the majority. I joined it and I remember it was quiet and then there was this moment when suddenly people just started to come out. I think that kind of had something to do with our first Polish politician who is a transgender woman. Almost all the nation hated her, but awareness was raised and Poles realised that transgender people existed. Hundreds of people started to be added to this group and now it's the biggest group for Polish transgender people with thousands of us and it's amazing. I find is so helpful in every way possible; for example a 15-year-old who just came out joins the group and every single question they ask is answered in like five minutes. How to bind?[3] What doctor should I go to first? What is dysphoria?

All the resources are there which makes transition easier, everything is accessible much easier and you couldn't get this knowledge anywhere else. It's also very emotionally supportive. Maybe someone is in a difficult situation, like they get kicked out of the house or something, and they just got the best psychologist's contact and even the shelter sometimes from the group. Even parents join and become allies. I don't really know about other [sites], just LGB places, because I remember I was joining a few places like that but the problem was they were just so transphobic that I couldn't stand it.

3. Binding refers to using restrictive materials to flatten breasts.

How does the online world help or hinder LGBTQ+ identities?

JOHN: In your own life, how … what role did the internet play in helping or hindering you with your own identity?

LUKAS: For me, the internet has been a very helpful medium. I managed to get out of the closet in a suburban town in Bavaria, by chatting with like-minded people online and meeting them in person later on. If online communities like dbna wouldn't have existed back then, it would have been a lot harder for me. Besides online communities, YouTube has also been a very helpful tool. There are several YouTubers out there who posted so-called "coming-out videos". Those YouTubers act as role models for a lot of queer people out there.

At our youth organisation, I often observed that those coming-out videos acted as a conversation start[er] for first-time visitors. The "coming-outs" of those YouTubers are basically an inspiration to a huge part of the queer-youth community.

KAJ: Yes, so the good internet vibe that I have, it's mostly Facebook, YouTube and Instagram. These are huge influences and from my perspective – when I came out, I think I was like about 20, I felt it's kinda late to do that – but this was the time that I just got to know what being transgender is really, because nobody educated us at school, nowhere, and I didn't know you can be transgender, and the first place that I tried to look for information was actually foreign YouTube and Facebook. I just started looking at those YouTube guys and I think I was watching them for about a year very intensely, kind of obsessing about that and watching everything I could possibly find. So I really got all of my knowledge about how the transition can look, what you can do, why you can feel like that and everything, really everything you can possibly know, all from YouTube. This is funny because when I started my medical transition, it was pretty clear that my doctors do not know the things that I know – from the internet. Medical things, that *they* should tell *me*.

SEÁN: To echo Lukas, the first place that I came out was on the internet. Coming out is a constant process and one that you never really get away from. But the internet was the first place I had typed or in essence said my truth about myself and my sexuality to anyone who was listening, and I mean that was overwhelmingly like almost like a big release for me, so that, the positive of being able to communicate to people who are outside of your immediate circle and outside of your immediate space about shared experiences. I was on Bebo, which was pretty popular in the UK, but very early on it had an option for you to display your sexual orientation and like just the fact that this option existed was really shocking to me and really kind of new. So many of my friends put silly answers into that, but I remember when I first typed in those three letters and submitted it that was when my friends knew, because I was able to type three, press a button three times and enter. That was me out – it was probably the easiest I'd ever done it. The internet was also the first time that I consumed any form of media that represented LGBTQIA+ people, or like I was able to witness privately and safely without people knowing.

JOHN: Hélène, Roberta, Millie, as three people who present as female, do you know of digital or online sources which are more readily available for gay men than they are for lesbians or bisexual women?

HÉLÈNE: For me the feeling of finding an online community is also strongly linked to my past as a feminist, and the way I became more involved and more aware of intersectional and feminist communities. All those things are very linked to me. I discovered communities that tackle all these issues at the same time. To answer your question more specifically, when you follow French speaking or Belgian LGBTQIA+ websites, women are a bit more invisibilised than men – and it's also non-binary people and other genders that are very not visible.

MILICA: It's my personal experience, even though I have connections on internet that are with gay and lesbian communities, I think that lesbians or even feminists even seem more present on the internet and they seem to use it more than the gay community. I have a lot of gay friends on Facebook, but they don't use it as a political platform, in that direct way as maybe my feminist or lesbian friends do. I also share memes or funny things about LGBTQIA+ issues with my friends. That helps us, say "oh I feel like that, isn't this funny?" … and I mean I do that all the time. I think it's like a coping mechanism that helps you be okay with your identity, to know that somebody actually feels like that, and at the same time it's so creative to make a meme out of it.

ROBERTA: I don't think that there's a difference in the accessibility of information since the internet, from this point of view [it] is quite democratic: everyone can get pretty much everything. Of course there is a big difference in representation, as I said before, and the image you get more commonly is about gay men and you almost never get to see bisexual or queer or trans people. So maybe it's a bit easier for gay men to find someone to identify with. Regarding the transgender community, it's the fact that trans women have way more visibility than trans men. So in this particular community you have this strange inversion, where trans men don't get any visibility, any representation, while you have a huge amount of trans women. Today when I go to LGBTQIA+ places, in the younger generation I seem to find way more trans guys than trans girls and that's so strange because, some years ago it was almost impossible to find trans men because there was no information about it and even trans men themselves didn't know about other people like them; they thought they were maybe the only one and they couldn't get any help. So the situation has changed quite a lot.

HÉLÈNE: If I can just react to this. I have someone very close to me who started transitioning a few years ago; from what he told me, at the beginning, like I think it was five years ago, it was quite difficult to find information and then more and more he started to find either YouTube videos or kind of online communities, especially for trans men, so that's something that is changing and increasing over the past few years.

JOHN: Do you feel like the ability to share the stories of their experience is different for people with different intersections? So for example in Northern Ireland to be gay and Catholic, or to be trans and a wheelchair user, or to be black and non-gender non-binary – things like this?

SEÁN: I think that is 100% the reality in Northern Ireland. Like my social media feed is predominantly white, which means that it's less likely that I will hear or witness the stories of queer people of colour unless I actively seek that out, like I actively look for it, and it's the same with able-bodied people: it's something I have to actually seek out.

JOHN: Last year I was organising a really beautiful meeting for LGBTQIA+ young people in Italy and I met a young woman who is a deaf lesbian, and I started following her on Instagram, on Facebook, on Twitter. I also started following a lot of the organisations, organisations of disabled LGBTQIA+ people and just simply by clicking "like" and following them I learned so many things that I didn't know about disabled LGBTQIA+ people, it was amazing: just simply by following her I learned a lot.

Can you, Kaj and Lukas, say if you have a similar or different experience around, you know, learning or campaigning or advocating the rights of LGBT people and other intersections? What have you learned? Do you feel like your parents, your friends, people your own age have learned things also by liking and sharing and following people on the internet?

LUKAS: At our organisation we are actually still trying to tackle the intersection issue. It's definitely a huge problem within the queer community, and it's causing a lot of discussions lately. People of different intersections aren't really visible in our community. Since 2019, we have been trying to organise our pride events [to be] as inclusive as possible. For example, through sign language for deaf–mute people at our panel discussions. In my opinion, online communities can be a good place to increase awareness for intersections within queer communities, like in your case, John. But I think you have to encounter such intersection-awareness-related content with an open mindset. If that's not the case, people might have to learn about intersections first. Afterward, they might hop on the "awareness team". We also have some people in our youth organisation who don't fit into a cliché of queer youth and I'm really astonished by their confidence to step out and show themselves to the community, no matter how others look/react to them. People like them are sometimes missing as role models in online communities.

KAI: I think it's really helpful mostly. I just recently realised that even from the other side – how I sometimes feel supported by people, that I didn't know were supportive, and they turned out to be, and that's because I just see what they're doing online. For example, my friend's parents, who I always thought that were … not the most LGBTQIA+ friendly people on earth. They started to share all this news, statements or even memes , that were really supportive for LGBTQIA+ people and I was like "oh wow, really?" So you can show a lot of support even like this, and it's only just sharing some memes, but it really makes a difference because you can tell how many organisations, companies, public people are supporting us, and it's really important to see. We're getting stronger by just sharing memes!

Advocating with online stories and voices

JOHN: Do you ever refer, say friends, family, or people that you know, to resources online or digital resources as a way of helping you explain elements of your identity? Of course you can never explain your whole identity on one Web page, but do you ever use digital tools or digital resources to help you explain to people who are maybe not in the community?

HÉLÈNE: Yes, yes, a lot. I think for me, I do that either to explain my own identity or when I was running training on trans identities in education. Because I focused on visibility of trans students it really helps to bring online resources, either videos or some kind of images. I have more difficulty using those with people who are a bit older, for instance my family, or people the age of my parents, between 50 and 60 … I guess to a certain generation online, maybe they're not used to this kind of very strong visual content.

MILICA: I also use different articles, videos, sometimes even TV shows. If I share them with my friends that are not part of the LGBT community, it's with friends that I feel confident with and then I feel that they could understand, otherwise I don't use it as a way to say "oh, this is what I am" [laughs].

JOHN: So do you agree with what Hélène's comment was, that you're more likely to use these kinds of resources with people who are younger than older?

MILICA: Yes, of course!

ROBERTA: Well, regarding young people, sometimes they're really more aware than I am, so I don't even need to explain anything, they just accept it or they already know everything, and in my experience, until now, presenting myself the way I am [as a trans woman] has always been enough to create a contact with other people. I think everyone I've met, and the people I know, my friends, they understood, or at least in part they understood, what I was telling them when I said I was starting transition and I explained myself how I felt.

I've never had the necessity to explain it in detail to a very young person, other than just in one case, one of my students who is around 15 years old. Once I felt comfortable enough in coming out to him, as I had to do it, well, he just said it didn't really matter, it wasn't his business, so I didn't have to, I don't know, show him videos or stuff. The only time I used internet resources was with my mum actually. Probably she's in a position where it's harder to accept something like this, harder to conceptualise feelings. Of course being so close together, it's difficult. It's been difficult for her and so I remember creating this file on our computer where I would copy links from videos, from websites, blogs, interviews, everything I could find that maybe could help her understand better what I was going through, what were my feelings. We've never talked a lot about personal stuff, at least not in my case, so there was this like … It wasn't easy at first, and still nowadays sometimes it's a bit hard to get deeper into this kind of conversation, so I delegated it to the internet and whenever I found some article that I thought was interesting I just left it on the computer for her to read and it helped her a lot. I saw that she kept visiting blogs even after I had shown them to her.

JOHN: This kind of links, for me: one step is your own personal identity and the role that digital tools play in your own identity, and then there's another step around what you think the role of digital tools and the internet has been or is regarding political and social advocacy. Maybe to change the minds of not only members of Parliament, but even to change the minds of people locally or to highlight what kind of representations trans or gay and lesbian people have in the media. So these digital tools play a role in influencing and progressing rights for LGBTQIA+ people.

SEÁN: I think with the digital age and what our network the internet has provided us, at least on some level it has raised an awareness to the existence of LGBTQIA+ spaces and LGBTQIA+ people. This is in a way that may not always be positive but it has at least speeded up the process. When you look at things like media consumption, whenever an LGBTQIA+ character is introduced, in like television as an example, the way that they're written and the way that they are presented has changed drastically from over time at least in my English-speaking UK bit and Ireland-based world). Before the internet, it wasn't easy or possible for LGBTQIA+ people to review and be critical of this media. Media was reviewed by the straight majority. So if a character is written in a way that does not represent LGBTQIA+ people in a way that's positive or that is real, we now have the ability to collectively talk about that.

The internet has also allowed us to actually put our existence in the light, to tell our stories on an individual level. People are able to tell their stories of what it's like to be an LGBTQIA+ person and have that media be consumed, by so many more people. But although it's not a space where your voice is edited, or reviewed before it gets out, there is still censorship. For example, if I wrote a letter to the newspaper it's up to the newspaper to decide whether that letter gets published and whether people hear my story as a gay man, whereas online I can publish that letter myself. I can allow for that letter to be in its original unedited form to be consumed. So in essence there's a freedom online for us to speak our true voices without being altered. But then I mean that comes down to the issue of if we're allowed, or censored on those spaces. So things like platforms tagging LGBTQIA+ content as not safe for work, with adult content, when straight content does not get tagged the same way.

Conclusion: our recommendations for youth policy and practice

Our discussion above highlights both the positive and negative aspects of digitalisation for young LGBTQIA+ people. Overall, most authors see it as a positive process enabling us to access information, find representation and media that reflects us, create online LGBTQIA+ communities, as well as to share our stories with others. Early in our meetings Seán described the internet as "inherently a straight place". In a way, this concept underpins many of the things we have talked about – while the online world provides many opportunities for LGBTQIA+ young people, just like the "real" world it is not automatically inclusive or accepting. Instead we need to work to create online communities and spaces that are safe for LGBTQIA+ young people. One of the important messages that the youth sector should take from this is that, using a digital tool, youth sector actors should think about how what they are doing may or may not be promoting the inclusion of LGBTQIA+ young people, and take steps to ensure it is as inclusive as possible. Being digital does not automatically equate to being an inclusive place. Part of this also means thinking about how LGBTQIA+ identities intersect with other identities, such as disability or ethnicity, and recognising that there are also different communities and experiences within the LGBTQIA+ community itself. A digital tool or space that is accessible to a young gay man might not also be accessible to a trans woman or a lesbian with a disability.

To help promote the inclusion of LGBTQIA+ young people, both in the online world and the physical one, the following things might be of use. Educators, such as those in schools, should ensure that the programmes they run around media education or the online world address LGBTQIA+ dimensions in their work. This might include paying attention to topics such as:

- how to find and access LGBTQIA+ safe spaces online;
- how to deal with homphobic or transphobic cyberbullying;
- how to critically analyse information online about LGBTQIA+ people, and recognise politically motivated content or hate speech.

This sort of education should be delivered as early in life as possible. In institutions or countries where LGBTQIA+ education is more prohibited, those who wish to engage in education to support LGBTQIA+ young people can recognise that there are many digital skills that are valuable to them (e.g. search skills, critical thinking) that are not necessarily LGBTQIA+ specific.

WIthin the youth sector, it is always likely to be the case that there are a limited number of specialist LGBTQIA+ educators or organisations. By its nature, specialist provision is more often found in high-population areas like the city. However, for the sector as a whole, digitalisation offers the possibility for LGBTQIA+ specialists to collaborate with other parts of the sector through digital tools. With the appropriate funding, LGBTQIA+ youth specialists can create dedicated digital platforms, communities and peer-to-peer spaces. If they then work in collaboration with other parts of the youth sector, who may be less skilled at working with LGBTQIA+ youth, these platforms can be offered to very large numbers of young people, regardless of where they live. It is important, however, that such platforms are language-sensitive, and not all focused in English. Alongside this there is the potential to develop online training for youth workers on LGBTQIA+ issues, for instance through massive open online courses (MOOCs). This approach will be particularly valuable for reaching young people in territories where LGBTQIA+ rights are not respected. However, it is still crucial to recognise that digital tools cannot replace face-to-face support entirely.

Behind all of this, it is important that the systems and databases we use for young people are also LGBTQIA+ sensitive. For example, this means ensuring that digital systems in schools and youth centres do not automatically flag and censor LGBTQIA+ terms like "gay" as adult content. This prevents young people accessing support online, and sends out negative connotations. It is also important that the databases of youth organisations and educational institutions do not not categorise young people in limiting ways or share information about their gender or sexuality unless it is strictly necessary. The trans people in our authors group highlighted how school databases often routinely recorded genders of young people as male or female and shared this with other institutions. They questioned why an educational provider needed this information, and highlighted the extra challenges it created when they began to transition from one gender to another. Of course many of these issues about LGBTQIA+ sensitive technology are not specific to the youth sector. As the internet itself becomes more regulated it is important to ensure that internet service providers and online platforms are regulated in an LGBTQIA+ friendly way, and do not restrict or limit online spaces for LGBTQIA+ young people.

References

Alanen L. and Mayall B. (2001), *Conceptualizing child-adult relations*, Routledge/Falmer, London.

Croft S. and Beresford P. (1989), "User-involvement, citizenship and social policy", *Critical Social Policy*, Vol. 9, No. 26, pp. 5-18.

DeHaan S., Kuper L., Magee J. et al. (2013), "The interplay between online and offline explorations of identity, relationships, and sex: a mixed-methods study with LGBT youth", *Journal of Sex Research*, Vol. 50, No. 5, pp. 421-34.

Haraway D. (1988), "Situated knowledges: the science question in feminism and the privilege of partial perspective", *Feminist Studies*, Vol. 14, No. 3, pp. 575-99.

Head B. W. (2011), "Why not ask them? Mapping and promoting youth participation", *Children & Youth Services Review*, Vol. 33, No. 4, pp. 541-7.

Larkins C., Kiili J. and Palsanen K. (2014), "A lattice of participation: reflecting on examples of children's and young people's collective engagement in influencing social welfare policies and practices", *European Journal of Social Work*, Vol. 17, No. 5, pp. 718-36.

Lucero L. (2017), "Safe spaces in online places: social media and LGBTQ youth", *Multicultural Education Review*, Vol. 9, No. 2, pp. 117-28.

Mayall B. (2002), *Towards a sociology for childhood: thinking from children's lives*, Open University Press, Buckingham UK.

Miño-Puigcercós R., Rivera-Vargas P. and Cobo Romaní C. (2019), "Virtual communities as safe spaces created by young feminists: identity, mobility and sense of belonging", pp. 123-40 in Habib S. and Ward M. R. M. (eds), *Identities, youth and belonging: international perspectives*, Palgrave McMillan, Chan, Switzerland.

Putnam R. (2001), *Bowling alone: the collapse and revival of American community*, Simon & Schuster, New York.

Spyrou S. (2018), *Disclosing childhoods,* Springer, London.

Steinfield C., Ellison N. B. and Lampe C. (2008), "Social capital, self-esteem, and use of online social network sites: a longitudinal analysis", *Journal of Applied Developmental Psychology*, Vol. 29, No. 6, pp. 434-45.

Chapter 6

Can openness and open standards help revitalise marginalised languages?

Subhashish Panigrahi

Introduction

Linguists have often found that countries such as India and Papua New Guinea, which are extremely diverse linguistically, are also the most hindering places for languages to thrive. Out of the total 780 languages in India, 196 have been identified by UNESCO as endangered languages, and the country has lost some 250 languages in just 50 years. With almost all of the endangered languages being spoken by indigenous speakers, such languages are not given priority in education, governance, media development or even digital archives. Whereas some community efforts, like the ones for the Santali language by young contributors, have shown stark contrast in terms of language revival and sustenance, a vast majority of the Indian languages need immediate attention before they die. It could be argued that there is an omission in providing indigenous communities with vital information in their native languages, which may lead to the obstruction of human rights and compromising of democratic values. With no one language being a lingua franca for all the people in a vast and populous country like India, developing technical resources for information dissemination and sourcing as opposed to imposing any official language is recommended, to ensure good governance that will pave the way to inclusion for generations to come.

There is a broad spectrum of roles that youth can play in the use, promotion and evolution of indigenous languages in Asia. The Santali language – which is spoken mostly in India, with the diaspora also living in Bangladesh and Nepal – is currently experiencing active online use. This work is completely driven by young speakers. Santali is one of the languages which has seen a growing interest among some youth looking to develop more technical and educational resources and even taking external help from non-native speakers, especially the free and open source community. On the other hand, there are also languages like Kusunda from Nepal where the youth are largely unaware of their ancestral language because their parents and grandparents do not even know how to speak it.

How languages die

> Dominant languages and dialects spread widely, and lead to the gradual extinction of other tongues. (Kornai 2013)

Many dominant media cultures have brought an abundance of scientific literature and media content to readers across borders, and helped us bridge the knowledge gap by learning about each other. However, there exists a huge gap in the knowledge commons because of the lack of indigenous content and participation. Dominant languages like English and French have often been accused of acting as "killer languages" as languages with fewer speakers are falling out of use with the widespread use of the majority languages (Ceramella 2012).

Asia differs from areas like Australia or the Americas, where language endangerment is widespread and heavily advanced, because of their different ecologies of language endangerment: in Asia, language shift is typically the result of implementing relatively recent neo-colonialist policies under the guise of national development or identity-building strategies, rather than the effects of long-term settlement colonisation (Anderson 2018).

In India, for instance, ever since it was formed as a country in 1947, indigenous communities have been subject to post-colonial and neo-colonial social and political transformations, and not everyone agrees that Hindi should be spoken everywhere. The federal government further encourages the nationwide use of the Hindi language for official communications, although Hindi is the official/co-official language only in eight states (provinces) and the remaining states have different official languages.

Hindi being the official language of the Union Government, the Ministry of Tribal Affairs is actively involved in encouraging the use of Hindi in official work. The Ministry of Tribal Affairs also monitors the progressive use of Hindi in official work in organisations under the ministry. Most of the officers and staff have proficiency in Hindi or have working knowledge of Hindi (Ministry of Tribal Affairs 2017).

Considering the geopolitical and ethno-cultural nuances of Asia, the issues for Asia could be classified as:

- lack of youth and adult empowerment programmes to establish a wider user of native languages or dialects;
- lack of the right kind of policies in place to help grow indigenous languages by their use in domains like education, governance and business;
- the ability to use one's own language is a human right;
- lack of implementation of policies despite having the right kind of policies;
- modern migration to urban regions, which breaks larger families into nuclear ones so that the younger generation do not get enough exposure to their native language at home or at school (Holmes et al. 2017);
- lack of job opportunities for native speakers on the basis of their language skills because many languages are not used as business or formal languages at workplaces;

- lack of independent community-owned and community-driven media content, which would include new media in the form of app-based games for children and adults alike, and other newer forms of entertainment and educational media;
- lack of technical tools and platforms, alongside insufficient awareness of and education about existing tools/platforms, to make use of the language in digital spaces;
- lack of domain-specific literature (for instance, science and technology, art, history and humanities) in addition to creative literature.

The contributing factors, including systemic exclusion as above, largely differ from language to language, and youth initiatives to protect and make a language thrive need to follow the exclusion factors specific to the same language. Further consideration of the Kusunda language can help the reader to understand such factors more.

How the Myahaqs (almost) lost their language

In May 2018, with support from the National Geographic Society, and ground support from researcher Uday Raj Aley and independent media professionals Sanjib Chaudhary and Ananda K. C., I made a documentary on Gyani Maiya Sen Kusunda, the older of the two surviving speakers of the Gi myahq (Kusunda) language of Nepal. As a moribund language, Kusunda was always an oral language with no standardised writing system. With the process of the then nomadic Kusunda community becoming assimilated into the dominant communities in the Dang district of Nepal through intermarriage, the community slowly lost the language to other major languages like Nepalese. Such socio-economic factors brought a drastic drop in the domestic use of the language. After a few generations, almost all the elders had forgotten how to speak Kusunda.

The dearth of formal use of the language in education, policy making or media development led to the language being classified as nearly extinct (Endangered Languages Project 2017). Gyani Maiya Sen Kusunda (83) and her sister Kamala Sen Khatri (48) are the only two known speakers of Kusunda at the time of publication (Aley 2017). An interview with Prem Bahadur, Kusunda's son, also strongly indicates that communities like Kusunda, where the majority of its members are under-resourced and live at the bottom of the economic pyramid, often deprioritise the use or protection of their native language because the contribution of the latter to improve the speaker's financial health is often unknown (Gaedtke and Parameswaran 2013).

During the interview for the OpenSpeaks documentary *Gyani Maiya*, Kusunda emphasised that: "The [Kusunda] language should be taught to kids. It should be preserved. Else, it would die" (Panigrahi 2019). Aley, who authored the first trilingual dictionary for Kusunda (Kusunda–Nepalese–English), titled *Kusunda jaati ra sabdakosh / Kusunda tribe and dictionary* (Aley 2017), said that this publication was arguably the most detailed documentation ever done before the completion of the project. After news reports about Kusunda came to mainstream news, the linguistic research and journalistic community started working towards the documentation of the language.

The Nepal Language Council has initiated a year-long pilot led by Aley to teach kids Kusunda, and 20 students have already graduated from a three-month course.

Though many adult speakers, like Bahadur, are unable to gather enough interest to revive and revitalise their endangered language, nevertheless youth outreach and systematising language learning (either as a curricular or extra-curricular activity) can help save many languages from extinction. UNESCO has identified over 2 464 languages which, like Kusunda, are in extreme danger of becoming extinct. There is not much activism and there are few initiatives in place to ensure the viability of such languages (Moseley 2010).

What is lost for the young when their native language is lost

Language is a device for the documentation of narratives that can encompass everything related to a community's cultural heritage, from intimate human stories of struggle and existence to new discoveries and secrets that often help young people to navigate through their own community's history. Indigenous communities are generally very tightly knit and hence their own language plays a major role in shaping their identity. Linguists have argued that ethno-linguistic and cultural neo-colonialism are forcing the Birhor and Gta' speaking youths of India to self-identify themselves as a part of a macro-community where they are practically isolated from their original ethnicity while agreeing to the alleged neo-colonial norms (Anderson and Jora 2017).

With the death of an indigenous language, a speaker community can disintegrate because language plays the role of a common binding factor for its members. The loss of this bond can be highly detrimental for young speakers and their close connection with the rest of the community. The lack of the essential resources needed to help a language survive and thrive, and the resulting challenges to the language if it is to be used in modern settings, can catalyse the spread of neo-colonisation by dominant cultures and languages. Youth that are struggling to use an indigenous language widely fall victim of the aforementioned issues that lie broadly in the areas of governance, business, technology and education. The vacuum that is formed – because of the dearth of community-owned media or educational and entertainment resources – is often filled up with existing dominant media, which tends to leave no room for emerging content in indigenous languages, thus discouraging new age authors, artists and producers. From the poor representation of the *adivasi*s, India's indigenous peoples, in the mainstream movie industry, Bollywood (Minj 2017), to the dominance of such established media over the indigenous groups (Baski 2013), there is much strong evidence to indicate how the narratives of the indigenous peoples are skewed in the knowledge commons.

Their lack of participation historically in the content industry, which continues to date, discourages youth from using and promoting their own language. When a language is no longer a symbol of identity nor a commodity for job opportunities, it eventually gets cornered just as a heritage language. With the lack of financial, social and other forms of remuneration, such a language could die out over time and the young native speakers would assimilate themselves into the dominant and mainstream culture. When contribution to one's own language does not translate

into being rewarded and recognised, and does not contribute financially, any youth interest in language conservation may die out. From an ethnographic standpoint, this is a huge loss of the diversity in knowledge that different communities contribute. Such transitions also enable racial hegemony and more neo-colonisation.

Human rights and access to knowledge in one's own language

It could be argued that "access to knowledge is, you know, a basic human right ... Knowledge should not be commoditized; it wants to be free" (Andraka 2014).

The reason why many indigenous youths access knowledge in majority languages, as opposed to learning by using their own language, can be broadly explained by four major factors:

1. lack of content in their own language that is of the same (or better) qualitative value as compared to the language that they tend to use for knowledge exchange;
2. the language that they tend to use is formalised and optimised for use in professional environments, which helps them use such a language easily, whereas their own language might be an oral language lacking a standard formal vocabulary;
3. there might be very few technical resources and little support available in their native language; and
4. the ease of searchability and discoverability of information in the majority languages makes them preferred over minority languages, partly because the presence or absence of a sustainable education system that is easily affordable to all native youth and to the media industry largely impact how a language is represented in the common knowledge.

The majority of Asian indigenous languages, and particularly the ones from South Asia, are spoken by communities that lie in lower economic strata. Two thirds of the world's indigenous peoples live in Asia (Errico 2017) and more than 200 such groups are based in South Asia, but almost half of the indigenous population lives in low economy segments (Fisiy 2010). In India the indigenous groups are classified as the Particularly Vulnerable Tribal Groups (PVTGs) by the Indian Ministry of Tribal Affairs and there are 75 such groups at the moment. The population of all indigenous peoples in India is about 104 million (8.6% of India's total population). At the time of publication of this volume, none of the indigenous languages were used in federal or provincial government websites. Such systemic gaps discourage the youth from using their own indigenous languages. Similarly, the state-sponsored over-promotion of a dominant language over minority indigenous languages (see note about Hindi in the section "How languages die", above) leads to wider dissemination of vital information in a non-native language in indigenous communities. This also indicates that the 104 million indigenous people in India are restricted from access to education, governance and vital information related to healthcare and human rights in their own languages. Even with access to low-cost smartphones and cheaper mobile data, the youth of many indigenous communities have a huge entry-level barrier for knowledge sharing in their native language.

There is a need to create formal structures like grammar, dictionaries and writing style guides, which are building blocks for languages with writing systems and can encourage youth to become formally educated in their native language. Similarly, languages which are completely oral need native language multimedia guides for young speakers to access available resources. The content gap that exists in most indigenous languages, the majority of which are oral, needs sustained and sustainable consultation-based efforts to help native speaker communities create meaningful content that youth will be interested to use.

Indigenous language digital activism

In the past five to 10 years, smartphone prices have dropped sharply, primarily because the technology is so pervasive. Similarly the mobile data price in most developing countries has hit the lowest bar ever imagined, and India's Jio has the lowest price of $0.26 for 1Gb of data (Cable.co.uk). The total internet user population in India was expected to reach 627 million by the end of 2019 (Kantar IMRB 2019) and the steep rise of internet penetration is partly attributed to the growth of internet use among children and young adults (Statista 2016).

The evolution of mobile apps that have extremely high user engagement using multimedia is at a peak, and technologies like artificial intelligence and deep learning are already in place in such apps. Apps like TikTok and MadLipz that use technologies like voice dubbing for popular videos are changing the public discourse. Because these apps are completely focused on user engagement and give users the freedom to share short entertaining content in their own language, many indigenous and minority languages and a broad range of accents, intonations and dialects are being more widely heard for the first time. This was never a reality before, and neither mainstream media nor public initiatives were ever capable of creating content on such a large scale or, most importantly, disseminating the content so widely (Herrman 2019). Though these platforms were never designed for preserving languages, their simplified user learning experience and futuristic functionalities, and most importantly, their wider popularity among young users, have opened up huge scope for crowd-sourcing indigenous language content.

There seem to be two parallel sets of digital activities to protect languages that are partly complementary and partly disconnected from each other. One kind of activity is the most obvious one and it includes linguistic research, which is valuable for furthering the standardisation and formalisation of a language. But the second part is digital activism in a real sense, but it is in obscurity and is led by millennials from many indigenous communities. They are mostly known by their pseudonyms on the aforementioned social media platforms and their works are not easily accessible or publicly searchable, because social media and other entertainment app-media are not optimised for anyone's internet research, but they do have instant and significant impact.

The latter segment – the kind of digital activism where young audiences consume and contribute multimedia – often uses platforms that are easy from a user experience standpoint and lack the features of a conventional Web archive, such as tagging, annotation, options for multilingual subtitling and captions, and rich metadata.

When the simpler user experience enables more young users and contributors to exchange content much faster, there is great scope for linguists and content aggregator companies to work together and expand advanced features to help build archives in crowd-sourced indigenous language content.

Crowd-sourcing, openness and open standards to drive digital activities in indigenous languages

One of the connecting links between the different forms of less-formalised digital activities that are mostly led by young people – including the use of social media and other similar user-engagement platforms, mobile and online – is crowd-sourcing. One of these platforms is Wikipedia, which relies on crowd-sourcing and helps speakers of any relatively established language to compile encyclopaedic knowledge collaboratively. Openness is key to the development of Wikipedia and many other platforms that allow collaboration. Openness is a value-based philosophical concept that encourages open, transparent and unrestricted sharing of knowledge by means of collaborative and crowd-sourced contributions (Peters 2014). Practical implementations can exist in governance and democracy, licensing and copyright, scientific research and education, content, media production, cultural practices, software development and generally in the information technology and even the hardware industry. Open Source and free software were the starting points for the Openness movement to grow into an overarching philosophy that would eventually contrast with authoritative, proprietary, secret and bottom-up processes.

In real terms, an open system for the indigenous language would largely mean that:

- the native speakers can openly and transparently access or contribute knowledge in their own language, where the created work would be distributed under open licences;
- the community would have control over the content in such a manner that their individual privacy is protected and their consent is duly asked for in the content/media production process; and
- openness would not come with a cost of any form of exploitation of the community, including commercial reproduction of the community-owned content.

The first aspect goes against the widely prevalent imperialist system of knowledge creation, where many indigenous communities do not get access to the content that involves them and/or is owned by them because of the lack of open access, a system that helps readers to access content that is not protected behind a paywall. Frank Stasio, an NPR correspondent in his show *State of Things*, once said, "A lot of academic research was paid for with public funding, but public access is often restricted by expensive paywalls" (Stasio 2018). Literary, cultural and other narratives in an indigenous language that are documented digitally are still owned by the speakers from an ethical standpoint. Restricting such content and the derived content not only stops the community from benefiting from accessing it, but leaves no space for the community to make any decision over the content. In general terms, unless otherwise mentioned explicitly, the content is legally owned by the author. This simply means that the publisher or publishing institution, or a donor agency

for commissioned works or an author or researcher or filmmaker in an independent work, has the legal rights over the content produced by them.

As well as open access, open licensing or open content, indigenous languages could benefit a lot from many other open practices, if they could be brought into institutional practice in governance and policy making. Wikipedia is one example that embodies specifically the open practices, open access, open content and open licensing at almost all levels. There are two sets of contrasting viewpoints when it comes to using Wikipedia as a platform to promote a language. The first view suggests that many languages (for example, indigenous languages, though this is not explicitly mentioned in the article) do not have the necessary framework that is required to sustain a Wikipedia entry.

> I believe that having a Wikipedia in our own language is extremely important. I also think that not all languages should have a Wikipedia, as the main reason for having an encyclopaedia is to document and share encyclopaedic knowledge, and not all languages have the infrastructure (resources like universities and academics) to have the encyclopaedic knowledge presented in reliable sources. (Toms 2019)

The second school of thought suggests the need for a Wikipedia-like platform. Long-term Arabic Wikipedian and Wikipedia community leader Anass Sedrati, in a panel at the Wikimania 2019 Stockholm conference, said that languages deserve to have their own Wikipedias, explaining how Wikipedia helps build the online contributor community to grow the digital footprint of a language (Panigrahi et al. 2019).

There is a list of challenges and structural issues to be faced if Wikipedia is to be used for indigenous and oral languages, because Wikipedia was created with dominant languages in mind that have a huge user base and have matured for use in formal and written forms. Unless or until the current structure is optimised to accommodate the specific needs of several indigenous languages that are predominantly oral, other alternatives can be sought, while still making the best use of openness, collaboration and the availability of existing resources that allow crowd-sourcing.

Early digital activism of the Santali language using Openness

Santali is an exception among indigenous languages, being officially recognised in India. Not many Asian indigenous languages have gone past the entry-level barriers from a social, governance, linguistic and technical standpoint to become officially recognised. Santali was included in the eighth schedule of the Indian constitution in 2004 (Ministry of Home Affairs 2004). By the time the Santali writing system Ol chiki was introduced by Guru Gomke (Raghunath Murmu) in 1925, Santali print literature existed in multiple writing systems, including Bengali Devanagari, Odia and Latin. Similarly, before Unicode character encoding was made available for Ol chiki in 2008, legacy-standard encoding systems were used for digital and print publication. These pre-existing resources contributed both positively and adversely in bringing Santali to the same technical level as other established and written languages.

In 2017, some Santal youth from India, Bangladesh and Nepal got connected online and built a volunteer contributor community to grow encyclopaedic content in the form of Wikipedia articles in Santali. Some of the young people who were active in

a parallel way to create technical resources also joined hands with the Wikipedia community. Within a year, the Santali Wikipedia became a live project, starting from an Incubator-wiki project, and in the second year it reached 1 000 articles. This, for the first time, brought open access to factual content in Santali that is searchable and discoverable on the internet for the seven million native speakers who only shared knowledge offline and orally before. Santali Wikipedia as a platform also bridged the cultural gap of a dispersed community that is geographically based in three different countries.

Another indigenous language from the same geographical region, Ho, which is part of the same family of languages (Mundari) as Santali, is following this lead and is currently in the Incubator-wiki stage. When some youth of the indigenous language community have taken steps to create entertainment media, they have found that there is a huge dearth of critical knowledge collation and sharing in such languages in the areas of arts, science and humanities. Personal accounts of Santali speakers also suggest that their social and political exclusion is not much portrayed in creative literature and media, neither of which is often in line with the reality on the ground.

Conclusion

Protecting and preserving indigenous languages, and helping young native speakers to make more practical use of their languages for accessing and contributing knowledge, are part of a collective accountability. Policy makers, technologists, academia and research communities, media and content producers, parents and the young people themselves have crucial roles to play to ensure that the indigenous languages thrive.

A human right

It could be argued that access to knowledge in one's native language is a human right. That does not change even with the changing times of cultural homogenisation that young people from marginalised indigenous communities face socially, academically, in media cultures and in politics. Languages are unique and so are their challenges and needs. Many indigenous languages are spoken by a very small number of people, who might be dispersed geographically, and the children and youth might not have access to (or the luxury of) formal education in their native language. When there has to be provision at the level of education policy for children to learn their native indigenous language, especially at the elementary levels, the school environment has to also ensure a healthy environment to promote multilingualism. Similarly, parents need to proactively use their native language while interacting with children and youth.

In the same way, public policies need to accommodate those native speakers with the lowest level of access to knowledge. When countries operate in only one or a few official languages for practical reasons, the dissemination of the most vital information (including civil rights, healthcare and disaster management) in all minority and indigenous languages needs to be a high priority for governments. Relaxation of telecommunications and other relevant broadcasting policies needs to be re-evaluated and

changed accordingly to accommodate the needs of independent media production in indigenous languages. Necessary steps should be taken for the dissemination of other public information in indigenous languages on all platforms, including digital and online ones. Encouraging youth in using their own language at all levels – socially by parents and in school, in the media on media platforms, and in public services by service providers – can gradually boost the confidence of the young people and help them take ownership of the future of indigenous languages that are otherwise in danger.

The creation of entertainment and other content in indigenous languages needs to be done with a strict check on moral and ethical practices while encouraging openness. Producers of entertainment and information media content need to educate themselves about the value of open access and adhere to open practices in their work, while ensuring that the content benefits the indigenous communities first and foremost. Openness should be adopted from the start as a philosophical basis and this approach should be widely encouraged in policy making, Open Educational Resources (OER) and openly licensed technical resource creation. In addition, there should be an emphasis on dissemination of knowledge using open standards.

Participation

Public policy processes need to accommodate more individual-centric participation. The specific case studies on the Santali language and social media engagement platforms indicate the benefits of using smart, collaborative, bottom-up and consensus-based systems that allow wider participation in knowledge sharing and greater participation of youth in public policy making. Democratic public policy can still aim for a hybrid process that allows both individual-centric and mass-centric policy-making processes where individual rights are deeply regarded. The social and technical challenges, combined with the structural bottlenecks in governance, need policy reforms to ensure that individuals are not neglected while protecting the larger economy, and to ensure that the indigenous languages spoken by small groups of individuals are getting the right environment to prosper.

Digital activism

The digital rights of indigenous communities need to be carved out on the basis of the primary needs of each community. The needs of each indigenous language community are unique, so policies and practices need to align to cater to those needs. The same platforms, particularly social media, that can help promote indigenous cultures can also be misused to exploit the privacy and other digital rights of individuals and communities. Individuals and organisations that carry out initiatives to promote indigenous cultures need to self-educate about the digital rights and risks to ensure that such rights are not violated while implementing activities to promote indigenous languages and cultures.

Digital activism to promote indigenous languages can be initiated externally, because not all communities are in a position to self-start, but the activities need to be driven locally. Affordable and commonly used platforms like social media can be tapped into to promote useful indigenous language content like current news. Considering

the low penetration of native languages in many indigenous communities, such activities will not only help promote the language but will also fight the spread of misinformation with factual content. Since human rights and indigenous rights are at risk for many indigenous communities, the preservation of linguistic rights and the right to information through digital activism will serve a larger cause. It is paradoxical to create legal barriers for indigenous communities by protecting content about them and their languages with copyright and then still expect the content to help promote their cultures. Ensuring community ownership over content and encouraging open access to cultural and other documentation can open avenues for future generations to reclaim their cultural heritage.

Acknowledgements

OpenSpeaks is an initiative of the O Foundation and was founded by Subhashish Panigrahi. Some of its activities received further support from the National Geographic Society. The project also received advisory support through the Online News Association's MJ Bear Fellowship and the Mozilla Open Leadership Series.

Panellists, co-speakers and participants at several conferences, particularly the UNESCO International Conference on the Role of Linguistic Diversity in Building a Global Community with a Shared Future in Changsha, China, and the International Year of Indigenous Languages (IYIL) campaign throughout the year of 2019, Wikimania 2018 in Cape Town, South Africa, the Creative Commons Global Summit 2019 in Lisbon, Portugal, and Wikimania 2019 in Stockholm, Sweden, provided input and participated in brainstorming led by the O Foundation. These discussions and other discussions at the Marginalised Community Council, an online working group at the O Foundation, were crucial in shaping this chapter.

References

Aaley U. R. (2017), *Kusunda jaati ra sabdakosh / Kusunda tribe and dictionary*, U.R. Aaley [the author], Kathmandu, Nepal.

Anderson G. D. S. (2018), The Ecologies of Language Endangerment and the Threat to Linguistic Diversity in Asia, GA2-Conferences 1-11, Freie Universität Berlin.

Anderson G. D. S. and Jora B. (2017), "The linguistic ecology of particularly vulnerable tribal groups in Middle India: State-mediated ethnolinguistic erasure and neocolonialist development", Texas Linguistics Forum.

Andraka J. (2014), *Access to knowledge: a basic human right*, Creative Commons, available at https://creativecommons.org/2014/01/07/access-to-knowledge-a-basic-human-right, accessed 4 July 2020.

Baski B. (2013), "Santal worries", *D+C*, available at www.dandc.eu/en/article/young-generation-indias-adivasis-struggles-tough-problems-other-youth-do-not-have, accessed 4 July 2020.

Cable.co.uk (2020), *Worldwide mobile data pricing: The cost of 1GB of mobile data in 228 countries*, available at www.cable.co.uk/mobiles/worldwide-data-pricing, accessed 4 July 2020.

Ceramella N. (2012), "Is English a killer language or an international auxiliary? Its use and function in a globalised world", *International Journal of Language, Translation and Intercultural Communication*, No. 1, pp. 9-23.

Endangered Languages Project (ELP) (2017), *The catalogue of endangered languages* (ElCat), database available at http://endangeredlanguages.com/userquery/download/, accessed 4 July 2020.

Errico S. (2017), *The rights of indigenous peoples in Asia*, International Labour Organization, available at www.ilo.org/global/publications/WCMS_545487/lang--en/index.htm, accessed 4 July 2020.

Fisiy C. (2010), *Indigenous peoples still among poorest in world, but progress reported in some countries*, World Bank, Washington DC, available at www.worldbank.org/en/news/feature/2010/04/26/indigenous-peoples-still-among-poorest-in-world, accessed 4 July 2020.

Gaedtke F. and Parameswaran G. (2013), *Kusunda*, available at https://vimeo.com/58705459, accessed 4 July 2020.

Herrman J. (2019), "How TikTok is rewriting the world", *New York Times*, available at www.nytimes.com/2019/03/10/style/what-is-tik-tok.html, accessed 4 July 2020.

Holmes P., Fay R. and Andrews J. (2017), "Education and migration: languages foregrounded", *Language and Intercultural Communication*, Vol. 17, No. 4, pp. 369-77, available at https://doi.org/10.1080/14708477.2017.1376142, accessed 4 July 2020.

Kantar IMRB (2019) *2ICUBE: Digital adoption & usage trends*, 21st edition, available at https://imrbint.com/images/common/ICUBE%E2%84%A2_2019_Highlights.pdf, accessed 4 July 2020.

Kornai A. (2013), "Digital language death", *PLoS ONE* Vol. 8, No. 10: e77056, available at https://doi.org/10.1371/journal.pone.0077056, accessed 4 July 2020.

Ministry of Home Affairs (2004), Government of India, *Constitutional provisions relating to the eighth schedule*, Ministry of Home Affairs, available at https://mha.gov.in/sites/default/files/Eighth_Schedule.pdf, accessed 4 July 2020.

Ministry of Tribal Affairs (2017), Government of India, *Progressive use of Hindi, 1.8, Annual Report 2017-18*, available at https://tribal.nic.in/writereaddata/AnnualReport/AR2017-18.pdf, accessed 4 July 2020.

Minj N. (2017), "An urban adivasi's perspective on Newton", *Round Table India*, available at http://roundtableindia.co.in/index.php?option=com_content&view=article&id=9208:an-urban-adivasi-s-perspective-on-newton, accessed 4 July 2020.

Moseley C. (ed.) (2010), *Atlas of the world's languages in danger*, 3rd edition, UNESCO Publishing, Paris, available at www.unesco.org/culture/languages-atlas/en/atlasmap.html, accessed 4 July 2020.

Panigrahi S., Sedrati A. and Tcherneshoff K. (2019), *Why indigenous languages matter more (now) and what we can do for them*, Wikimania 2 Stockholm, Sweden, available at https://wikimania.wikimedia.org/wiki/2019:Languages/Why_indigenous_languages_matter_more_(now)_and_what_we_can_do_for_them, accessed 4 July 2020.

Peters M. (2014), "The idea of openness: open education and education for openness", *Encyclopaedia of Educational Philosophy and Theory*, archived from the original on 1 May 2014, available at https://archive.fo/20140501132743/http://eepat.net/doku.php?id=open_education_and_education_for_openness, accessed 4 July 2020.

Stasio F. (2018), *Paywall: the business of scholarship*, available at https://paywallthemovie.com, accessed 4 July 2020.

Statista Research Department (2016), *Population of children and young adults across India in 2016, by age groups (in millions)*, Statista, New York, available at www.statista.com/statistics/660690/children-and-young-adults-population-india-by-age-groups, accessed 4 July 2020.

Toms J. [Томс Жюстин] (2019), "Interview with Nat Tymkiv", *Ukrainian Wikipedia, Wikimedia Bulgaria*, available at https://blog.wikimedia.bg/2019/06/27/interview-with-nat-tymkiv-ukrainian-wikipedia/, accessed 4 July 2020.

Chapter 7

Precarious youth and the spectre of algorithmic stereotyping

Dan McQuillan and Ron Salaj

Introduction

This chapter looks critically at the narrative of digital innovation and technological entrepreneurship through discourse analysis. Placing its focus on the Excesses of the narrative, the chapter seeks to demystify the myths created around the Signifiers of the narrative. By looking at access to power and privilege, neo-colonial resource extraction and the notion of freedom, as well as drawing from concepts of Sartre's "seriality" (Sartre 2004: 256-346) and Pfaller's "interpassivity" (Pfaller 2017), the chapter explores the impact that artificial intelligence has on the employment and inclusion/exclusion of young people. The chapter delves into the actual operations of AI to illustrate the divisive character of its predictions, such as the way it tends to amplify discrimination against those at the social margins who are already subject to the most data gathering, and how that will intensify the institutional prejudice found in bureaucracies. By looking outwards from early examples of algorithmic bureaucracy (the use of algorithms as a core part of institutional delivery) related to youth and children's services, the chapter warns of pre-emptive interventions that evade due process by automatically categorising young people as "risky" or "at risk" without any fair hearing that tests those claims. Despite this, the chapter closes with a hopeful call to action: that, by building on the participatory tradition in youth services, and in particular through establishing People's Councils on AI for Young People, youth work itself can become the site of a more open and prefigurative approach to the application of artificial intelligence.

The references to semiotic elements such as "Signifier" and "Excess" are used as part of discourse analysis that we apply – critically – to the narrative of digital innovation and technological entrepreneurship. The Signifier is the main discursive element that communicates a meaning, whereas the Excess is the element that accompanies the Signifier – the connotational meaning that exceeds the Signifier but yet applies to the Signifier. To illustrate with an example, let's use the headline that we analyse below in the text: "Amazon was founded in the garage of Bezos' rented home in Washington". One can locate the Signifier of the headline at three main elements: "Amazon", "garage", and "Bezos". These three elements, as we discuss below, are present across all the headlines of the narrative, as they tend to dominate the audience. However, we argue that the Excess is not only equally important as Signifier, but rather unmasks the meaning of Signifier. The Excess, in the example, is located

in the following phrase: "rented home in Washington". It is precisely by putting the focus on the Excess that one can further analyse the access to privileges, economic inequality and social reproduction.

Ultimately, two clarifications should be made. Firstly, the discourse analysis applied to the dominant narrative of digital innovation and technological entrepreneurship does not take as a framework any particular method from the field of discourse analysis, but rather draws from the discipline of semiotics and media theory. Most notably, it captures some of the concepts elaborated from Umberto Eco's work on *The Theory of Semiotics* (Eco 1973) to analyse the Signifier element, and John Fiske's concept of "semiotic excess" (Fiske 1991) to analyse the Excess element. Secondly, the discourse analysis was conducted on various texts published in America and Europe, in English, about leading technological companies, such as Amazon, Facebook, Google and Uber, and which included newspaper articles, research papers and other types of publication. A small number of them were published around the late 1990s, but the majority were published after 2010.

A brief look at the narrative of digital innovation and technological entrepreneurship

In the last 10 years a new narrative has been elevated above others: the narrative of digital innovation and technological entrepreneurship, which was promoted as one of the main opportunities that would free individual talent, needing few or no resources, thus creating new jobs, new openings and a new economy. One of the primary audiences for this narrative was young people. Technology, social networks, start-ups, innovation, artificial intelligence, big data, participation and freedom (of opinion, of choice) were some of the key words that constituted this narrative. But in order for the narrative to be appealing to its audience, it needed its own story and its own characters. Zuckerberg, Bezos, Brin, Page, Gates, Jobs and others were (and continue to be) the main icon-characters of the narrative.

The narrative in itself has a dominating tendency, because it enables its own story to dominate over its audience in particular, and public discourse in general. What the narrative of technological innovation and entrepreneurship has achieved is to create its own myths: "Zuckerberg created Facebook in his dormitory room at Harvard University"; "Amazon was founded in the garage of Bezos' rented home in Washington"; "Page and Brin started Google in a garage rented by them – along with three other rooms – while they were still living at the dorms of Stanford University"; "Jobs built his Apple empire in the garage of his parents' house"; "Gates and Allen developed Microsoft in Seattle's Albuquerque two-car garage".

Young talented men built technological empires in humble garages and dormitory rooms; this not only makes an inspiring story for everyone, but it turns the whole story into a myth. This myth is, however, problematic at two levels: firstly, at the level of ethno-cultural particularities, it advances a dominant role of (white) men; and secondly, at the level of (economic) equality, it reproduces social inequality and reproduction. While the names and humble locations play the role of the Signifiers whose main role is to totalise the attention of the audience – particularly in today's world of semiotic inflation (Berardi 2012) where more signs, words and information

buy less meaning – one should put the focus on the Excess that accompanies the Signifiers. While acknowledging the deeper impact of the Excesses, it is important to note that this chapter offers only a brief examination of three main Excesses that will help us to deconstruct the totalising effect of the Signifier and unveil what is behind. This does not in any way imply that their impact is limited to the descriptions below, but rather that we have limited the discussion for the reasons of brevity.

From Signifiers to Excess

The first Excess we should look at is the access to elite education. Mark Zuckerberg studied at the prestigious Harvard University; Jeff Bezos graduated in 1986 at Princeton University; Google's Sergey Brin and Larry Page met in 1995 at Stanford University while they were working in PhD research. Do all young people have access to such an education? Particularly, do youth who come from marginalised backgrounds and contexts have access to such an education or even to any education at all? Will a young person with a significant student debt to pay for their studies have "free time" to innovate in garages? Who will pay their loans? And rent the garages? These are questions that one should ask when faced with the myth of Silicon Valley's wonderland of bright visionaries who may save the world.

The second Excess is the access to (seed) funding. In order to start up a project idea, however little or modest it may be, one still needs resources to cover various expenditures such as renting a space (unless your parents, relatives or carers own one), buying office materials, investing in machines (computers, servers, etc.) or simply to cover the time you're working on your start-up – since you still need to live. Because the Signifiers of the narrative are so bold, they often obfuscate the very fact that the majority of tech giant owners did have access to ready-made money, for example, scholarships – Sergey Brin and Larry Page were among the first to receive the Massive Digital Data Systems grant by the US National Security Agency to build what is known today as Google – or access to their family's own capital (Hartmans 2018), which was useful for Jeff Bezos in his first days of Amazon. However, the narratives of success presented to us ignore the almost inevitable failures of such a dream in a different context. For a young person who lives in a country with poor socio-economic indicators, a country with experience of armed conflict and (neo) colonial exploitation of its resources, deep-rooted social inequalities create a multitude of barriers which make it almost impossible for them to have access to the necessary funding to start up their own company.

It is important to realise that the success of Silicon Valley and other tech giants elsewhere, who mostly belong to the rich countries, cannot be isolated and reduced in a simplistic narrative, but is rather connected with the broader history of the politics of these countries (i.e. the extraction of human and natural resources of the past and present, by one country exploiting another, continue to impact the whole chain of a country's development, from economic growth to the quality of education).

The third Excess is that of the ethno-cultural particularities. Isn't it symptomatic that the (co-)founders of the biggest tech companies belong to the same ethno-cultural particularity? We can also read this symptom differently: despite the fact that I live in a rich country, do I still have to belong to the privileged ethno-cultural particularity

in order to have access to elite education, funding and opportunities that will pave my way towards the dream to found the next billion-dollar company? The Excess symptom of the ethno-cultural particularity explains also how centuries-old oppressive structures are reproduced so purely in some of the most "innovative and modern environments".

We can identify three main oppressive structures that are reproduced within the narrative's own habitus: the first oppressive structure belongs to economic inequality, that is, one's own social class; the second oppressive structure relates to the lack of women's access to privileges and power; and the third is connected with the historic past and the present of the United States and Europe, which is (neo)colonialism. The social inclusion (or exclusion) of young people is closely related to the oppressive structures identified here. Any policy design that aims to encourage, support, promote and strengthen social inclusion of young people should tackle the whole frame of oppressive structures – from intersectionality and class perspective too – in a way that becomes a practice of freedom rather a practice of bureaucratic limitations, particularly for marginalised groups.

"You can be the next one …" – illusions, freedom and employment

How does this all relate to young people, particularly those who come from marginalised/vulnerable communities and/or backgrounds? The main messages we receive from the narrative of digital innovation and technological entrepreneurship are "Zuckerberg did it in his dormitory room", "Jobs did it in his garage", "Bezos did it in his garage" – and the narrative continues with "You can be the next one ...", encouraging young people, public institutions, universities and schools, international organisations and other entities to invest in technological innovation and entrepreneurship. But the dream to become "the next one" turns out to be nothing more than an illusion.

"The next one" stands more for the next precarious work contract, delivering food or driving a taxi, that a young person may receive through one of many mobile apps, which control working behaviours even better than a physical supervisor standing over the worker. We have arrived at the point where human rights values such as social solidarity, equality, justice and mutual support are overtaken by finance-driven competition, individuality, tax avoidance, the culture of limitless growth and market monopoly. This culture has contributed in two aspects: firstly, it encouraged precarious work among young people under the name of "freedom", such as freedom to work from anywhere or freedom to follow one's own passions; and, secondly, which is also a consequence of the first aspect, it contributed to the fragmentation of the working contract, as a result of which we can see the slow melting of labour and social rights.

Another implication that this culture has brought is related to the role of technology vis-à-vis employment. Not only in terms of control and surveillance in the working environment, such as Amazon's wristband that tracks warehouse workers' movement (Solon 2018), but also in terms of cultivating the culture of surviving: in order to survive as a precarious worker you are solely dependent on the number of contracts/clients you can ensure, in order to generate greater revenue. This is known as the gig economy, which is made possible by high-level AI-run technologies and precarious

contracted workers. It is no surprise that Eurostat figures show that a massive 44% of workers aged between 19 and 24 have only a temporary contract, compared with 14% among the population as a whole (Eurostat 2019c).

The technologies which fuel the gig economy are heavily based on AI technologies. These technologies are mainly trained by "ghost work" (Gray and Suri 2019). For algorithms to be trained well, it requires the invisible labour of a thousand trainers, who in some cases are contracted, whereas in some other cases the labour itself is performed for free by the users. A recent example of free labour that is performed by the users is the AgingBooth mobile app, which scans your face and instantly turns it into an aged face. Thousands of scanned faces are free labour that can be used to train the facial-recognition algorithmic machine of AgingBooth, which then can be used for other purposes and services.

In Abolishing freedom – a plea for a contemporary use of fatalism, the philosopher and scholar Frank Ruda problematises the concept of "freedom" that we often believe in today, questioning whether freedom is something we ought to pursue at all. One of the motivations of the book, as Ruda writes in the introduction (Ruda 2016), is "linked to a diagnosis shared by many contemporary thinkers, namely that 'freedom' became (or is) a signifier of disorientation. As a result, the signifier of freedom can function as a signifier of disorientation, that is, in an utterly repressive way." Analysing how the notion of freedom today works, Ruda says that freedom functions as a signifier that enables the dismantling of all forms of social protection, it is important to understand how freedom effectively works. One should look at the "flexible" job contracts, for example, which are presented as an opportunity to freely explore different job opportunities, but in reality, the "freedom" offered is the unfreedom for social protection and security. Another example includes the implementation of universal healthcare in the United States which was attacked for lack of "freedom to choose" what healthcare one actually wants. What one understands from Ruda's problematisation of the notion of freedom is that we lack the very language to articulate our unfreedoms. For example, one can notice how the freedom (to work from anywhere, to consume, to change jobs, etc.) is often proclaimed as liberty to travel, explore new countries, follow your passions, but yet working nomadically, and so on. But, as a consequence of this freedom we can see the rise of precarious short-term contracts and the lack of permanent, stable working contracts with social security, pension and paid leave. For example, Uber promotes the freedom of choice and flexible working contract as follows: "Working a nine-to-five job gets really old, really fast. … Being able to set your own hours, earn money in your spare time, and accept as many rideshare requests as you wish is liberating" (Levin 2017). This is the (un)freedom to function as part of the gig economy, whose contributions to the pulverisation of the working contract have been immense. But the gig economy's functioning relies solely on the power of AI (as in food delivery companies, taxi companies, home renting companies, etc.).

These little freedoms that are offered for "free" nonetheless have a high price prescribed in them. Having a short-term, flexible contract, with no social security and no access to other labour rights, does have a great impact on mental health, particularly among young people who realise the dimension of the insecurity they are in: insecurity to plan the near future, no security to own a house or build a family, no

secure access to better education or, in some countries, even no access to healthcare. Even to participate actively in the gig economy one should nevertheless have some privileges. For example, if you want to rent out your apartment through AirBNB, you need to own one. If you want to become part of Uber, you need to own a car. What about those who have no access to these privileges? In the best-case scenario, those unable to actively participate in the gig economy will be outsourced to clean up the apartments or cars of those who are participating. Hence, we see a situation of meta-exploitation: the underprivileged are exploited by the exploiters themselves, who are already being exploited by the precarious and monitored employment of the gig economy.

Between seriality and interpassivity

Ruda's book starts with a section called Provocations where a number of fatalist slogans are listed. One particularly is interesting: "Act as if you did not exist!" For algorithmic machine learning and data science, people do not exist as subjects. They are instead reduced to (statistical) numbers. Once reduced to numbers, they undergo the process of data optimisation, to be used for other purposes such as micro-targeted advertising, profiling, data selling, etc. This process – turning people from subjects into serial numbers – gives people an original structure of "seriality" as defined by Jean-Paul Sartre. Sartre's concept of seriality looks at two different social compositions, between groups and series.

A "group", according to Sartre, is a number of people actively and meaningfully engaging with each other, "tightening its bonds … and by becoming aware of itself as a unity of individuals in *solidarity*" (Sartre 2004: 346), identifying with each other and sharing the same vision and strategies to achieve the common goal. In contrast, a "series" is a number of people passively brought together by orienting themselves towards an object or behaviour, establishing loose connections and superficial relations between each other. Sartre uses the example of the bus queue to illustrate seriality by saying that "we are concerned here with a plurality of isolations: these people do not care about or speak to each other and, in general, they do not look at one another; they exist side by side alongside a bus stop. … This man is isolated not only by his body as such, but also by the fact that he turns his back on his neighbour – who, moreover, has not even noticed him" (Sartre 2004: 256). For Sartre, seriality is negative as people do not go beyond loose connections, living in isolation and negating any possibility for mutual connection (ibid.: 256).

Sartre's seriality is relevant in understanding the dominant role that AI, big data and social networks run by algorithms have in today's society. Filter bubbles, private groups and hashtags are only some new forms of seriality. For example, the much-discussed Facebook News Feed is a great example of how a "filter bubble" enables users to have personalised experiences, using algorithms to deliver the content that users are most likely to engage with and enjoy, sometimes even reinforcing their world views. In Sartre's own words, Facebook's News Feed algorithms established a global "plurality of isolations" in small bubbles where the connection among individuals inside the bubble often is superficial (e.g. those strange occasional invitations to befriend someone you have never met or spoken to).

The very fact that "by default" a person/user is serialised in a particular bubble by Facebook's algorithms is highly problematic, undemocratic even, because it presupposes that the person's (user's) own identity and behaviours are stereotyped and prejudiced. Just because, for instance, the user clicked on a number of articles related to HIV infections, a behaviour which is recorded and optimised by the Facebook's algorithm, the user is "prejudiced" by AI and potentially filtered as an HIV-infected person, therefore becoming a target for a "good offer" either for counselling or medical drugs, which are offered to the user in a matter of minutes through Facebook ads. The scale of algorithmic stereotyping and prejudice can be massive and have more dangerous implications, as in the case of the Cambridge Analytica scandal. Having access to 87 million Facebook users' personal data (Kozlowska 2018; Lapowski 2018) – i.e. public profile, page likes, birthdays, current city, including permissions to access the newsfeed, timeline and messages – Cambridge Analytica had in its own hands immensely large datasets with enough details to serialise the groups and create psychographic profiles of the subjects of the data. Once the groups had been serialised into psychographic profiles, micro-targeted advertisements were then launched with various purposes – to discourage voting, to manipulate the truth, to radicalise the antagonisms through "culture war" – and manipulating thus the election outcome (Hern 2018; Andrews 2018).

The other problem with AI, particularly facial-recognition AI, is its own design. As reported in numerous cases, AI facial recognition is biased and can play a discriminatory role for the very reason that it was trained predominantly by light-skinned men (Buolamwini 2019). In a research paper "Gender shades: intersectional accuracy disparities in commercial gender classification" (Buolamwini and Gebru 2018), the authors uncovered large gender and racial bias in AI systems sold by tech giants like IBM, Microsoft and Amazon. Given the task of guessing the gender of a face, all companies performed substantially better on male faces than female faces. The companies that the authors evaluated had error rates of no more than 1% for lighter-skinned men. For darker-skinned women, the errors soared to 35%. AI systems from leading companies have failed to correctly classify the faces of Oprah Winfrey, Michelle Obama and Serena Williams.

This type of seriality embodied in the very design of the AI becomes even more problematic when the services of these companies are used or promoted by governments, institutions and other organisations to tackle issues such as poverty, inclusion or participation. It is therefore crucial that the interventions, both at policy and practical level, take into consideration the design biases of such technologies.

In 1996, Robert Pfaller proposed the concept of interpassivity whose main intention was "to relativise and water down the overwhelming dominance at the time of the discourse of interactivity" (Pfaller 2017). Interpassivity, according to Pfaller, is a widespread, and yet mostly unacknowledged, form of cultural behaviour. Rather than letting others (other people, animals, machines, etc.) work in your place, interpassive behaviour entails letting others consume in your place. One among many examples of interpassivity that Pfaller provides is the way some people use their video recorders by programming them with great care when leaving the house in the evening, in spite of the fact that interesting movies are being shown on TV. Once back home, the person anxiously checks to see if the recording has taken place and then, with a certain relief, they put the tape on a shelf – without ever watching it.

Doesn't the same thing happen today when we allow Netflix to suggest our next movie or TV series to watch? Or delegate the enjoyment of listening to music to Spotify, who will choose and prepare the perfect playlist for us? Further, at the political level, don't we delegate our authentic participation and engagement to the machines when signing e-petitions or retweeting for a cause, feeling thus satisfied for doing our duty as proper citizens? But should we trust the machines to which we delegate much of our activity and enjoyment? Is there space for behavioural manipulation by algorithmic decision making?

Zeynep Tufekci's experiment "Youtube, the great radicalizer" (Tufekci 2018) explains precisely how the delegation of decision making to an online platform's algorithms (in her case to YouTube's algorithm) can lead to radical manipulations. During the 2016 presidential election campaign in the United States, while she was watching videos of Donald Trump rallies on YouTube, she soon noticed how YouTube started to recommend and autoplay videos for her that featured white supremacist rants, Holocaust denials and other disturbing content. Intrigued with this, she started to test with non-political topics. "The same basic pattern emerged. Videos about vegetarianism led to videos about veganism. Videos about jogging led to videos about running ultramarathons." The conclusion that Tufekci arrives at is the fact that it seems as if you are never "hard core" enough for YouTube's recommendation algorithm.

Interpassivity is not only a harmless pseudo-engagement, as Pfaller initially intended when he proposed it to challenge the hype of interactivity in contemporary art. Quite on the contrary, today interpassivity is part of the ruling technologies that dominate our lives by enabling a constant state of passivity in the presence of potential authentic activity/action or engagement. Instead of inclusion, algorithmic decision making (often delegated by ourselves, and sometimes by others) can enforce social exclusion and marginalisation. If compared with Roger Hart's "ladder of youth participation" (Hart 1997), interpassivity is a mixture of tokenism, information/consultation and manipulation. It provides young people with the possibility to engage with an issue but without any possibility of authentic engagement, often taking the form of online surveys, consultations and evaluations/assessments. Interpassivity is the outcome and the consequence of AI seriality. Interpassivity becomes thus a new form of oppression and censorship, precisely because it gives the illusion of total freedom and engagement/participation. One is free to sign as many e-petitions as possible, to write as many rebel tweets as one can, but the only thing that seems impossible is the freedom to propose new alternatives that may, even slightly, disturb the dominant (political and economic) consensus. In this deadlock, the only alternative we hear is that there is no alternative. To use a well-known saying, often attributed to Fredric Jameson, people today can more easily imagine the earth being hit by a comet than by a radical transformation of the fundamental (socio-political, but also economic) co-ordinates of our daily life.

Computation and social consequences

The Signifiers of Silicon Valley and actual social relationships of inequality and neo-colonialism are at the core of AI. While some of the algorithms applied by state institutions are still straightforward calculations using pre-set parameters, they are

rushing to adopt the kinds of machine learning which drive Facebook, Uber and YouTube. Machine learning "learns" from being given lots of labelled examples, known as the training data; the algorithm iterates over the features of these data until it has achieved a good fit, meaning it can correctly predict the target labels. Thus, machine learning produces its own parameters. AI, as we know it, is applied machine learning. The current revolution in AI comes especially from a type of machine learning known as deep learning or artificial neural networks, which consist of deep layers of massively interconnected nodes (or "neurons"). Neural networks do not need prior information about the training data; if they get enough data passed through the layers, they will find a fit, and they can do so on messy data (like facial recognition) which elude all other kinds of algorithms. Neural networks work by developing their own rules, but to do this they depend on the availability of big data. In contrast to the science fiction mythos of AI, its recent surge is built on precarious labour.

The key technological enabler of AI's acceleration was ImageNet, a labelled dataset of more than a million images and 20 000 categories (Russakovsky et al. 2015). Due to the scale of the labour involved, the creation of ImageNet was only possible because of the Amazon Turk crowd-sourcing platform giving access to a global zero-hours workforce. ImageNet was crucial to crafting the new wave of connectionist AI, starting with AlexNet's convolutional neural network. Since that moment in 2012, deep learning fundamentalists have held that a sufficient amount of training data combined with a sufficiently deep (many-layered) neural network can solve any problem (Marcus 2018). While the social effects were initially restricted to the manipulations of Facebook's News Feed, they have spread to the welfare systems and public services that define our social baseline. Understanding the full social payload carried by these tools means looking more closely at the ways they subdivide and reassemble the world. The ways in which AI produces its predictions about the world depend on seriality, and the resulting interpassivity reshapes any institution or public service that becomes dependent on it. As we will see, when such systems are deployed in real-world services they will tend to intensify discrimination and disempowerment, especially for groups such as young people who already have less social power.

The data drawn into an AI algorithm are vectorised, meaning that every example becomes a point in an abstract geometric space. The algorithm sums the distance between all these points and the predictions of the model, and the sum of these distances becomes the loss function that it tries to minimise. In deep learning the layers of computational nodes, or neurons, have multiple interconnections – each neuron is activated by a combination of many inputs, and it passes that on to many neurons in the next layer. The algorithm passes the errors back across the layers to correct the weights at each neuron, a process that is repeated thousands of times until it learns to predict the correct target classes (Chollet 2017).

Deep learning is powerful because it does not need to be told what is important about the data it is given. When recognising a face, for example, it does not need rules for finding eyes or ears, or anything about typical facial proportions, it just needs to be fed enough examples and the mathematics will distill out the important connections. In this way, AI converts humanly meaningful questions ("which MRI scans show cancer?", "which job candidate is worth inviting for interview?") into the repetitive large-scale mathematical calculations that computers are good at. There's

no doubt that the results are impressive and exceed anything that computers were previously considered capable of, and AI is now driving cars and beating professional players at Go. But beneath the hood, these are huge leaps in narrow tasks that can be statistically inferred from huge datasets. AI is presented as having some kind of insight into the world, when it literally understands nothing, in the sense that we would understand understanding. AI is a clever leveraging of statistical distributions, not a superintelligent system with nascent consciousness. The danger for society is not that AI will develop a plan to take it over, but that AI's prosaic operations intensify existing social and institutional problems.

One of the first impacts of applied AI is the way it confounds due process with opacity. Its complex pattern figures out the rules, but the catch is that it cannot tell you what the rules are. The features of the data are abstracted and recombined in such an intricate way that it's frequently not possible to say which elements are the most significant. It's not simply the case that AI is a black box system; rather, it is opaque all the way down. The question for socially applied AI is how a decision can be challenged in line with due process if it cannot even be explained.

Some regulatory frameworks for automated decision making propose the right to an explanation when a user is denied a service, but the technical question is still unresolved, and poses a dilemma for implementation: whether to use the most accurate deep learning system or instead use a far less accurate system whose decisions can be explained. AI's corrosive effect on due process is only one of the ways that these systems rearrange agency and authority between people, institutions and machines.

Intensification and thoughtlessness

Although AI is popularly understood as a futuristic technology that removes the need for human involvement, the introduction of AI into institutions will actually intensify their bureaucratic aspects. AI fits right in because, like bureaucracy itself, it is a generalised and goal-oriented mode of rational ordering based on abstracted categories and justified by efficiency. This is particularly significant because of the institutional tendencies which will be intensified by introducing AI. Even when a decision is not automated but is subject to human review, it is unclear how an overworked and under-pressure professional is meant to contest an AI's recommendations. The "human in the loop" will only have the kind of freedom critiqued by Ruda, the "freedom" to choose between options presented by an intelligent system whose internal reasoning is opaque.

As a result, there will be an increase in thoughtlessness in the sense that Hannah Arendt (Arendt 1998) meant when she wrote about people's complicity with authoritarian institutions. When people cannot meaningfully question decisions, and when the institutional culture promotes compliance with a higher authority, there is a tendency for people to stop reflecting on consequences, and to choose to believe instead that the correct ordering is being carried out. The justification of AI in terms of efficiency is also questionable as efficiency itself can only be applied in a context where the world has been rendered as calculable – it is reductive in exactly the problematic way that is intensified by AI.

The assumption that AI generates insights also makes machine learning prone to what Miranda Fricker calls epistemic injustice, where prejudices cause people to give a deflated level of credibility to a speaker's word or ways of knowing (Fricker 2009). In this case the inflated credibility will be given to the machinic mechanism over the (often already suspect) voice of the service user. A father in South London whose welfare benefits were stopped because of a mistake in an automated system run by the Department of Work and Pensions (DWP), and who ended up without food, homeless and estranged from his family, said "The DWP staff appeared to be in thrall to the Universal Credit computer, allowing it to make all the decisions. Being able to tackle the computer beast that had made this decision wasn't within their capability" (Booth 2019).

Whether you are a young person on an apprentice scheme or a recipient of benefit payments, the presence of AI's algorithms in the minutiae of your life will narrow your self-determination and your autonomy. It's not so much a question of AI replacing people, but that new arrangements of people and technology will become a question of dignity. The AI assemblage ensnares both public-sector workers and service recipients in a machinic judgment about who is deserving and who is undeserving, a calculative Victorianism, assigning morality via statistical metrics.

The essence of applied AI is reductive optimisation. In order to dredge a generalisable pattern from the flood of data, the mathematics of deep learning ruthlessly pursues the minimisation of its loss function. It renders lived experience as numbers between zero and one, hyper-abstracting diversity into planes of numerical consistency. Factors that cannot be made numeric are literally not counted, especially the incommensurable elements of relationship and empathy that are so key to frontline activities like youth services. This powerfully reinforces the tendency within contemporary public institutions for effectiveness to be determined via metrics and marketisation. It ends up being the numerical proxies that are optimised, not the experience of actual service users. But AI optimisation also leads to the multiplication of discrimination. While it is becoming widely understood that an AI trained on biased data will reproduce that bias, it is also the case that the core operations of AI are potentially discriminatory, over and above any distorted data. In fact, the simplification of social problems to optimisation based on reductive correlations resonates strongly with the rising politics of populism.

Stereotyping and pre-emption

When AI applies its trained model to new input data, it makes predictions by discriminating, in a technical sense, between one target class and another. But we should be very wary of discriminative ordering that tries to apply the same criteria and judgments across the technical and the social. The operation of computational classification becomes an inference about identity and value at a social level. Treating an abstract distance in data space as an innate affinity is a logic of statistical segregation which will manifest in actual stereotyping, whether that is in Facebook's "ethnic affinity" or in the algorithmic ranking of visa applications (McDonald 2019). Indeed, the very idea of an "artificial intelligence" that will become superior at some point embeds the same stratification of intelligence that has historically underpinned colonialism and white supremacy (Golumbia 2019). Putting algorithmic stereotyping

at the heart of services will exacerbate existing prejudices and lead to new instances of collateral damage. The multiplication of classifications increases the moments of "administrative violence"; that is, conflicts between self-identity and administrative categories such as those experienced by the trans community (Keyes 2018).

These conflicts are particularly acute for those on the margins, about whom the state and institutions have already gathered the most data. Despite these frictions, the resource crisis created by austerity is making the introduction of AI almost irresistible. AI is being proposed as a solution to the problems of austerity in the public sector. In tough times, say the pundits, we need to make hard decisions about allocation. AI offers a method for squaring the circle between rising demand and diminished resource; a data-driven triage of social support justified by "smart" targeting (Alston 2019). Delegating this task to AI is justified by the mythos of Silicon Valley and the idea that the government should be more like Amazon or Google (Meisenzahl 2019).

While the futurist narrative of AI posits it as a productive technology, it is first and foremost a mechanism for the reproduction and redistribution of scarcity. For example, one in three local authorities in the UK are using computer algorithms to help make decisions about benefit claims, justified by claims about efficiency and fraud prevention and judged on their success in reducing the overall cost to the benefits system (Marsh 2019). Sunderland Council paid £50m to a US datamining firm called Palantir, which has strong links to the military and intelligence sector, to target local "Troubled Families" for targeted intervention (Savvas 2014). But the patterns discovered by AI are based on correlations and not on causation, so they actually tell us little about the best ways to intervene. The built-in assumption is that intervention must be differentiated and individualised, rather than tackling the shared problems that people have in common. This is a problem with AI targeting when it is done in good faith, never mind when there is institutional capture by political forces based on prejudice. In the latter case, AI becomes the most efficient way to administer a "hostile environment" (Mijente 2018).

What AI offers is not just the classification of the present, but the capacity to discriminate between futures. AI's probabilistic modelling produces predictions about future states based on current data. The actualisation of AI's predictions in the present as pre-emptive interventions will bring about new forms of categorisation, such as pre-extremist, pre-underperforming employee or pre-failing student.

In New Zealand, the Department of Work and Income's Youth Service, NEET, uses an algorithm to help identify school leavers who may be at greater risk of long-term unemployment, and proactively offers them support in terms of qualifications and training opportunities (MacManus 2018). The data used by the algorithm include whether a young person's parents were on a benefit and whether they have ever been the subject of a notification to child protection services. One third of young people referred to NEET come through automated referrals by this algorithm. While the intentions are well meaning, it sorts individual young people into stigmatising categories through "risk indicator ratings" based on a statistical similarity to a cohort, rather than based on a young person's unique circumstances.

These predictions are problematic, not only because the model behind them is opaque but because they are based on the empirical erasure of factors that do

not contribute to numerical optimisation. This is effect without cause, claiming preventative power but abandoning the inconvenient politics of explanation. AI is the reductive imagineering of people's social future, and yet it is presented as inevitable. Mark Fisher coined the term "capitalist realism" to describe the entrenched belief that, despite the global financial crash, there is no alternative to our current socio-economic system (Fisher 2009). What we're seeing now is AI realism; for better or for worse, AI will inevitably take on important functions in our lives.

Care and people's councils

The question for youth-facing institutions is not first and foremost how AI can enhance youth services but what to do about AI as an engine for amplifying inequality and injustice. The Excess of AI overflows legal and policy mechanisms for reform or restraint. AI's insatiable hunger for more data means that everything becomes training data, even the most inclusive and participatory activities. Initiatives around "ethical AI" are increasingly understood to be corporate PR and spin (Metzinger 2019), while public institutions are easily outmanoeuvred by the data privateering of the big AI enterprises (Hodson 2016). Even the law does not adequately address the structural asymmetries that channel judgmental analytics into intensifying existing injustices (Eubanks 2018).

An alternative and constructive response is to recompose the very idea of AI, not as a matter of intelligence but as a matter of care (Bellacasa 2017). A politics of care starts with concern about the exclusions and boundaries of a stratified society. The first question for AI should not be how many accuracy points it has gained on a numerical benchmark but how it might increase the asymmetry of care or neglect. An AI based on care means starting from the perspectives of those at the edges, starting from ways of knowing that can challenge the erasure of lived experience by the ideology of efficiency and can generate a counter project to the algorithmic production of carelessness. An AI of care sets out to incorporate first of all the perspective of those who might be harmed but would otherwise have no way to voice their concern. Likewise, incorporating a feminist ethics of care makes relationality fundamental. A different construction of AI will operationalise different values.

Both the history of youth work and the broader heritage of social radicalism offer a model for reforming AI in the form of the assembly or people's council. People's councils are bottom-up, federated structures that act as direct democratic assemblies, a model which goes back to the face-to-face democracy of the Athenian *ekklesia* (popular assembly). Such assemblies are horizontal structures in which everyone has an equal say about the matter being decided. People's councils are a distributed form of democracy which can be used to contest distributed algorithmic governance. Establishing a forum for young people based on the people's council model would be an organised refusal by young people to be rendered only as data (McQuillan 2018). Councils have the potential to transform seriality because they create different relationalities, outside those defined algorithmically. As their core method is consensus decision making, their iterative deliberations are an antidote to interpassivity and to the calculative iterations of machine learning.

As in other areas where young people's voices are unheard or overridden, People's Councils on AI for Young People would operate as an explicit way of reintroducing situated knowledge, in this case as a counterweight to the generalising abstractions of AI. People's councils on AI for Young People would incorporate both young people and youth workers, who are also subsumed into the algorithmic assemblages that are starting to transform state institutions. Horizontal structures such as these are the preconditions for a politics of care, that is, for solidarity. They are the discursive practices which replace AI thoughtlessness and carelessness with mutual aid and support for diverse human flourishing.

Conclusion

At the present time, a discussion of AI and youth work cannot recommend best practice or come to any definitive conclusion. The changes we are experiencing are too fast and too deep. However, the future cannot be abandoned to the excessive narrative of digital innovation and the social collateral of precarity and interpassivity. There are signs of hope within the history and practices of youth work itself, especially in the participatory tradition. While AI cannot be uninvented, there are ways to transform it into a form of learning that is not just about what is in the data, but also about what is not in the data and what could be, so that we can recast machine learning itself as a different kind of apparatus. It should be communities of interest, those impacted directly by AI, who are involved in both setting the questions it asks and determining the meaning of what is found.

One starting point offered here has been that of People's Councils on AI for Young People. They are an attempt to challenge and extend machine learning through critical pedagogy, that is, with collective ways of asking questions about the problems we have in common, and learning together by generating ways to tackle those problems. People's councils and critical pedagogy are inclusive approaches aimed at giving a voice to excluded or marginalised groups of young people. To have agency through people's councils would be to re-invent the problem, to reverse statistical reductiveness through a commitment to the possible over the probable. If we don't want pre-emptive structuring but prefigurative openness, our actions and relations right now need to embody the better society we want to live in. In the same way that young people are showing the way on climate change, there is the potential for youth work to become the site for a new and more hopeful approach to the role of AI in the production of togetherness.

References

Alston P. (2019), *The digital welfare state - Report of the Special Rapporteur on extreme poverty and human rights*, available at https://srpovertyorg.files.wordpress.com/2019/10/a_74_48037_advanceuneditedversion-1.pdf, accessed 14 December 2019.

Andrews E. L. (2018), *The science behind Cambridge Analytica: does psychological profiling work?*, available at www.gsb.stanford.edu/insights/science-behind-cambridge-analytica-does-psychological-profiling-work, accessed 26 February 2020.

Arendt H. (1998), *The human condition*, University of Chicago Press, Chicago and London.

Bellacasa M. P. (de la) (2017), *Matters of care*, 3rd edn, University of Minnesota Press, Minneapolis.

Berardi F. (2012), "Emancipation of the sign: poetry and finance during the twentieth century", *e-flux* [journal] No. 39, available at www.e-flux.com/journal/39/60284/emancipation-of-the-sign-poetry-and-finance-during-the-twentieth-century/, accessed 2 July 2020.

Bergson H. (2010), *The creative mind: an introduction to metaphysics*, Dover Publications, Mineola NY.

Booth R. (2019), "Computer says no: the people trapped in universal credit's 'black hole'", *The Guardian*, available at www.theguardian.com/society/2019/oct/14/computer-says-no-the-people-trapped-in-universal-credits-black-hole, accessed 14 December 2019.

Brin S., Motwani R., Page L. and Winograd T. (1998), *What can you do with a Web in your pocket?*, available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.36.2806&rep=rep1&type=pdf, accessed 15 December 2019.

Buolamwini J. (2019), "Artificial intelligence has a problem with gender and racial bias. Here's how to solve it", *Time*, available at https://time.com/5520558/artificial-intelligence-racial-gender-bias/, accessed 25 February 2020.

Buolamwini J. and Gebru T. (2018), "Gender shades: intersectional accuracy disparities in commercial gender classification", Proceedings of *Machine Learning Research*, Conference on Fairness, Accountability, and Transparency, available at http://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf, accessed 25 February 2020.

Chollet F. (2017), *Deep learning with Python*, 1st edn, Manning Publications, Greenwich CT, USA.

Conger K. and Metz C. (2018), "Tech workers now want to know: what are we building this for?", *New York Times*, available at www.nytimes.com/2018/10/07/technology/tech-workers-ask-censorship-surveillance.html, accessed 18 December 2019.

Eco U. (1973), *The theory of semiotics*, Indiana University Press, Bloomington IN, USA.

Eubanks V. (2018), *Automating inequality: how high-tech tools profile, police, and punish the poor*, St. Martin's Press, New York.

Eurostat (2019c), *Temporary employment*, available at https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20190524-1, accessed 27 February 2020.

Fisher M. (2009), *Capitalist realism: is there no alternative?* John Hunt Publishing, Ropley, Hants, UK.

Fiske J. (1991), *Television: polysemy and popularity*, The Guilford Press, New York.

Fricker M. (2009), *Epistemic injustice: power and the ethics of knowing*, Oxford University Press, Oxford.

Golumbia D. (2019), *The Great White Robot God*, available at https://medium.com/@davidgolumbia/the-great-white-robot-god-bea8e23943da, accessed 17 December 2019.

Gray M. L. and Suri S. (2019), *Ghost work: how to stop Silicon Valley from building a new global underclass*, Houghton Mifflin Harcourt, New York.

Hart R. (1997), *Children's participation: the theory and practice of involving young citizens in community development and environmental care*, Earthscan/UNICEF, London.

Hartmans A. (2018), *Jeff Bezos' parents invested $245,573 in Amazon in 1995 — now they could be worth $30 billion*, available at www.businessinsider.com/jeff-bezos-parents-jackie-mike-amazon-investment-worth-2018-7?r=UK&IR=T, accessed 15 December 2019.

Hern A. (2018), "Cambridge Analytica: how did it turn clicks into votes?", *The Guardian*, available at www.theguardian.com/news/2018/may/06/cambridge-analytica-how-turn-clicks-into-votes-christopher-wylie, accessed 26 February 2020.

Hodson H. (2016), "Revealed: Google AI has access to huge haul of NHS patient data", *New Scientist*, available at www.newscientist.com/article/2086454-revealed-google-ai-has-access-to-huge-haul-of-nhs-patient-data/, accessed 25 December 2019.

Keyes O. (2018), *The misgendering machines: Trans/HCI implications of automatic gender recognition*, available at https://dl.acm.org/doi/abs/10.1145/3274357, accessed 23 December 2019.

Kozlowska H. (2018), *The Cambridge Analytica scandal affected nearly 40 million more people than we thought*, available at https://qz.com/1245049/the-cambridge-analytica-scandal-affected-87-million-people-Facebook-says/, accessed 16 December 2019.

Lapowski I. (2018), *Cambridge Analytica could have also accessed private Facebook messages*, available at www.wired.com/story/cambridge-analytica-private-facebook-messages/, accessed 16 December 2019.

Levin S. (2017), "Uber's scandals, blunders and PR disasters: the full list", *The Guardian*, available at www.theguardian.com/technology/2017/jun/18/uber-travis-kalanick-scandal-pr-disaster-timeline, accessed 16 December 2019.

MacManus R. (2018), *How government algorithms are judging you*, available at www.newsroom.co.nz/@technology/2018/11/11/312796?slug=how-government-algorithms-are-judging-you, accessed 19 December 2019.

Marcus G. (2018), *Deep learning: a critical appraisal*, available at http://arxiv.org/abs/1801.00631, accessed 19 December 2019.

Marsh S. (2019), "One in three councils using algorithms to make welfare decisions", *The Guardian*, available at www.theguardian.com/society/2019/oct/15/councils-using-algorithms-make-welfare-decisions-benefits, accessed 25 December 2019.

McDonald H. (2019), "AI system for granting UK visas is biased, rights groups claim", *The Guardian*, available at www.theguardian.com/uk-news/2019/oct/29/ai-system-for-granting-uk-visas-is-biased-rights-groups-claim, accessed 25 December 2019.

McQuillan D. (2017), "Data science as machinic neoplatonism", *Philosophy & Technology*, No. 31, pp. 253-72, available at https://link.springer.com/article/10.1007/s13347-017-0273-3, accessed 25 December 2019.

McQuillan D. (2018), "People's councils for ethical machine learning", *Social Media + Society*, Vol. 4, No. 2, available at https://journals.sagepub.com/doi/full/10.1177/2056305118768303, accessed 25 December 2019.

Meisenzahl M. (2019), "The future of government could offer an 'Amazon experience,' according to the CTO of Washington DC", *Business Insider*, available at www.businessinsider.com/amazon-experience-smart-cities-future-of-government-washington-dc-cto-2019-12, accessed 29 December 2019.

Metzinger T. (2019), "Ethics washing made in Europe", *Der Tagesspiegel*, available at www.tagesspiegel.de/politik/eu-guidelines-ethics-washing-made-in-europe/24195496.html, accessed 16 January 2020.

Mijente [Latinx organisation] (2018), *New report exposes tech & data companies behind ICE*, available at https://mijente.net/2018/10/23/whos-behind-ice-the-tech-companies-fueling-deportations/, accessed 1 March 2020.

NSF Grant IRI-96-31952, *Data warehousing and decision support*, Stanford University, Stanford CA, available at https://doi.org/10.1007/s11263-015-0816-y, accessed 15 December 2019.

Pfaller R. (2017), *Interpassivity: the aesthetics of delegated enjoyment*, Edinburgh University Press, Edinburgh.

Ruda F. (2016), *Abolishing freedom – a plea for a contemporary use of fatalism*, University of Nebraska Press, Lincoln NE, USA.

Russakovsky O., Deng J., Su H. et al. (2015), *ImageNet Large Scale Visual Recognition Challenge*, available at https://doi.org/10.1007/s11263-015-0816-y, accessed 18 January 2020.

Sartre J. P. (2004), *Critique of dialectical reason*, Vol. 1, Verso, London.

Savvas A. (2014), "Sunderland Council builds big data intelligence hub with Palantir", *Computer World*, available at www.computerworld.com/article/3425615/sunderland-council-builds-big-data-intelligence-hub-with-palantir.html, accessed 18 January 2020.

Solon O. (2018), "Amazon patents wristband that tracks warehouse workers' movements", *The Guardian*, available at www.theguardian.com/technology/2018/jan/31/amazon-warehouse-wristband-tracking, accessed 27 February 2020.

Tufekci Z. (2018), "YouTube, the great radicalizer", *New York Times*, available at www.nytimes.com/2018/03/10/opinion/sunday/youtube-politics-radical.html, accessed 16 December 2019.

Waters T. and Waters D. (2015), *Weber's rationalism and modern society – new translations on politics, bureaucracy, and social stratification*, Palgrave Macmillan, London, available at www.palgrave.com/gp/book/9781137373533, accessed 20 January 2020.

West S. M., Whittaker M. and Crawford K. (2019), *Discriminating systems: gender, race and power in AI,* AI Now Institute, New York, available at https://ainowinstitute.org/discriminatingsystems.pdf, accessed 3 March 2020.

Chapter 8

Young people's digital well-being: optimising the potential and minimising the risks

Cathy Street, Aiman El Asam and Adrienne Katz

Introduction

In this chapter we explore how digitalisation is affecting young people's mental health and well-being. We consider the implications for youth work practice, if we are to optimise this development and address the adversities becoming apparent in the UK and across Europe. Our focus is largely on young people in the age range 11-16 years, so in this chapter we use the term "young people" to refer to roughly this age range. By digitalisation, we mean their use of technology to access information, communicate with their peers to share experiences and views and their experience of the digital environment. In the health arena, this may include the monitoring and reporting of symptoms, the sharing of personal clinical data or the receipt of specialist computerised programmes of treatment. We discuss the impact of all these experiences on young people's mental health and well-being, outlining current research findings about both positive and negative effects, including problematic or excessive use of technology and some theories behind these findings. We then present new research data about the groups who may be most vulnerable online – wherein young people with mental health difficulties are prominent.

There are a number of reasons to focus on young people in the 11-16 age range. This represents a rapid human development phase, including biological and psycho-social changes. Young people's capacities are ever changing during this period, often laying down patterns of learning and behaviour that last into adulthood. It is arguably essential to instil healthy ways of managing online safety and well-being at this life stage if young people are to grow into adults who can avoid online harms and risks to their well-being. Likewise, this is a stage in life when early intervention to address difficulties, to provide appropriate support and education, is justified on the basis of preventing harm, facilitating more positive online well-being and ultimately better mental health.

The current context

As a global system the internet offers virtual existence; it enhances the individual's ease of access, freedom of speech, autonomy, power, choice and sense of belonging.

It is indeed different from the offline environment, which is limited and often intimidating for many. Despite its advantages, young people's increased reliance on the internet is a source of concern for many researchers, parents, educators and policy makers. In the EU, research by Eurostat showed that in the year 2016 almost 91% of young people (16-29 years) used the internet on a daily basis, higher than the percentage of the total population (71%) who used the internet every day (Eurostat 2017). The internet was accessed via mobile phones (83%) more often than via portable computers (38%).

In the UK, Ofcom reports annual statistics, which for the age range 8-15 showed increased internet use compared to previous years; 35% of children aged 8-11 have their own smartphone while 47% have their own tablet; 93% go online for approximately 13.5 hours a week and 18% have an online social media profile (Ofcom 2019). Furthermore, 83% of young people aged 12-15 have their own smartphones and 50% have their own tablet; 99% go online for approximately 20.5 hours a week and 69% have a social media profile. Online gaming as a main activity seems to increase with age, and those aged 12-15 spend almost 14 hours a week gaming. Facebook, Instagram and WhatsApp are the popular choices for social networking. These statistics clearly illustrate the significance of the internet and digital environment in young people's lives. Despite the enormous advantages offered by technology, researchers over the past two decades have identified risks and harms thought to be associated with frequent or excessive internet use. These findings often describe harms such as poor mental health and increased chances of being targets or victims of online risky experiences.

At a time of reports of both increased prevalence and increased complexity of mental health problems among young people in the 0-25 age group in many European countries (WHO 2018), and widespread concerns about the possible causes, understanding the impact of digitalisation on young people's well-being is pertinent. Furthermore, there are questions about the adequacy of support and treatment available to young people, especially when they get into difficulty online. The concurrent growth of e-therapies, health apps that aim to help people self-manage their mental health, digital health records and a variety of other digital innovations that encourage young people to use the internet, while clearly positive, adds to the urgency of this discourse.

When adult anxieties cloud the true picture for services working with young people

The question is no longer whether young people are using digital technology, but "how, why, and what are the effects?" (George and Odgers 2015). Recently, the panic about screentime eclipsed all other questions – with media headlines overwhelmingly concerned with how long young people spent online. In the UK, this only subsided after 82 reviews of screentime were analysed by UNICEF (Kardeveldt-Winther 2017), followed by the work of Orben, Dienlin and Przybylski (2019) and the UK Chief Medical Officer (2019) issuing guidelines that explained that the scientific evidence was insufficient to support evidence-based guidelines on optimal amounts of screen use.

Violent video games may be the next problem (Draper 2019). For example it was alleged in the USA, in the wake of events in El Paso, that they encourage mass shootings despite a policy statement from the News Media, Public Education and Public Policy Committee of the American Psychological Association, which explained that: "Scant evidence has emerged that makes any causal or correlational connection between playing violent video games and actually committing violent activities" (Ferguson et al. 2017). What we can learn from these serial panics – which in fact go back to the arrival of television or even, in 1948, the arrival of comic books when Frederic Wertham, a German-American psychiatrist, claimed that comics made young people delinquent (Wertham 1954) – is that the position is usually more nuanced and complex. Blaming a new means of communication, such as social media, television or video games for societal ills might obscure other more important issues or perpetuate myths.

Reviews of the evidence and guidance from the UK professional body (Royal College of Paediatrics and Child Health 2019) suggest that current research is inconclusive on whether screentime causes mental ill health, obesity and educational failure, so should services be open to other ideas? Orben and Pryzbylski, when discussing their longitudinal research study on adolescent well-being and digital technology use (Orben and Pryzbyslski 2019a), pointed out that "in science the lack of an expected finding is inherently valuable, making us reconsider challenge and update our notion of how social media is affecting us" (Orben and Pryzbyslski 2019b). Their study found a minuscule negative effect of screen time, in particular among girls. But, to keep it in perspective, the effect was "less than skipping breakfast".

Being digitally skilled and safe online, by which we mean able to navigate the online environment without falling prey to scams, grooming or other pitfalls or harm, is the gateway to knowledge, socialising, entertainment, commerce and citizens' interactions with services and the state, along with so much more. The opportunities and benefits of the internet are enabling, yet for those who come to harm while using it, the benefits can be denied. While the majority of young people aged 11-16 are resilient and cope well with online life, there is a sizeable minority at risk (Katz 2017). It is sometimes taken for granted by adults that young people – often referred to as "digital natives" – have digital skills simply as a result of the period in which they were born. However, this is not universally the case. While the concept of a digital native suggests someone at home in the digital world, it is possible to be digitally skilled but emotionally immature, naive or needy.

What is problematic internet use?

For youth work and other services working directly with young people, when assessing whether a young person's internet use is excessive or not, it can be helpful to think about some of the ways in which researchers have tried to define the impact of online life. Researchers have come up with various terms, all of which are linked to generic excessive time spent online. Some of the terms are: "internet addiction disorder", "excessive internet use", "pathological internet use" or "problematic internet use". It is argued that the internet, in much the same way as substance misuse or addiction, produces similar addictive symptoms. It is generally agreed that these terms often refer to preoccupation or excessive and poorly controlled internet

access, leading to significant personal distress or impairment over a period of time. Among young people, neglect of daily tasks, constant obsession with the internet and poor control of online use are often indications of problematic internet use (El Asam et al. 2019; Frith 2017).

One of the main issues in recognising this phenomenon as mental health disorder is the fact that the internet is not a substance and cannot be put in the same category as substance use or addictive disorders; it is merely a medium facilitating different activities such as social media, gaming or gambling. With this in mind, a more comprehensive view was suggested by Davis, who argued that this phenomenon is best explained through a cognitive-behavioural model (Davis 2001). He introduced two essential forms, "generalised problematic internet use" (GPIU) and "specific problematic internet use" (SPIU). GPIU refers to overuse of the internet for various and multiple reasons, and not related to a specific service/purpose such as frequently checking online social networking sites, websites or shopping. SPIU describes overusing the internet to feed a sole or main content-specific purpose or function. A prime example is the newly recognised behavioural addiction called "online gaming disorder" (American Psychiatric Association 2013).

Davis (2001) emphasised that social isolation and lack of social support could lead to excessive time online with no specific purpose. This theory argues that two types of factor are the main contributors to problematic internet use. These are distal and proximal factors. Distal factors are underlying psychopathological causes such as anxiety, depression or addiction, which in turn become associated with a specific activity or service online. One example might be those who are lonely, with depression symptoms, who might seek to use the internet to cope with their symptoms by seeking online friendships.

Proximal factors refer to maladaptive cognition about people's thoughts and views about themselves and about the world around them. A person is more likely to use the internet excessively if he or she believes that "the internet is the only place where I am respected". As a result, such cognitions are enacted automatically online. Clearly this model focuses on the importance of cognition and psychopathology as ways of explaining why problematic internet use takes place.

An alternative explanation for problematic internet use is the Basic Needs or Self-determination Theory. According to Ryan and Deci (2000), this assumes that individuals universally have inner psychological needs that need to be satisfied for optimal growth and functioning, namely: competence (having a sense of mastery); relatedness (to connect and function with others); and autonomy (the power to meet inner needs). These needs are considered integral in self-motivation and development of personality in that they form the motives for engaging in various life activities; they are vital for growth, integrity and survival. It is argued that if such needs are not fully met in real life, individuals may resort to the internet to compensate for them (Wong et al. 2015). That is, with basic skills, internet users have the freedom to choose the activity they like and the people they wish to relate to, and hence it might provide a better and more convenient environment for them to seek growth and fulfilment.

Another well-known explanation, called "fear of missing out (FOMO)", was suggested by Przybylski and colleagues (2013). This explains that we constantly resort to the

internet because of worry that others might be having rewarding experiences that we are not part of. This is a form of social anxiety that is explained by people's desire to continuously be involved or connected with others' actions online (e.g. What are others doing? What are they saying about me?).

The views above provide educators with perspectives on why individuals might choose to spend much of their time online. Some individuals might spend much time online, but use the time in various activities (GPIU), whereas others might spend it mainly on gaming, on social networking websites or on some other specific service (SPIU). Although research is scarce and the findings inconsistent, similar risk factors seem to exist among all excessive users of internet, regardless of the activity.

The link between internet use and mental health, along with the rapid growth of digitalised activities in all aspects of life, means that youth sector services need specialised knowledge to respond to young people appropriately. This will be explored below alongside discussion of some of the policy initiatives and recent research findings concerning young people's mental health and their use of digital technology.

The impact of digitalisation on young people's mental health and well-being

Concerns about the impact of social media on young people's mental health have been around since at least 2010, with reports of "contagion effects" that may encourage young people to self-harm or to kill themselves after witnessing others describing suicidal thoughts or sharing information about ways to commit suicide. There is a focus, as discussed earlier, on whether the internet is causing "addiction" and what constitutes excessive or problematic use, along with increasing concerns about dangerous "challenges" such as online grooming and manipulative relationships.

The exponential growth of smartphone use, and ever-younger users, has given these concerns considerable momentum. A number of inquiries and large-scale reviews have emerged in recent years, including the review by the OECD (2018) and, in the UK, a House of Commons inquiry (2019). In addition, a wide range of research papers have been published. Nevertheless the conclusion from these inquiries, reviews and research papers is that more detailed empirical studies are called for, using consistent definitions and taking account of different forms of social media. While there is acknowledgement that associations do exist between internet use and mental health, contradictory interpretations of data and arguments about the extent of the impact or the direction of association abound (OECD 2018; House of Commons 2019). Causation has not been proven. Questions remain, such as: does social media usage contribute to elevated symptoms of mental health disorder, or is it that young people with these symptoms utilise social media more, possibly as a coping mechanism or in response to difficulties accessing support and treatment elsewhere?

Research about specific mental health disorders

In terms of specific mental health problems, concerns about the impact of social media have been reported in relation to depression and anxiety, self-harm and suicidality,

anorexia, other eating disorders and body image concerns among young people. Studies have also looked at general well-being, at young people's satisfaction with life and at the impact on physical health, including sedentary lifestyles, time online and the impact on sleep.

A systematic review of research found an association between social media use and depression (McCrae et al. 2017). Vannucci et al. (2017) also found a similar link between anxiety and high daily social media use. McCrae et al. noted that several studies report gender differences in the relationship between social media and depressive symptoms – for example, in one study, girls who were high internet users were found to be 3.8 times more likely to have major depressive symptoms than no symptoms. However, two of the studies found that girls were less likely to show depressive symptoms than boys. The researchers acknowledge that there are many limitations to be borne in mind, which include considerable methodological weaknesses in study design. They conclude that "a degree of correlation is found between social media use and depressive symptoms … however, causality is not clear and further development is needed in research on this topic" (McCrae et al. 2017: 327).

Anxiety disorders are reported as the second leading cause of disability among all psychiatric disorders in the USA, peaking during emerging adulthood (Vannucci et al. 2017). This highlights that social media may serve as an important channel through which young people on their way to adulthood can undertake important developmental tasks, such as identity development. However, social media also "has the potential to function as a source of stress or reinforce negative self-evaluations … the immersive experiences created by the numerous distracting features of social media sites may also facilitate avoidant coping strategies and social isolation" (Vannucci et al. 2017: 163).

These researchers outline various hypotheses: that social media sites may serve as a source of stress that contributes to elevated anxiety symptoms in emerging adults; alternatively, some elements of social media use may directly elicit stress responses, for example, receiving negative feedback from peers; social media may contribute to a general overload of communications that may bombard young people from a multiplicity of different sources, and this has been associated with psychological distress; finally, social media can trigger negative comparisons with other people, which may promote anxiety symptoms.

However, as Vannucci et al. (2017) conclude, the direction of the association is unclear since, alternatively, young people with anxiety may tend to use social media more, possibly to validate their self-worth or to reduce feelings of uncertainty. They may also turn to it as a primary communication avenue and source of social support instead of face to face, to regulate fears of rejection or as a coping mechanism of underlying mental health problems which may explain problematic internet use, as explained by Davis (2001).

The opportunities to access harmful information online that encourages or normalises self-harm or suicide is a prominent theme in the existing literature. Research in the United States by Memon et al. (2018) concluded that online social networking could lead to increased exposure to and engagement in self-harming behaviour as a result of users receiving negative messages promoting self-harm, copying the

self-harming behaviour of others or learning new practices from shared videos. More time online could lead to higher psychological distress, poor self-rated mental health and increased suicidal ideation. Frith (2017) notes that studies have revealed how easy it is for young people to find detailed information online about ways to hurt themselves. She mentions the findings of Biddle et al. (2008) that, across Europe, 11% of youngsters aged 11-16 reported having seen websites where people discussed ways of hurting themselves, and 6% had viewed pro-suicide websites.

Social media usage, among both young women and young men, may be associated with body image concerns and eating disorders. In the Education Policy Institute review, the "abundance of idealised images of beauty on social networks" (Frith 2017: 20), and the impact this has on young people's view of their own appearance, is discussed. OECD (2018) cites findings about the influential role of peers in digital forums. One study noted that longitudinal studies suggest that the association between social media usage and body image concerns may strengthen over time and it concluded that "social media use is associated with body image concerns, particularly if users are engaging in certain kinds of activities … such as making appearance comparisons to others" (Fardouly and Vartanian 2016: 3). This issue is also mentioned in the House of Commons inquiry into social media and young people's health (House of Commons 2019), which describes how a "compare and despair" attitude may be promoted through the viewing of highly manipulated images or videos. Of importance, however, is Fardouly and Vartanian (2016), who note that these effects are similar to those for what they term "traditional media", for example, magazines.

Maximising the benefits

"Harnessing digital technology" is one of the key avenues for promoting resilience, prevention and early intervention noted in current UK mental health policy focused on young people (Department of Health and NHS England 2015). The final report of a specially convened taskforce, *Future in Mind*, notes that "the digital world has become of utmost importance with its potential to protect and enhance the mental health and wellbeing of our children and young people" (ibid.: 38). The report describes the positive role of digital technology in providing new opportunities to deliver information and reduce stigma together with apps that empower self-care and can give young people more control over their health.

The prominent narrative about the possibly negative impact of digitalisation – in particular, social media use – on young people's mental health and well-being has often led to neglect of the positive aspects of increasing technology in young people's lives. Frith (2017: 15) argues that it is important to recognise that "young people tend to view social media as a positive influence in their lives, in particular, valuing the social benefits it can provide". She also suggests that digitalisation can help young people to connect with friends and family, make new friends, be socially active and involved in community, charitable or creative activities and collaborate on projects. It may help with identity formation and the honing of social skills. With specific reference to health, it may help young people to access health information online or find supportive networks of peers with similar conditions.

Furthermore, Frith (2017) states that the UK Chief Medical Officer has identified the digital medium as an important avenue for improving access for young people who may struggle to use Child and Adolescent Mental Health Services (CAMHS), for example those living in rural areas. It also allows young people to access support out of working hours and in the familiar environment of their home. Similar findings are reported in the review by Street (2014) of young people's views of counselling. With regard to online counselling, young people highlighted the benefits of not having to travel to a service, the extended hours and that, for some, it had clear advantages over face-to-face support. One young person explained: "I love typing out all my worries and feelings; it gives me a chance to reflect on them and to look at them properly" (Street 2014: 10). As noted earlier, social media usage may also play an important role in supporting young people with depression and anxiety, in particular, by addressing social isolation and fostering a sense of social inclusion. It can help young people to feel less alone or as if they are the only one with mental health problems, a fear many young people report and which can compound the stigma of acknowledging a mental health problem (Street 2008).

The OECD (2018) review reports that some digital health interventions show promise – in particular, computerised Cognitive Behaviour Therapy (cCBT). Developments in Australia of a suite of mobile apps, websites and online games, intended to lower depression, suicide risk and stress, are also described. Other research has identified clear benefits of social media usage for young people at risk of suicide, including access to prevention and support programmes (Christensen et al. 2014). The identification of those young people who may be hard to reach or at risk is also suggested, where social media platforms may "allow others to intervene following an expression of suicidal ideation online" (Robinson et al. 2016: 103) and "enable people at risk of suicide to access information, support and counselling, and to share their experiences in a flexible, timely and readily accessible format … to simultaneously receive and provide support in what is perceived to be a safe and non-judgemental environment" (ibid.: 119). However, these researchers also detail challenges around controlling user behaviour, assessing risk and issues to do with privacy, confidentiality and contagion. They conclude that while social media appear to offer significant potential for prevention activities, more research into their safety and efficacy is required.

In summary, this brief overview of the findings of a number of recent studies points to a complex picture of both benefits and risks arising from the increasing digitalisation in young people's lives, including problematic or excessive use of the digital environment and in particular of social media. There are still many aspects of the association between social media use and young people's mental health that we do not adequately understand, and in the context of a rapidly changing digitalised environment, clouded by continual media panics and myths, developing a robust evidence base will be challenging. Effective policies and interventions to support young people with mental health problems to use the internet safely are urgently needed. However, no one solution will fit all, and a range of approaches will be needed. Linked to this, there is also a need to understand more about who the groups of young people are and who may be most vulnerable to getting into difficulty online, as well as the different reasons for, and ways through which, this risk may present.

Offline vulnerabilities increase online risk

Kardeveldt-Winther (2017: 26), writing for UNICEF, argues that "it is not feasible to investigate the effects of digital technology in isolation from children's lives in a broader sense". A more nuanced view therefore, takes account of a child or young person's offline vulnerabilities, their age, whether they spend a particularly long time online per day to the exclusion of sleep, eating, family time or physical activity and what they actually do online or who they interact with.

El Asam and Katz (2018) explored offline vulnerability and how it is associated with online risks and harms. Their study explored the digital lives of 2 988 young people aged 10-16 in the UK and suggested that offline vulnerabilities can influence online life and even predict the likelihood of specific online risks or harms. In particular, this study found that certain groups of young people are more likely to experience online risks, their offline vulnerabilities make them more susceptible to mental health disorders and they have been found to spend more time online than their peers who do not have these offline vulnerabilities. The young people who are more at risk than their peers are the ones with vulnerabilities in one (or more) of five areas:

- family (children in care and young carers);
- physical disability (including long-standing illness);
- special educational needs (SEN);
- communication (hearing loss, speech difficulties, EAL);
- a self-reported mental health difficulty.

For their study, El Asam and Katz placed risks into one of four categories: contact, content, conduct and cyberscams. These are the risks and harms that the young vulnerable people were more likely to report than their counterparts with no vulnerabilities.

Table 1: Categories of risk (El Asam and Katz 2018)

Category of risk	What it involves
Contact	High-risk online relationships involving "sexting" and the reasons for doing so such as: being pressured or blackmailed; being tricked into it; being in a relationship and wanting to share the image; sharing it due to threats; or sharing it "just for fun".
Content	Visiting or encountering online content that: urges you to be very thin; provides advice and encouragement for, or talks about, people self-harming or trying to kill themselves; promotes hatred or racist views; gives dangerous advice; sells illegal goods; contains nudity or violence that the user did not search for.
Conduct	Use of chatrooms or forums with an increased risk of harm.
Cyberscams	Various types of hacking or being tricked into paying for something, having credit or bank card details stolen or buying fake goods.

This study found relationships between different categories of risk which make it more likely that a young person who encounters one risk type will then go on to encounter others. Therefore, taken together with their offline vulnerability, their age, gender and online experiences can predict the risks they are most likely to come across, allowing prevention and early intervention to avert this. This has implications for youth services of all kinds, including health, mental health, education, counselling, online safety education and care.

Feeling our way towards supporting vulnerable young people in their digital lives

It is only recently that the focus on vulnerable young people has revealed quite how many young people there are in this situation. The Children's Commissioner for England (2019) has repeatedly drawn national attention to a wide range of children and young people who are considered vulnerable. The UK Department of Health (2000) describes vulnerability as being influenced not only by the child's developmental needs, but by their parents' capacity to meet these and by other wider family and environmental factors. With this increasing awareness of vulnerability among children and young people, it is timely to consider how they can be enabled to safely take advantage of what the internet can offer. If they are significantly more likely to be unsafe or come to harm online, they could experience considerable further disadvantage in modern connected society.

El Asam and Katz (2018) argue for a more nuanced and tailored approach for vulnerable children and young people, along with specialised training for services interacting with these groups. Their findings suggest ways of approaching a case that could be developed to explore the young person's online life in tandem with their offline vulnerability, in such a way as to avert further harm. This is holistic, echoing the concept of Contextualised Safeguarding developed by Firmin (2019), which takes into account where the young person goes and with whom they spend their time, alongside various other known factors about their lives.

Challenges of delivering online safety education

Thus the challenge of delivering relevant online safety education and support to all children and young people, in a range of services and settings, becomes clear. One size does not fit all, yet currently, in the UK and in many other countries, online safety education is fairly generic. Above all, teenagers are reacting against "online safety" lessons. These mostly take the format of scare scenarios followed by rules. This may include a tragic or frightening video, a formula that Jones and colleagues (Jones et al. 2014) point out has been widely rejected in sex and drug education.

"They tell you OVER and OVER again how to stay safe online and they say it so much you don't want to remember it," was the comment from one young participant during a survey by Katz (2017). Some believe that "It won't happen to me", especially if the lesson or the advice is given too early. Risk-takers can be attracted to the danger or can be disinhibited online, leading them to disclose more than they would offline or to act in a cruel manner as a result of a "disinhibition effect" (Suler 2004).

A wide body of literature has highlighted that, in an average school class, there will be pupils with multiple needs that may include serious mental health issues (which may be undiagnosed, or else diagnosed but the young person is waiting to access mental health services), disability and special educational needs (SEND), carer responsibilities or a background of adverse childhood experiences (ACE). In the highly multilingual context of the UK and many European countries, a number may have a different first language from that being used to teach online safety (or their parents might have). The way these young people take in and act on online safety advice from an education, social or medical professional may be influenced by a range of factors, not least emotional need, such as seeking the love, admiration or connectedness that they feel they lack offline. Some feel powerless offline but are empowered behind a screen, while others are disinhibited by the anonymity afforded by technology. This facilitates behaviour that they would not be capable of if their identity were known. It is clear then that some will require tailored support.

Another factor for consideration is economic disadvantage. Their home may not have an internet connection, which is unlikely to be available in temporary accommodation and also too costly for some. This means they and their parents are likely to be using a smartphone to access the internet, and only in public spaces with free Wi-Fi, such as a shopping centre. They are less able to view and download advice, and their parents are similarly less able to view and download advice on how to help their child.

It is often argued that internet use displaces offline activities such as socialising, playing sport or reading books. This displacement theory was also seen in relation to television (Neuman 1988). Now applied to the time spent online, proponents assume that every young person has an ideal life offline, which is patently not the case. Research by Livingstone and Helsper (2007), Sheldon (2008) and Stamoulis and Farley (2010) has described how some people use their internet activity to compensate for or escape their offline life, while findings from Katz (2017) reveal that those with mental health problems and those questioning their gender identity in particular seek "people like me" and "new friends" online. This has the potential to lead them into dangerous relationships, whereas others may successfully find support.

Time to modernise our thinking?

Online safety or digital literacy is often reduced to warnings and rules, overlooking the excitement, benefits and sheer fun of technology. The motivation for our actions and learning about relationships are rarely part of online safety lessons. The UK will shortly attempt to incorporate the digital world into education about relationships and sex education alongside other aspects such as digital citizenship and digital literacy. Increasingly, universities are having to address sexual harassment and hate speech. The influence of the digital environment on youth culture changes rapidly, and practice is in a race to keep up.

Teaching media literacy is a valid aim, but the argument that this in itself is enough to reduce the potential for harm is not proven (Milward-Hargrave and Livingstone 2006). It is widely agreed that media literacy should not be taught in isolation but integrated with personal, social and relationships education. This is emphasised by

the Association for Young People's Health, which suggests that "improved resilience will not result from any one particular action or decision; it arises from a 'critical mass' of different efforts to improve young people's outcomes" (AYPH 2016: 14).

This illustrates how policy makers and services are grappling with the challenges presented in a digital world. One way of planning delivery is via a three-tier model providing universal online safety and relationships education to the majority, targeted delivery to those who require intensive support with relationships, emotional health and online safety education, plus individualised provision for the most serious cases, where professional involvement is likely (Katz 2012; Katz and El Asam 2019).

Implications for youth policy and practice

The OECD (2018: 7) review states that "the most robust studies suggest that moderate use of digital technology tends to be beneficial for children and young people's mental wellbeing, while no use or too much use can have a small negative impact". This echoes the findings of Pryzbylski and Weinstein (2017), whose highly influential work suggests that moderate internet use might be beneficial for young people compared to very little or no internet use, or indeed excessive use, although they argue that the harmful impacts are minimal.

What both pieces of research clearly highlight is, as we described at the beginning of this chapter, the challenge of helping young people to optimise the benefits of digitalisation, while at the same time, on a number of fronts, taking steps to reduce the wide and serious risks clearly posed by current social media developments. This was a key finding of the UK House of Commons inquiry (2019), which concluded that the inquiry had illuminated a broad spectrum of both benefits and risks arising from young people's use of digital media.

At a national level in many countries, signs of activity in response to these concerns are already emerging. For example, in the UK a working group to advance the online safety and digital literacy of vulnerable children and young people, by increasing the body of knowledge, policy and practice, has been formed within the UK Centre for Internet Safety.

As countries grapple with the challenge and the speed of change in the digital world, different approaches are emerging, though it is too early to say which is the most likely to succeed. In France, current youth policy includes the promotion of media literacy and online safety; a range of digital education projects have been set up; and the state-approved association of CEMEAs (Training Centres for Active Education Methods), which trains youth work professionals, has organised training and talks on media literacy. There have also been national campaigns run by the Ministry of National Education in partnership with the e-Enfance (e-Childhood) Association to combat cyber-harassment and raise young people's awareness of best practice in digital technology (European Commission 2017). In Germany, the German Safer Internet Centre works to promote safe use of the internet and mobile technologies among young people, with a national awareness campaign – klicksafe, www.klicksafe.de – promoting media literacy and providing educational

materials and online seminars (German Safer Internet Centre 2019). The German Association for the Advancement of Youth and Social Work also runs a range of programmes to empower adolescents and young adults to use the internet safely. Furthermore, the Greek Safer Internet Centre promotes safe and responsible use of the internet and mobile technologies among young people; in 2019, Greece was one of a number of European countries that participated in an International Safer Internet Day involving a wide range of stakeholders. Similar bodies now exist in many other countries, including the Czech Republic, Russia, Croatia and Bulgaria to name but a few, typically offering seminars and conferences each year and often working closely with local non-governmental organisations (NGOs) to provide training and helplines. However without the method of delivery and the content of online safety messages being widely evaluated, it is difficult to know what is effective or where change is needed.

Finally, across a number of European countries, other positive steps are afoot: a set of standards around age-appropriate design is being considered, along with practical guidance on 16 standards of age-appropriate design for information society services likely to be accessed by children (ICO 2019), and there is a vigorous debate about the rights of children online. This discussion about children's rights has wider ramifications. It is likely that a comment will be produced to accompany the United Nations Convention on the Rights of the Child (UNCRC) on children's digital rights. GDPR law has been adopted in the EU and UK; it regulates data protection and privacy for all individual citizens of the EU and the European Economic Area. Further, it covers the transfer of personal data outside the EU and EEA areas. The Audiovisual Media Services Directive (European Parliament 2018) aims to regulate audiovisual media and has been in force since December 2018. It covers video-sharing platforms and marks the first attempt at legislation at a European level to address content regulation on any kind of digital platform.

Acting in haste or as a result of panics and media pressure may cause solutions to be drawn up which are unrealistic or difficult to implement, or may indeed lead governments to discard other solutions. A plan for age verification in the UK has now been quietly dropped, much to the distress of child protection professionals. The overarching issue is for countries to act together because the internet knows no national boundaries. Criminals targeting children operate across all time zones and territories. Apps and new platforms can spring up without moderators in far-off countries where Europe has no jurisdiction, yet they can affect children on the other side of the globe. Developments in the gaming industry appear to be skirting the border of gambling with in-game purchases of loot boxes or other incentivised spending, encouraging players to buy without knowing what they will get, in the hope of improving their playing experience. There are debates about changing the law on gambling to address this. But the digital environment changes rapidly and legislation cannot keep pace with these changes. While most of our young people develop skills and resilience, the sizeable group of vulnerable young people becomes more at risk. Thus while regulation is one route, it is to the educators, the services and professionals who engage with them that we look to prepare young people for digitalisation and support them when they come to harm.

Concluding remarks

Those leading, designing or commissioning services should focus efforts on identifying the true picture in the face of myths and panics; this requires being evidence-led and tracking the types of cases seen. Without such data it is not possible to identify trends or determine what effectiveness looks like. Good data systems will alert services to new trends and help determine what expertise and skills are required by those working in services for young people.

Planners should consider how any professional or practitioner interacting with a young person can access training in rapidly changing online issues or have access to expert support and nuanced advice to help them in difficult cases, especially where vulnerable young people are involved. Good practice involves a mosaic of information being considered in order to keep young people safe online or offline. This information may be held by disparate services around the young person. In addition, services should have a good understanding of problematic internet use and the theories that might explain this behaviour. Agencies and policy makers should view the online lives of young people not as an isolated issue but alongside or integrated with their offline vulnerabilities and needs. Only in that way can healthy offline and online lives be promoted.

References

American Psychiatric Association (2013), *Diagnostic and statistical manual of mental disorders*, 5th edn, pp. 795-8, American Psychiatric Association, Washington DC, USA.

AYPH [Association for Young People's Health] (2016), *A public health approach to promoting young people's resilience*, AYPH, London.

Biddle L., Donovan J., Hawton K. et al. (2008), "Suicide and the internet", *BMJ [British Medical Journal]*, Vol. 336(7648), pp. 800-2, available at www.bmj.com/content/336/7648/800.

Children's Commissioner for England (2019), *Childhood vulnerability in England 2019,* Children's Commissioner's Office, London.

Christensen H., Batterham P. and O'Dea B. (2014), "E-health interventions for suicide prevention", *International Journal of Research and Public Health*, Vol. 11, No. 8, pp. 8193-212.

Davis R. (2001), "A cognitive-behavioural model of pathological internet use", *Computers in Human Behaviour,* Vol. 17, pp. 187-95.

Department for Education (2019), *Statutory guidance: relationships and sex education (RSE) and health education*, Department for Education, London.

Department of Health (2000), *Framework for the assessment of children in need and their families*, Department of Health, London.

Department of Health and NHS England (2015), *Future in mind. Promoting, protecting and improving our children and young people's mental health*, NHS England, London.

Draper K. (2019), "Video games aren't why shootings happen. Politicians still blame them", *New York Times* (5 August 2019), available at www.nytimes.com/2019/08/05/sports/trump-violent-video-games-studies.html, accessed 24 October 2019.

El Asam A., Samara M. and Terry P. (2019), "Problematic internet use and mental health among British children and adolescents", *Addictive Behaviors,* Vol. 90, pp. 428-36.

El Asam A. and Katz A. (2018), "Vulnerable children and their online risks", *Human-Computer Interaction,* Vol. 33, No. 4, pp. 281-304.

European Commission (2017), *Youth policies in France*, available at www.eacea.ec.europa.eu/national-policies/en/youthwiki, accessed 2 October 2019.

European Parliament (2018), Audiovisual Media Services Directive, available at https://eur-lex.europa.eu/eli/dir/2018/1808/oj, accessed 2 July 2020.

Eurostat (2017), *Statistics explained. Being young in Europe today - digital world*, available at https://ec.europa.eu/eurostat/statistics-explained/index.php/Being_young_in_Europe_today_-_digital_world, accessed 2 October 2019.

Fardouly J. and Vartanian L. (2016), "Social media and body image concerns: current research and future directions", *Current Opinion in Psychology,* Vol. 9, pp. 1-5.

Ferguson C., Klisinan D., Hogg J. L. et al. (June 2017), "News media, public education and public policy committee", *The Amplifier Magazine*, Division 46 of the American Psychological Association, available at https://div46amplifier.com/2017/06/12/news-media-public-education-and-public-policy-committee/, accessed 24 October 2019.

Firmin C. (2019), "Contextualised safeguarding: a new way of identifying risk", *Community Care* 25 March 2019, available at www.communitycare.co.uk/2019/03/25/contextual-safeguarding-new-way-identifying-need-risk/, accessed 29 March 2019.

Frith E. (2017), *Social media and children's mental health: a review of the evidence*, Education Policy Institute, London.

George M. and Odgers C. (2015), "Seven fears and the science of how mobile technologies may be influencing adolescents in the digital age", *Perspectives on Psychological Science,* Vol. 10, No. 6, pp. 832-51.

German Safer Internet Centre (2019), Better internet, available at www.betterinternetforkids.eu, accessed 2 October 2019.

House of Commons Science and Technology Committee (2019), Impact of social media and screen-use on young people's health, Fourteenth Report of Session 2017-2019, House of Commons, London.

Information Commissioner's Office (ICO) (2019), Age Appropriate Design: Consultation available at, https://ico.org.uk/media/about-the-ico/consultations/2614762/age-appropriate-design-code-for-public-consultation.pdf, accessed 28 August 2020.

Jones L. and Finkelhor D. (2011), "Increasing youth safety and responsible behaviour online", A Family Online Safety Institute discussion paper, Crimes Against Children Centre, University of New Hampshire, Durham NH.

Jones M.J., Mitchell K.J., Walsh W.A., (2014) Content Analysis of Youth Internet Safety Programmes: Are Effective Strategies Being used? Crimes Against Children Research Centre, University of New Hampshire, New Hampshire.

Kardeveldt-Winther D. (2017), "How does the time children spend online impact their mental wellbeing, social relationships and physical activity? An evidence-focused literature review", *Innocenti Discussion Papers* No. 2017-02, UNICEF, Florence.

Katz A. (2012), *Understanding Cyberbullying and E-safety: What Educators and Professionals Need To Know*, Jessica Kingsley Publishers, London.

Katz A. (2017), *The annual cybersurvey by Youthworks Consulting*, Youthworks, London.

Katz A. and El Asam A. (2019), *Vulnerable children in a digital world,* Internet Matters and Youthworks, London.

Livingstone S. and Helsper E. (2007), "Taking risks when communicating on the internet: the role of offline social-psychological factors in young people's vulnerability to online risks", *Information, Communication and Society,* Vol. 10, No. 5, pp. 619-43.

McCrae N., Gettings S. and Purssell E. (2017), "Social media and depressive symptoms in childhood and adolescence: a systematic review", *Adolescent Research Review,* Vol. 2, pp. 315-30.

Memon A.M., Sharma S.G., Mohite S.S and Jain S. (2018), "The role of online social networking on deliberate self-harm and suicidality in adolescents: a systematized review of literature", *Indian Journal of Psychiatry,* Vol. 60, No. 4, pp. 384-92.

Milward-Hargrave A. and Livingstone S. (2006), *Harm and offence in media content: a review of the evidence*, 2nd revised edn, Intellect, Bristol.

Neuman S. (1988), "The displacement effect: assessing the relation between television viewing and reading performance", *Reading Research Quarterly,* Vol. 22, pp. 414-40.

NHS Digital (2002), *Survey of the mental health of children looked after*, NHS Digital, London.

NHS England (2019), *NHS England long term plan,* NHS England, London.

OECD (2018), *Children and young people's mental health in the digital age: shaping the future*, OECD, Paris, available at www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf, accessed 25 July 2020.

Ofcom (2019), *Children and parents: media use and attitudes report 2018*, Ofcom, available at www.ofcom.org.uk /research-and-data/media-literacy-research/childrens/children-and-parents-media-use-and-attitudes-report-2018, accessed 25 July 2020.

Orben A., Dienlin T. and Przybylski A. (2019), "Social media's enduring effect on adolescent life satisfaction", *Proceedings of the National Academy of Sciences* 21 May, Vol. 116, No. 21, pp. 10226-8.

Orben A. and Przybylski A. (2019a), "The association between adolescent well-being and digital technology use", *Nature, Human Behaviour*, Vol. 3, No. 2, available at https://doi.org/10.1038/s41562-018-0506-1, accessed 7 July 2019.

Orben A. and Przybylski A. (2019b), "We're told that too much screen time hurts our kids. Where's the evidence?", *The Guardian*, available at www.theguardian.com/commentisfree/2019/jul/07/too-much-screen-time-hurts-kids-where-is-evidence, accessed 7 July 2019.

Przybylski A., Murayama K., DeHaan C. R. and Gladwell V. (2013), "Motivational, emotional and behavioural correlates of fear of missing out", *Computers in Human Behaviour*, Vol. 29, No. 4, pp. 1841-8.

Przybylski A. and Weinstein N. (2017), "A large-scale test of the Goldilocks hypothesis: quantifying the relations between digital-screen use and the mental well-being of adolescents", *Psychological Science*, Vol. 28, No. 2, pp. 204-15.

Ringrose J., Jenkinson A. and Whitehead S. (2019), "10 years on: why we still need better sex education for a digital world", *Institute of Education London*, blog on *Parenting for a Digital Future*, 17 March 2019, available at https://blogs.lse.ac.uk/parenting4digitalfuture/2019/08/21/10-years-on-why-we-still-need-better-sex-education-for-the-digital-world/, accessed 7 August 2019.

Robinson J., Cox G., Bailey E. et al. (2016), "Social media and suicide prevention; a systematic review", *Early Intervention in Psychiatry*, Vol. 10, pp. 103-21.

Royal College of Paediatrics and Child Health (2019), *The health impacts of screentime: a guide for clinicians and parents*, RCPCH, London.

Ryan R. and Deci E. (2000), "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being", *American Psychologist*, Vol. 55, pp. 68-78.

Sheldon P. (2008), "The relationship between unwillingness-to-communicate and students' Facebook use", *Journal of Media Psychology,* Vol. 22, No.2, pp. 67-75

Stamoulis K. and Farley F. (2010), "Conceptual approaches to adolescent online risk-taking", *Cyberpsychology: Journal of Psychosocial Research on Cyberpace,* Vol. 4, No. 1, article 2.

Street C. (2008), "Delivering accessible and culturally competent services" in Jackson C. et al. (eds) (2008), *Child and adolescent mental health today: a handbook,* Mental Health Foundation, YoungMinds and Pavilion, London.

Street C. (2014), *Children and young people's views of counselling: improving the tools to gather outcomes*, Youth Access, London.

Street C. and Katz A. (2016), "Evaluating the response to online safety", for Dudley Metropolitan Borough Council, Youthworks Consulting, London.

Suler J. (2004), "The online disinhibition effect", *Cyberpsychology & Behaviour,* Vol. 7, No. 3, pp. 321-6.

Twenge J. (2017), *i-Gen: why today's super-connected kids are growing up less rebellious, more tolerant, less happy – and completely unprepared for adulthood*, Atria, New York.

Twenge J. and Campbell K. (2018), "Associations between screen time and lower psychological well-being among children and adolescents: evidence from a population-base study", *Preventative Medicine Reports,* Vol. 12, pp. 271-83.

United Kingdom Chief Medical Officer (2019), Commentary on screen-based activities and young people's mental health and psychosocial wellbeing: a systematic map of reviews, UK Government website, available at www.gov.uk/government/publications/uk-cmo-commentary-on-screen-time-and-social-media-map-of-reviews, accessed 3 October 2019.

Vannucci A., Flannery K. M. and Ohannessian C. M. (2017), "Social media use and anxiety in emerging adults", *Journal of Affective Disorders,* Vol. 207, pp. 163-6.

Wertham F. (1954), *Seduction of the innocent*, Rinehart, New York.

WHO [World Health Organization] (2018), *Situation of child and adolescent mental health in Europe*, WHO, Copenhagen.

Wong T., Yuen K. and Li W. (2015), "A basic need theory approach to problematic internet use and the mediating effect of psychological distress", *Frontiers in Psychology*, Vol. 5, article 1562.

Chapter 9

WhatsApp refugees? A reflexive account of the methodological use of WhatsApp with newly arrived refugees in Europe

Daniel Briggs

Introduction

We often perceive refugees to be poor, socially excluded and vulnerable. To some degree this is true in that as they have typically sold everything to leave their war-torn countries to start new lives in Europe, they have to adjust to the different cultural and social expectations of their new host country, and they have to start to learn a new language and look for work. However, this very group – just like us – are very much digitally connected. Many young refugees are familiar with and use Facebook, Instagram and WhatsApp applications (Brenner and Frouws 2019). They used these media to contact people smugglers, negotiate the way they left their countries, crossed borders and arranged the journeys they took, and these apps are how they maintain relations with those back home as well as the way they seek out new support networks in their new settings (Alencar 2018; Dekker et al. 2018).

This chapter firstly shows how this is the case and is based on a series of case-study observations drawn from a three-year unfunded ethnographic project, from 2015 to 2018, which interviewed 110 refugees across 14 European countries. This chapter goes on to show how the application WhatsApp was pivotal in making connections with the sample and then building and maintaining relations with them. Without this app, the study would not have been able to achieve its longitudinal approach and provide valuable insights into how the refugees progressed in their new lives in Europe. The chapter concludes by arguing that this method can be useful for practitioners in the youth field: this kind of proactive engagement has numerous benefits and can facilitate good relations between various professionals and refugees as well as other vulnerable or hard-to-reach groups.

The digitalisation of social life

"Digital capitalism" – in other words, the global exchange of digital information over data networks – has quickly become the cornerstone of economic and social activity,

and the effects of digitalisation and globalisation in combination with neoliberalism are wide ranging and far reaching, offering both opportunities and risks (Briggs et al. 2020; Castells 2001). On one hand, it has been argued that digitalisation has improved business and made elements of our lives easier (Daniels et al. 2016) while, on the other, it has generated a fierce debate among policy makers, economists and industry leaders about its negative impact on diminishing jobs, lower wages, increased inequality, and its impact on privacy and security (Bauman 2011; Bridle 2018). It is not for this short chapter to go deeply into these arguments but we can simply state that the ongoing digital revolution is having a significant impact on almost every aspect of the way we live (Sobczak 2017). Digitalisation penetrates every aspect of our lives: technology embeds itself in us (for example, through brain implants), comes between us (through social media), knows more and more about us (via big data and techniques like emotion recognition) and is also learning to respond and behave more and more as humans do (robots and software exhibit intelligent behaviour and can mimic emotions) in an "intimate technological revolution" (Royakkers et al. 2018).

We should be unsurprised to learn therefore that this revolution is rapidly expanding globally. Data from the latest *Global digital report* (2019) show that the number of internet users increased by 9.1% in comparison to 2018 and that worldwide there were 4.388 billion users. In the same period, 5.112 billion people had mobile phones, an increase of 2% on 2018. This expansion inevitably influences the time we spend online, which averages at 6.5 hours per day. We can be sure that much of this activity is spent socialising on social media networks, and the statistics support this: for example, it is estimated that there are 1.5 billion users of WhatsApp worldwide (see Figure 1).

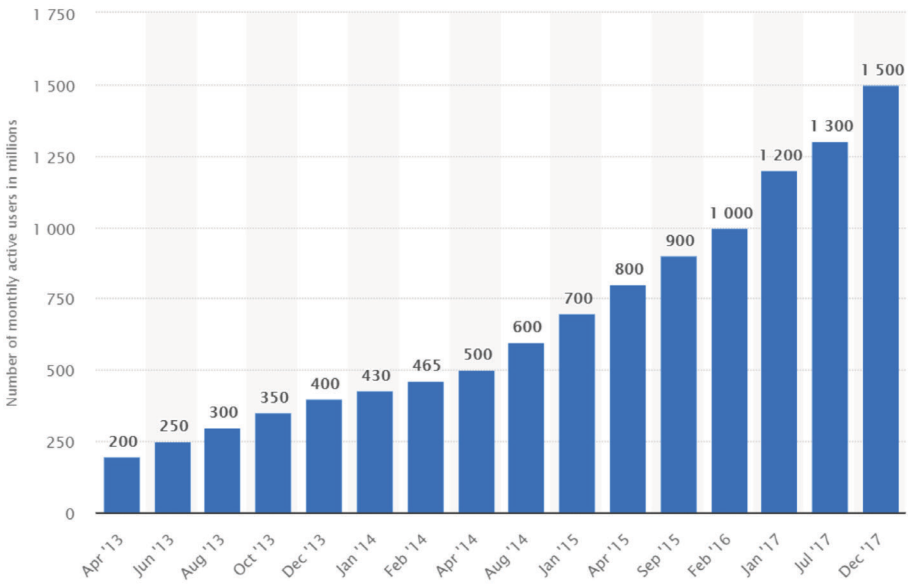

Figure 1: Active WhatsApp users worldwide, April 2013–December 2017 (Statista 2018)

How the "socially excluded" do social inclusion: the case for refugees

In sociological terms, this new form of digital subjectivity not only adds new dimensions to self and social expression but metamorphoses our social interactions and relations, thus creating a more fluid form of social organisation which penetrates every corner of society across boundaries of class, ethnicity and place. Social media have been pivotal in the organisation of activism and protest (Winlow et al. 2015) as well rioting and disorder (Baker 2011; Briggs 2012) in both motivating and sustaining collective feelings which intersect geographic and virtual public space. Moreover, social media are now commonly used to increase awareness and dissemination of particular social issues (Verdegem 2011).

For these reasons, social media have been used to address social exclusion, yet many people who are perceived to be socially excluded are perhaps more socially included than we may think (Hall et al. 2008; Young 2007), or in the context of this chapter, they may be "digitally included". We often perceive refugees to be poor, socially excluded and vulnerable, but – just like us – they are often very much digitally connected and certainly familiar with Facebook, Instagram and WhatsApp applications. For many of them, WhatsApp in particular has been vital; for me, the application was certainly pivotal in the execution of my three-year study of refugee border-crossing stories.

My study and its methodology

This chapter is based on an unfunded ethnographic study which began in August 2015 and concluded in August 2018. Observations were undertaken and data collected in refugee camps, at border-crossing points, in housing projects and immigration centres, with NGO associations and in general city centre spaces and poor suburban peripheries. The study also recruited 110 refugees for face-to-face interviewing, almost all of whom were from Syria, Iraq and Afghanistan. The term "refugee" is used here loosely to describe the people I came to talk to who had either been granted asylum, and therefore had access to protection, or had not qualified for it and consequently been rejected or not applied for it. In this respect, there were no particular criteria for people to participate in the study other than that my participants were in circumstances of vulnerability and need.

The research fieldwork was undertaken in 14 European countries – namely Spain, France, Germany, Belgium, Austria, Denmark, Netherlands, United Kingdom, Norway, Hungary, Italy, Greece, Turkey and Sweden – which were a mix of reception countries such as Turkey, Greece and Italy and settlement countries, which included France, Belgium and Germany. The main project's objectives were to:

a. examine how and why refugees were leaving their home countries;
b. follow and analyse what happened to them, find out when they left and how they arrived; and
c. evaluate how they settled in the new countries and what happened to them as a consequence.

Ethnographic research normally adapts itself to particular fields of study and the contexts of the participants and the circumstances in which they live and the various social pressures around them. For this reason, there was no recognised sampling strategy attached to the study, given that its evolution adapted itself to the precarious circumstances of the refugees. The study started in a Spanish city called Melilla in the north of Africa where a base sample of 25 refugees was recruited from border crossings and the city's immigration centre. They were interviewed using open-ended questions which related to the research aims, so the approach was inductive.

Participants were informed about what the study aims were and gave verbal consent to talk about their perceptions and experiences. As a researcher studying vulnerable people, I took care to reduce the automatic power imbalance this generates by avoiding formalisms associated with the research process; for example, border crossings or refugee camps are not the sort of place to start producing pieces of paper for signed consent. As I have learned from other studies with similar groups, people do not appreciate this kind of formal procedure because it associates me with the authorities and can be an impediment to building trust. At the beginning of all the recordings, I explained – either in English/Spanish or through a translator – the purpose of my study, the nature of the questions, how they could stop my questions at any time and that they did not have to answer if they were not comfortable. The open-ended interviews lasted between 30 minutes and an hour. If necessary, in cases where the refugees spoke neither Spanish nor English, a translator was used. Once the interviews were transcribed, the recordings were destroyed. All participants were then given fictitious names.

After the interviews, participants were asked if they wished to remain in contact via phone, WhatsApp or Facebook, and five people consented. (Facebook played no active role in relationship building, but the fact that refugees regularly liked my posts helped the process as they became familiar with who I was.) Contact was maintained as they settled in countries like France, Belgium and Germany. Even though many had sought asylum in Spain, many simply left for countries where the economy was perceived to be stronger and/or where they already had family/friends. When they arrived and started to settle, I visited them and recruited people they had come to know in the same area via the snowballing sampling method. The new participants were then asked if they knew anyone in other countries who might be interested in participating. Consequently, refugees were then recruited from countries such as Turkey, Norway, Hungary and the Netherlands. Where possible these people in these other countries were visited and interviewed; where this was not possible, I undertook telephone, Skype or WhatsApp interviews.

At all times, I was sensitive to the refugees' needs and feelings since many had been significantly traumatised. I avoided just taking information from them and, as is commonly done in ethnographic research of this nature, I demonstrated empathy, helped by translating papers and helped them to understand legal processes. Youth workers perhaps may recognise this as a form of "youth work" (Briggs and Cordero 2018) per se but, without complicating anything, it was something that should be second nature to people in circumstances such as ours; helping is certainly something which all researchers should do when they are studying vulnerable populations (see Briggs 2012; Briggs and Monge 2017).

WhatsApp refugees

My study would not have been possible without an application like WhatsApp, which not only facilitated my continual contact with some of my initial cohort but also allowed me to broaden my sample. Without it, it would have been impossible for one person to cover this sort of terrain and it is for this reason that the study has achieved longitudinal value and geographical variation in studying how the refugees progressed in their new lives in Europe. Here follow a series of case studies which highlight the process in its entirety.

Ahmed and Wasif

While it was one challenge to present my study to the refugees and undertake interviews with them, the real challenges became evident thereafter when I tried to continue the contact and started to message my respondents shortly after having met them. For various reasons outside my control, many of the people I met in Melilla desisted from contact. Some may have changed numbers, others may have seen little value in my contact while some may have been worried that continued contact with me might jeopardise their asylum applications. I cannot account completely for all this but in exchanges I always tried to make clear my research intentions and show genuine interest in their lives so that I could continue our contact for the greater good of telling the refugees' story. WhatsApp was useful primarily because refugees are transient. I met Ahmed in November 2015 in Paris, where he had been already waiting for four months on his asylum application. By the New Year, he was somewhere else.

WhatsApp conversation with Ahmed, November 2015

Daniel: Happy New Year, Ahmed. Hope all well in Paris or wherever you are. Will contact you in January.

Ahmed: Hii ✋ Happy new year … I wish you the best … And am in Bordeaux.

Daniel: How is it?

Ahmed: Good. Nice place.

Daniel: How did you get it and have you started to learn French?

Ahmed: Not yet, but we will start after short time.

Daniel: Ok, I will call in January to get an update on things. Say hello to your brother Kasim wasn't it?

Ahmed: Yes, my brother is here, come to visit my in holiday and after he will back to Paris.

I updated all my participants with my research progress. Some months later:

Daniel: Dear friend. You kindly agreed to help in my research. Today I received an invitation to speak at a conference in Germany next year. I will do my best to tell your stories. Daniel

Ahmed: Bonjour Welcome ✋ Thank you very much, and I wish you success and hope you deliver the word of truth for all the world.

Shortly after, I had no contact with Ahmed; a man who had witnessed bombing and death in civilian communities in Syria and had saved his brother's life twice when they dodged the Islamic State of Iraq and Syria (ISIS) detention and shots from the Turkish Gendarmerie. Similarly, after meeting Iman on a cold night in Zeebrugge in Belgium, after listening to the local townspeople's rejection of the refugee cause, my field notes record promising contact:

> To our right as we walk out is another Iranian man smoking. He tells us that four police vans are circling the area so he had fled to not make it look like he would be waiting around and considered someone who was trying to board the trucks/boats bound for the UK. We leave him and walk back towards the church. As we walk, passing a police van passes us slowly and the men inside look directly into our eyes. For now it doesn't stop. We walk up to where they will be sleeping tonight and exchange contact details ... "Inshallah you will arrive to where you need to" I say, clasping their hands. As we walk back we wave at them before passing the church towards the car. Later that night, once we are safely back in Gent, I am awoken in the night by a WhatsApp message from Iman "Tnx daniel for food and drink nice to meet you ok no perblem". [Field notes]

After a few more short conversations on WhatsApp over the next few days, in which Iman toyed with the idea of trying to board ships near Calais, our contact ceased: the WhatsApp messages I sent thereafter were not read and there was no response. I can only speculate on what happened. There was no set period of time or frequency of exchanges with the refugees that determined what they shared with me and in what way. Very often, digital media can work both ways in that, on one hand, questioning can result in nothing or no response or a change of subject, whereas at other times someone does not even need to be prompted. How this is handled is another matter, as I was to find out when I learned that one of my initial participants had died two years into the study.

WhatsApp conversation with Wasif

Daniel: Are you in contact with anyone from Melilla?

Wasif: Yes, a lot of friends.

Daniel: I would like to talk to them again …

Wasif: Some have already returned to Spain, while some are here in Germany now.

Daniel: Really? They got sent back?

Wasif: Yes, Germany rejects asylum claims and some returned to Algeria and Syria.

Daniel: How did they feel when they were rejected?

Wasif: I knew someone, he returned to Syria and a month later he died there. My brother also got refused and they sent him to Spain but he came back to Germany to try. My friend who you met in Syria was killed by the Syrian army.

[He sends me a picture of him and his friend, the man with the white hat, celebrating "freedom" on the beaches of Spain]

Figure 2: Celebrating freedom … momentarily

Note: Consent was given by the participants in the study to use these images.

Thereafter, the use of images also enhanced long-distance relations as my participants sent me pictures of themselves and what they had done, where they had been, and accompanied the pictures with updates on their progress in their new countries. This acted as a visual intimate insight into their new lives. To build these relationships, I reciprocated by sending photos of myself and sharing elements of my personal life; after all, I was learning about their personal circumstances and it was only fair that they knew about mine. In this way, I was able to solidify the relationships between us and we became more familiar with each other.

Shizar

A similar example was that of Shizar – a young Syrian who suffered from multiple sclerosis – whom I had met in an old-world-war-hospital-turned-refugee-camp in Oslo.

Most of Shizar's family still remain in his Syrian village in the government-controlled outskirts of Damascus. However, they are reluctant to leave because of their job security as well as the care requirements for Shizar's brother, who is blind. Leaving Syria because of the conflict, Shizar moved to south Russia because of his family roots; his sister had married and lived there, as well as his grandfather who was from that area. There he rented an apartment, taught himself Russian and attempted to get by.

Even though he has a degree in Civil Engineering from Syria he was refused permanent residence twice, because of the onset of multiple sclerosis. Though he was given some medicines, he had to keep working, taking on manual labour jobs and in cafes. However, the long hours and physical demands of the work took their toll on his body. His condition worsened and he lost the ability to walk, and had to be carried to hospital one day. He decided to leave Russia and first tried to travel through Estonia to Germany but was rejected at the border. Then he took a flight from Moscow to Murmansk in the far north of the country, near the borders of both Norway and Finland and took a taxi to the border with four friends. Because of some agreement between Russia and Norway, it is illegal to cross the border on foot so he, like thousands of others recently arrived from Syria and Iraq, bought a second- or third-hand bike which had faulty brakes and cycled the 50m into Norway. Little was he to know that, when he was to arrive in Oslo, he would find out that they were to starting to send back people like him to Russia. He sits back and sighs: "I can only hope," he says. [Field notes]

My initial meeting with Shizar was positive, and hearing his story was moving. Soon after, I left the hospital and heard from him.

WhatsApp conversation with Shizar, January 2016

Shizar: Hi Daniel, today I had the chance to buy Norwegian sim card … so I bought one.

Daniel: Shizar? I just arrived back in Madrid. Do send me updates on what happens there. I'm interested in what you do and the conditions you have to live in.

Shizar: Ok I will keep you updated with everything.

Daniel: And take care. If you think something may infringe your rights let me know and I can see what I can find out.

Shizar: Ok thank you so much ☺

In the following months, Shizar grew more and more anxious about the political situation in Norway when the government started to send back refugees who had come via Russia, the rationale being that technically they had not fled from a "country in conflict". Our messaging stopped at the end of January 2016, but suddenly two months later I received a message from the same number with some news.

WhatsApp conversation with Shizar, March 2016

Shizar: Hi Daniel how are you? I left Norway.

Daniel: What??? You ok?

Shizar: I came to Germany. I lived in the hospital for five months full of nerves and tension because of the Norwegian government decisions about refugees who came from Russia and have valid residence in there. Eventually I couldn't wait any longer. I decided to go to Germany.

Daniel: How?

Shizar: The Norwegian government is confused about me because I have valid residence in Russia until October and I have this sickness so they thought a lot about my case whether they reject or accept me.

Daniel: I suppose it was a risk to wait.

Shizar: I came by bus and train.

Daniel: And passport control?

Shizar: No one noticed.

Daniel: When did you leave?

Shizar: Three days ago.

Daniel: Who are you staying with?

Shizar: I applied for asylum here then they brought me to the camp. I'm living with two other Syrian refugees in the same room.

Daniel: I'm glad you are safe.

To this day I am still in contact with Shizar, who now speaks German and has a part-time job and a girlfriend. He lives in Dresden in Germany. As a researcher, I am outside the authorities and, in the brief time when I am interviewing people, who are already suspicious that what they say to me may have implications for their status, I have to show them that my cause is different. I was lucky that Shizar saw how I took risks to meet him, because my official clearance to enter the hospital was being delayed so I went in anyway. For this reason, he saw that my agenda was unconnected to that of the state.

Abbas

Figure 3: Abbas and I outside the immigration centre in Melilla

Note: Consent was given by the participants in the study to use these images.

Like Shizar, Abbas escaped a country that was in total political and social turmoil. He had spent some months waiting in the refugee immigration centre in Melilla, trying to decide which country to try to target to find work. Everyone around him

told him that Spain had a weaker economy and fewer work opportunities, so he set his heart on Germany. When I visited him in Madrid six months later, he was planning to travel illegally to France and then to Germany. He paid hundreds of euros to cross into France, but he was dumped on the streets of Brussels in Belgium where he slept and begged until he had enough money to get a train into Germany. The volume of people presenting for asylum was high at the time and the system was under significant pressure to carefully process and potentially reject refugees accordingly. In our early WhatsApp exchanges, his worry was evident.

WhatsApp conversation with Abbas, April 2016

Daniel: Abbas what's happening?

Abbas: Hello my friend. I am very, very sorry because I don't contact with you but every day I wake up at 5am and go to school at 8am in another city after that I take a train to my work because I make a "practicum" in school for kids finally I reach my home at 7pm. And the court will send me back to Spain this month or the next. Please forgive me that I don't call you.

Daniel: Its ok … you working now, that's great … is it paid in any way? Will you stay or come to Spain?

Abbas: They will send me back within the next two months.

Abbas then received an order to return to Spain.

When Abbas's asylum was denied in Germany, and he was to be sent back to Spain, it caused him severe panic attacks and he was admitted to a mental health institution. There he was given sleeping pills and painkillers for a few weeks and hired a lawyer to represent him to appeal the decision. While his lawyer put in an appeal, he escaped and went into hiding. The police searched for him at the refugee housing centre but had no luck. The small amount of money he had left went on legal costs to challenge his case. His perseverance paid off and he won, given the effort he had made to learn the language and get a part-time job. He agreed to repay [the fees] outstanding to the lawyer on a monthly basis for the duration of the lawyer's time. To this day, he still owes €1 200. [Field notes]

This was the major turning point for Abbas, and some months afterwards his wife was able to join him from Syria. Abbas had already been pivotal in translating interviews for me in Spain and when I went to visit him in Germany, he helped me interview more refugees. So, when he asked me for a favour, I obliged.

Abbas: Hello Daniel. This is Abbas, here is my new number. I wanna ask you my friend Ibrahim you know him and he still in Madrid but he is a professional in metal works. [He was part of a focus group I undertook with Abbas]. Some people told him that there is no job in Spain and he asked me to asked you if that's true.

Daniel: Abbas ... You are alive!

Abbas: Yes am still alive – you know Syria, Algeria, Morocco, Spain, France, Belgium, and Germany and am still alive so I will not die now, its so early!

Daniel: Haha. Ok I need to look into this. Is Ibrahim in Madrid now? And if so can he meet and speak English or Spanish?

Abbas: No, in place near Madrid.

Ibrahim

As it turned out, Ibrahim was in Salamanca, a smaller city 200 km from Madrid. Ibrahim had found it difficult to learn Spanish, and spoke no English, and the few refugees who had been housed there had started to lose hope for their future. I created a WhatsApp group called "Help for Ibrahim" with another participant, Osama, whom I had met through Abbas in Madrid and who spoke good English. Together we started to converse about the application and about supporting Ibrahim in his search for work.

Group WhatsApp conversation with Ibrahim and Osama, July 2017

Daniel created "Help for Ibrahim"

Daniel: Hello Ibrahim. This is so you can contact us if you have problems.

Ibrahim: تتحياتي ☺

Daniel: ☺

Ibrahim: Muchas gracias [Thank you].

Osama: ابراهيم هذا الغروب مشان نتابع الوضع معك

Daniel: ¡Muy bien! [Very good].

Osama: ونضل على تواصل

Ibrahim: انشا الله

Ibrahim: Poco a poco [Little by little].

Daniel: Eso es [That's it].

Daniel: Ibrahim, Osama will translate everything I say. Although I cannot write every day, the idea is you have support. Do not doubt your decision. You made it for a reason. Now it is time to build your future. Osama and I will help as we can. We start with papers and learning Spanish.

Osama: ابراهيم أنا انشا الله رح ترجم كل شيء بيحكي الأستاذ دانيل. بس هو ما رح يقدر يكتب كل يوم بس الفكرة ان لا تشك بحالك وبالقرارات ال اخذتا لان نحنا هون مشان نساندك. هلق هو الوقت اللازم تبني في مستقبلك أول شي منبلش بلوراق واللغة الاسبانية مثلما حكينا... وخلي إيمانك بالله كبير ☺

Ibrahim: Daniel, muchas gracias y me animó mucho y voy a aprender Español Inshallah. [Thank you Daniel, it encourages me a lot and I will learn Spanish, God willing].

Ibrahim's experience was like that of many other refugees that I came to know over the three-year period. Many were continually overwhelmed at what was demanded from them, in adjustments to culture, learning the language, finding housing and other challenges. Very often, the people they shared accommodation with were sceptical about their chances of starting again, often for good reason: many of

them struggled in language classes and training courses, and only a handful of the people I came to know got jobs, at best low-paid jobs. Over the course of the next few months, our sporadic chats continued in the WhatsApp group as Ibrahim started to get around the bureaucratic nature of registering himself for work in Spain. Still I offered support and help with CVs.

Ibrahim: شهر الخامس بعطوني إقامة مسموح فيها العمل

Osama: He gets the national identity in May and he takes the legal papers to work the same month.

Daniel: That is excellent news! Tell him to ignore what people say and focus on himself and where he needs to go. Tell him to start working on a CV in Spanish or English and we can help.

Osama: Ok.

Daniel: If I had listened to everyone who said I couldn't do something, I wouldn't have done anything because I wouldn't have tried.

Ten months later, after more supportive messages and even some Arabic poetry, I got news.

Daniel: Ibrahim, ¿Cómo estás? [How are you?]

Ibrahim: ¡Muy bien! [Very good]

Daniel: Esta mañana he visto a Osama. ¿Qué tal llevas con el español y la búsqueda del trabajo? [This morning I saw Osama and wondered how your Spanish was going and the search for work?]

Ibrahim: ¡Estoy trabajando como soldador! [I am working as a welder]

Daniel: ¡¡¡¡¡Enhorabuena!!!!!! [Congratulations!]

While at no point I can say this was down to me, the point is that there was a forum for Ibrahim to talk about his worries and at the same time receive support and for this reason the WhatsApp group served its purpose. This, as I was to discover, paid off when I got back in touch with Asim – an Iraqi man that I met in a homeless shelter in Brussels.

Asim

When Asim calls his friend, Younis, he discovers that he is in the Centre. We walk over to greet him and sit in the Dutch School area. Younis is only 21 and it has taken him 16 months to travel from Iraq. I start to listen, but each time he starts telling me about a new chapter in the journey I get more and more taken aback. We begin by talking about why he left Iraq and he tells me that last year ISIS took over his city with next to no resistance from the police or government forces. A strict Sharia law was imposed, and people were "not allowed to smoke or do hairstyles". He says "if people did not submit to ISIS, they were killed. All people who had contact or were in contact with police were killed".

Alarmed by the new way of life, the decision to leave came when ISIS summoned the city folk by force to witness a public execution at which were his young sisters who "cried and screamed as a man had his head cut off". Both his uncles were killed by ISIS and his brother was also imprisoned by them. He shows me a picture of his brother, fearing that he is already dead because "if ISIS keep you in prison for more than 10 days it mean you die". [Field notes]

Asim also kindly facilitated my interviewing in Belgium and acted as a translator at the end of 2015. He gave me a tour of the homeless shelter where he went every day to collect a daily dose of free food and to sift around in the donated clothing for things of interest. Asim received €7 each week while his application was being very slowly processed by the Belgian government. Such was the volume of applicants at the time that someone like him – a young male with no children – was not a priority. Shortly after our meeting in Belgium, I sent him a WhatsApp message.

WhatsApp conversation with Asim, December 2015

Daniel: Asim, I arrived back in Madrid. It was a pleasure to meet you and I hope to keep in contact. Please ask me if I can help you in any way.

Asim: Ok my friend. Thank you for the gift ☺ ... kiss Nadia [my daughter] for me.

Daniel: ☺ ✷.

Over the next two years, Asim continued to wait for his asylum decision to be made and lingered homeless around the city trying to make money in any way he could. Our contact continued. Then in March 2017 I heard from him again.

Asim: Hello Daniel. How are you? I asked new asylum. I'm waiting if they say yes they will send me to centre. I ask for centre only [as] place to sleep. I'm waiting … Also I'm with psychology doctor … have appointment [and] I need report. If they give me negative I'll go to Germany.

Daniel: Ok so you are safe but still in Belgium. But where do you sleep now then?

Asim: I'm with friend for the moment. I asked friends to find me job in black market.

Daniel: What do you hope to do?

Asim: Anything I can do. Cleaner, restaurant, construction works.

Daniel: Is there any of that work available? I would guess other people in your situation are doing the same, working in black. Do you know anyone?

Asim: Many friends doing the same they living in centre and working.

Daniel: But how can it be there is so much work for people who have had their asylum rejected?

Asim: In black market, for example, you work in restaurant [as] cleaner in the kitchen: start at 2pm [and work] until 1 am [and] they give 30 euro. Also they give you food for free.

The exploitation is evident and telling of familiar refugee employment conditions around Europe. By the summer of 2019, Asim had a more stable job cleaning in an old people's residential home and was living in a small studio. The spare money he was able to save each month, around €200, he sent to his family in Iraq. All this time, he had alluded to the need for some psychological support but said nothing until one evening in the summer of 2018 he declared the problems in some messages.

Asim: I need help, I take medication for depression.

Daniel: Depressed because of what happened in Iraq or because of new life in Belgium?

Asim: Depression was [part of] me since I was 15 years old but I didn't know. I remember it was hard childhood.

Daniel: Is it OK to ask what happened? You don't have to tell me if you don't want to – it's ok.

Asim: If I stop medication, I remember everything. My father [who worked in the military] was bad.

Daniel: Oh. Violent?

Asim: Yes.

Daniel: I am very sorry to hear this. When we talked, I don't think you mentioned it, but there was no pressure to anyway. Have you seen a therapist or psychologist?

Asim: Yes, but not things changed. I remember I went to old man – I think he was 70 years old – I go to his house. He was taking care about me. I went to feel safe but he was taking my clothes off.

Daniel: I'm sorry.

Asim: I knew it … it's something not ok. I am crying now.

Daniel: I guess it is something you can only manage, but not completely forget.

Asim: I went to police but they did nothing, it was 2007, I was 17 years old. I smoked weed last week.

Daniel: I can't imagine the Iraq police being very interested. Did the weed help or did it make you paranoid? Sometimes it can relax people or [it can] increase their worry and anxiety.

Asim: No, it makes me feel so bad. Every time I smoke I start thinking to go to the train and throw myself under, to stop this life, but I am scared to do it.

Conclusion: a case for digital media and engagement

This chapter has shown how digitalisation and the new technological media, such as mobile phone apps like WhatsApp, have been pivotal to refugee movements and social exchanges (Brenner and Frouws 2019), from refugees leaving their home countries, navigating the journey and taking decisions on routes, and then thereafter in their interactions with other refugees in their new communities. The digital era allows this continual contact which transcends physical space and has certainly proved to be an economical means of undertaking a longitudinal study. Like any such study,

people drop out or decide to discontinue their contact for their own reasons, but in these exchanges, there was no pressure on my participants to respond; the value of the data came from each and every conversation, audio message or photo that was exchanged.

In my WhatsApp conversations, I listened to these refugees and showed support for complicated moments or troubles they were having, particularly with adjusting to language, culture and the demands of living in a new place while having to come to terms with leaving everything behind. Given that, as a Westerner who has a comfortable life by comparison, there is no way that I could completely empathise with the kinds of things these people have seen and experienced, so in these situations I made neutral statements of shock/surprise mixed with general curiosity. The latter was particularly useful as it allowed me to delve deeper into how the refugees were feeling about things and permitted me to explore their inner anxieties.

I kept track of how my participants were progressing so that when I sent them messages some weeks/months later I could follow on from what they had told me. While I had the conversation history to hand, my documentation was concerned with making links with milestones in their new life and correlating it with their feelings. Over time, as the chapter shows, I was fortunate to gain their trust from some refugees as they opened up to reveal extremely personal feelings and experiences. As the light of the mobile screen is activated, prompts for the password are followed by a thumbprint on the green icon and then on my profile photo "Professor of Happiness" there is no face to judge them nor is there a voice to moralise their decisions; however, there is a person there who, although they may seem distant, is actually close. It is this "closeness" I tried to cultivate: something between a respectful distance and a personal invasion.

As someone outside the official state channels that may decide their fate or have influence over their lives, and equally someone unrelated to family or friends, a WhatsApp message away, my neutrality was always there, waiting for good news, updates or to hear worries and concerns; the depth of contact is evident in the cases of Ibrahim (getting the job a year after meeting him) and Asim (declaring his depression three years on after meeting him). Life for most of these people has been difficult for some time and almost all have faced frustrating processes relating to their legitimisation and settlement in Europe. Their clandestine movements I have been privy to, as well as their reasons and methods for crossing borders, often as they happen or shortly after, insights which few researchers gain using surveys or even conventional snapshot interviews. In this way, the value of the data is "live"; it came to me at times "as it happened". In this way, as others have alluded to (Alencar 2018; Dekker et al. 2018), this makes me very much part of their new support networks in their new settings.

The clear benefits of using WhatsApp in this respect are that refugees recognise it as a mode of communication which already facilitates their own relationships with family and friends, and because of this they are no stranger to it as a means to facilitate other relationships. It allows them to communicate without pressure, at times that are convenient to them and in confidence to someone (or to a representative body) about their problems, difficulties and challenges of settling into a new life.

Groups can be formed to support refugees, give them advice and help them with particular practical or personal issues. Because the app is online, the application can reach refugees in different places around Europe and is cost-effective. The limitations, however, also mirror its strengths. Refugees are a transient group who move from place to place and change phone numbers, and there is no guarantee that they will always respond to contact. Proactive, regular, careful and sensitive contact is therefore required on the part of the researcher/youth worker to cultivate a relationship which will be reciprocated should these things occur.

WhatsApp has allowed me to get to know these people even better than I could have imagined, given my circumstances as someone permanently living in Spain; it has been the vehicle to enable careful and periodic pursuit of how life has unfolded for these people. I had to use different means to interview than I would have done face to face as there were no facial cues to read and no breaks in tone of voice to interpret. Just "words", it seems. However, these exchanges in this chapter denote more than just "words" per se. Maintaining relationships required the use of a different set of interactional principles which revolved around patience and careful interrogation of written words, examining the frequency of messages, showing understanding during long delays in communication, playing and sending audio messages combined with visual images, videos, gifs and emojis.

These modes of 21st-century online communication and digital language are what we need to learn and use because they help secure the common ground between the researcher and researched, thereby unifying relationships and experiences. In this respect, my project was not only about research but also a model for an engagement and my intervention represents this new social organisation which transcends boundaries of class, ethnicity and place. I would hope that host communities, researchers and youth work professionals might also use these same media to help refugees and similar social groups. After all, applications such as WhatsApp are the future of our communication, just as much as refugees are and will continue to be our future neighbours.

References

Alencar A. (2018), "Refugee integration and social media: a local and experiential perspective", *Information, Communication and Society*, Vol. 21, No. 11, pp. 1588-603.

Baker S. (2011), "The Mediated Crowd: New Social Media and New Forms of Rioting", *Sociological Research Online*, Vol. 16, No. 4, pp. 1-5.

Bauman Z. (2011), *Culture in a liquid modern world*, Polity Press, London.

Brenner Y. and Frouws B. (2019), "Hype or hope? Evidence on use of smartphones and social media in mixed migration", available at www.mixedmigration.org/articles/hype-or-hope-new-evidence-on-the-use-of-smartphones-and-social-media-in-mixed-migration/, accessed 1 September 2019.

Bridle J. (2018), *New Dark Age: technology and the end of the future*, Verso Books, London.

Briggs D. (ed.) (2012), *The English riots of 2011: a summer of discontent*, Waterside Press, Hook, Hants, UK.

Briggs D. and Monge R. (2017), *Dead End Lives: Drugs and violence in the city shadows*, Policy Press, Bristol.

Briggs D. and Cordero R. (2018), "Young refugees, youth work and a call for political energy: Notes from an unfunded ethnographic study", in M. Pisani, T. Basarab, B. Giovanna Bello and S. Laine (eds) *Between Insecurity and Hope Reflections on Youth Work with Young Refugees*, (pp. 25-45), Council of Europe and European Commission, Brussels.

Briggs D., Silva A.S., Pérez Suárez J.R. and Cordero Verdugo R. (2020), *Online dating apps, risk and sex in a time of 'digital capitalism'*, Emerald (in press), Sydney.

Castells M. (2001), *The rise of network society*, Blackwell Publishing, London.

Daniels J., Gregory K. and McMillan Cottom T. (eds) (2016), *Digital sociologies*, Bristol University Press, Bristol.

Dekker R., Engbersen G., Klaver J. and Vonk H. (2018), "Smart refugees: how Syrian asylum migrants use social media information in migration decision making", *Social Media and Society*, Vol. 1, pp. 1-11.

Global Digital Report (2019), *Global digital report*, Hootsuite, New York.

Hall S., Winlow S. and Ancrum C. (2008), *Criminal identities and consumer culture: crime, exclusion and the new culture of narcissism*, Willan Publishing, Cullompton, Devon.

Royakkers L., Timmer J., Kool L. and Est R. (2018), "Societal and ethical issues of digitalisation", *Ethics and Technology*, Vol. 20, pp. 127-42.

Sobczak K. (2017), "Facebook as a new source of social exclusion in the Web 2.0 era", *Adeptus* 2017, No. 10, available at https://doi.org/10.11649/a.1500, accessed 5 July 2020.

Statista (2018), "Number of monthly active WhatsApp users worldwide from April 2013 to December 2017 (in millions)", available at www.statista.com/statistics/260819/number-of-monthly-active-whatsapp-users/, accessed 1 September 2019.

Verdegem P. (2011), "Social media for digital and social inclusion: challenges for information society 2.0 research & policies" in *tripleC*, Vol. 9, No. 1, pp. 28-38.

Winlow S., Hall S., Treadwell J. and Briggs D. (2015), *Riots and political protest: notes from the post-political present*, Routledge, London.

Young J. (2007), *The vertigo of late modernity*, Sage, London.

Chapter 10

"I'm there for you." Peer and worker support through online messaging

Ursula Curwen

Social media use among young people has had a bad press. Stories of bullying are rife. Fuchs, in his Marxist critique of social media, suggests that it is an extremely exploitative manifestation of capitalist morality (Fuchs 2014), but what if young people are actually using these media to connect and support each other, even where the chat is anonymous? A research project undertaken to monitor use of an anonymous chat app at a university in the UK demonstrated the sense of engagement and community behind the banter.

This chapter will demonstrate how young people who are marginalised and isolated can feel supported through the use of peer chat media. The ability to express the issues they face while remaining anonymous offers a freedom which face-to-face support cannot. The ability to support each other in a situation where the identity of the person in need is not known demonstrates the altruism and care alive within the youth community. Left un-policed, young people can, and do, close down those who seek to denigrate their contemporaries. The implications for the careful use of anonymised digital support networks in a range of settings are potentially vast. The fears of policy makers and app providers remain linked to a legal system which apportions blame to those facilitating the interaction and thus restrains the extended use of such systems. If we aim to inform an understanding of student issues and look at issues arising during the academic year – for example, homesickness, sexual health or bullying – by tracking the anonymous app Yik Yak, the level of peer support offered becomes amazingly obvious. That is not to say that young people do not offer inappropriate comments or abuse disguised as banter on occasion, but overall what was observed proved edifying.

Yik Yak were a relatively new (launched in November 2013, closed March 2018) social media app that enabled people to post anonymously in short message format, similar to a text or twitter. It differed by offering an up/down voting system, which meant that messages (yaks) could disappear if they were not popular. Yaks could be deleted by any user and tended to have a limited lifespan. This transience also added to the freedom of expression that users felt. The text was ephemeral, a throwaway, therefore who cares? There was an opportunity to use this to facilitate appropriate student support and staff action during times students found stressful. As Yik Yak allowed anonymous comment to be made, users felt free to express things they might otherwise hide.

In technical terms, users joined their "herd" by current location (the app used the location setting within a mobile device to determine which yaks should be downloaded, and then selected those within a 1.5 mile/2.4 km radius of the access point) or by selecting a "basecamp" so they could remain in contact with their home area from a distance. Users (yakkers) were often from a university but might also have been people from the local area (non-students). It would be possible to assess what the chatter among students is by accessing anonymous posts from the area close to a given university. For example, by tracking usage in a town where there was no student community, it was immediately obvious that Yik Yak is not widely used and might have no comments at all for months on end. It was also possible to "peek" at what was happening in other locations and in other parts of the world, and it was interesting to find that the yaks elsewhere were strikingly similar in content and tone.

The literature on support describes the way that young people seem to have differing support needs throughout the year. It tends also to agree that support services are reactive rather than proactive (Scott and Phillips 1998; Smith 2007). If there was a way to record these needs anonymously, the university would have the opportunity to best target resources according to these needs and according to any patterns that seemed to emerge. While support service staff do record their interactions with students, there are ways in which early intervention by teaching staff and personal tutors can prevent the need for services (such as counselling) by becoming aware of seasonal issues which arise. The question, then, is how to do this without young people feeling pressured to contribute or unable to tell a staff member exactly what is going on. For example, a student in the first few weeks of their programme may be uncomfortable with speaking to staff but nonetheless has an issue with an assignment.

It was possible to assess the chatter among young people by accessing anonymous posts from a given university/location. The Yik Yak terms of use, given by the operators, clearly stated that users should be non-discriminatory and that users would be monitored by the company. They had a clear reporting and removal system in place for wayward or rule-breaking posts. That said, it was definitely an adult forum and there were many sexual, drug and alcohol references. The company also stated that they actively blocked the app around school environments, although exactly how this could be done in tightly packed areas was not made clear. It had actively been developed for university-aged students. Beyond this, the app producers were very clear that the information posted would become public and might be viewed by anyone. This project tapped into this app and thematically analysed what young people were yakking about. While this revealed the less savoury side of student life, initial observations demonstrated that where young people had concerns (such as exam stress, loneliness or other issues) they felt liberated by the anonymity of the app to express themselves in a way which they did not do formally to staff. Users seemed relatively certain that staff members were not monitoring the app and, as such, did not censor the content they uploaded. This in turn ensured that appropriate support could be offered to the widest student audience.

Data were collected by collating screenshot images of yaks once or twice a day, according to the volume of yaks. The information contained was then analysed. Whatever scholarly research has been conducted using the app has been conducted

in a similar manner by analysing screen shots of yaks (Northcut 2015). Data came from publicly available material (Yik Yak User Agreement 2013). It was impossible to fully verify the exact incidents referred to in yaks but some data from support staff gave an indication that there was more than an element of truth there. Where internal records showed that an assault by a student on another student had been reported at this time and this report coincided with yaks to the effect of "fight at X", the effect was to recognise an issue of, say, bullying (after, for example, sports club social events) which needed action. There could be no conclusion that this was the same incident. Images were stored securely. The project was evaluated jointly with support and counselling services staff. The information gained was used to assist in planning staffing levels and support requirements for the academic year.

Over the span of the research some 5 000 or more screenshots were taken and over 57 400 individual categorised data points were created from the yaks within the images. Some of these meant that an individual yak might have been categorised in more than one way, e.g. image and statement and shared information. Thematic and time-related analysis revealed a range of issues and uses to which the app was put. It was possible to collate issues arising (with the time of year during which they arose) to give a coherent image of the particular needs of students at that time and offer possible action by the university to alleviate these issues. This was done by a regular scan through yaks collected photographically. Northcut (2015) sought to characterise yaks as *shock*, *joke*, *inquire* and *emote*. These appeared to be useful categories as a starting point. Additional categories were added for *banter*, *emoji*, *image*, *shared information* and *statement*. The most frequent category was *statement* (27 047). Many *statements* were responses to a *query.* A statement might also provoke a discussion about a topic or issues raised by the Original Poster (OP).

The items categorised as *query* (7 464) and *shared information* (3 116) are the focus of this chapter because these demonstrate most clearly the support young people felt able to offer openly to their peers. The range of *queries* asked was in some ways to be expected – for example "How do I complain about X on campus?" or "Does anyone know where there's a job going?" – ranging from the most frequent "When does the campus (shop/bar/laundrette/library) open?" to much more personal enquiries, such as information about contraceptives or advice sought regarding actions on sexual assault. The anonymous nature of the app definitely enabled people to ask questions in a way that they might otherwise have felt unable to do. *Shared information* tended to be about rental properties or particular region-specific information, as well as personal information such as holding to religious faith on campus.

Wells (cited in Syverson 2015) suggests that young people move to comment on social media which they consider to be more private to avoid being identified. If a user were to give a name applicable to another social media app such as Snapchat, a photographic messaging app, to enable a private message from another user this would generally be deleted almost immediately by that user. This was certainly the case within the yaks collected and related almost entirely to interactions of a perhaps morally dubious nature (sex/drug-related). There were however some instances where offers of support for heartfelt issues (homesickness, depression, even suicidal thoughts) were also taken to a private space through direct messaging rather than remaining in the public sphere. It was not possible to determine the outcomes of

these private conversations. Yaks could be correlated against incidents recorded (anonymously) by the support teams but it would be unreasonable to suggest that there was any direct correlation to link events/issues recorded and yaks discovered. For example, as mentioned earlier, yaks relating to a fight in the town/city centre might or might not be related to disciplinary action against members of a sports team.

Where information occasionally came to light which demonstrated a potential danger to young people or staff at this particular university, it formed part of the review process to facilitate any action necessary (for example, drug or sexual abuse references). As the posts were anonymous it was impossible to identify individuals posting and it was important to remember that these might be members of the general public rather than students, because the app did not discriminate. Nonetheless, the comments were raised with student support teams to suggest that a particular topical information campaign might be appropriate at that time. For example, the Blue Monday phenomenon (third Monday in January, found to be the saddest day of the year according to controversial research from Cardiff University) did show a higher than usual number of yaks around "depression" and feeling homesick. This led to a campaign around mental health and positive activities which has been maintained in subsequent academic years to great effect. It would seem that there is a season for everything. This is one of the things that the research hoped to uncover.

Here are some examples of *queries* made and *information shared*. These are typical but the list is not exhaustive or complete.

> Coming out. Mental health worries. Drugs use to sleep or concentrate. Advice on relationships. Tech info/advice. Dealing with grief. Homesickness. Loneliness. Ways to save money. Pregnancy. Contraception advice. Netflix viewing advice. LGBT+ positive and negative. Jobs (gaining/losing). Unsuitable/creepy landlord. Suicidal thoughts. Weight/fat shaming. Supporting each other. White privilege. Prejudice towards individual. Pressure to drink. Issues of disability prejudice. ADHD. Confidence. Losing virginity. Anti-Semitism. Solution for mild stomach ache. Insomnia. Dyslexia. Anxiety. Counselling/support. Stress. Taxi service. Noise during exam revision. Help with essay. Haven't eaten in days.

As can be seen the range of topics demonstrates the concerns of a population in transition towards adulthood. Although it may be argued that these young people are not entirely representative of the wider youth/young adult population, their concerns do seem to resonate with those issues which are often cited as being of concern to all young people.

In particular conversations between two or more users, where someone initiated the interaction, users would refer to the original poster as OP and to each other by the name of the temporary icon the app had assigned them (Blue boat, yellow mushroom etc.). Within conversations it would be difficult to guess the gender/sexuality/ethnicity/religion/political beliefs of a user unless they were specifically stated or formed part of the conversation. Users could, and sometimes did, take conversations into private areas. Contact details for other social media were sometimes exchanged by public posting and quick deletion. This was, perhaps, one of the more difficult practices as it left the person posting open to anyone currently on line having access to their social media feed and to their receiving unwanted images or attention.

Within the queries shared, there was a notable focus on issues of health and, particularly, mental health taken in its broadest terms. For example, here is an exchange between four individuals from early March at around 9 a.m.

> OP: Anxiety is the worst.
>
> Tent: How does it affect you? It impacts me the most when I'm too scared to ask for help with work and I panic.
>
> OP: I overthink too much about every little thing and I get chest pains really bad! I'm also, like you, scared to ask for help with work as I feel stupid!
>
> Tent: I'm sorry op. I know it's dreadful ☺ I hate building everything up to make them seem impossibly difficult or scary, when in reality it's all in your head.
>
> Balloon: I feel the same its so scary. It's like constant dread.
>
> OP: Yeh I'm so glad I'm not the only one! I have been okay for a few weeks but all of a sudden it's just hit me all at once again! Not a good feeling.
>
> Balloon: Same lately!! You are not alone. I get anxious when my boyfriend says he's going out because I get scared he's gonna get hurt, or I get anxious when he doesn't reply after 10 minutes.
>
> Balloon: Anxiety is feeling like there is a threat over small irrelevant things.
>
> Pink Balloon: I know the feeling. I'm glad I'm not the only one who feels this way! Hope you're both okay and I'm here if you need a chat ☺

Clearly the participants find comfort and support from knowing that others feel the same way and feel able to offer support to the others taking strength from simply not being alone. Other Yaks about anxiety speak of the overuse of the word "suicidal" and advice on where to find help with anxiety. Interestingly the yaks sometimes included critique of the way in which help was offered and, in light of the comments in such cases, policy makers would find it worthwhile to consider using a questionnaire on how and when a young person gets anxious, to be filled in before having a simple conversation. This example gives us pause to remember that monitoring and evaluation are only useful if the service is one which young people actually want to use.

In another exchange an OP asks if anyone has ever felt "like you're getting to grips with dealing with things then all of a sudden out of nowhere something comes along and knocks you 10 spaces back?" The story unfolds as Paw asks "What's up OP?" The young person is suffering grief triggered by hearing a particular song and being reminded of the death of a family member. The two chat for a while. Paw acknowledges their own grief and OP takes comfort in not being alone.

Overall, the online community found by the research reflected the offline community in that people were generally good to each other and supportive, offering genuine advice and solutions. Indeed they seemed more willing to do this in a way that was non-discriminatory. While there was a certain amount of posturing by those who self-identified as male, this group too tended towards supportive advice. Items

recorded in the early hours of the morning tended to be more open and raw in their content (both positive and negative). Alcohol and other substances frequently (but not always) played a part in this openness, as often stated in the yaks.

In terms of social inclusion, it appears that young people in current times find it easier – certainly more accessible – to express themselves fully in an online forum. This applies particularly to those situations where previously a chat with a close friend might have served to alleviate their fears. In an age where young people are forever "connected", but may have a lesser sense of truly belonging, the young are, in a sense, always trying to fit in rather than find a sense of self. Brown (2015) suggests that shame and identifying strongly with the incident or behaviours which cause shame may be at the root of issues around belonging. She defines belonging in terms of a space where a person can be their true self. It is sad to think that the current generation of young people is so caught up in the hype of social media that they are only able to form a true sense of self online and anonymously.

On a positive note, this means that they are also able to gain a sense of connection (some might even argue, belonging) online in a way which older people may not quite grasp. Certainly, as an outsider watching these exchanges, it is noticeable that there is a level of security in the open nature of these exchanges between strangers. Observing young people reveal intimate details of their lives could, at times, be quite uncomfortable as they worked together to try to resolve the issues. Perhaps as adults and practitioners it is necessary for us to trust young people a little more and to intervene a little less. The temptation here is to add "except where we can see a danger ahead which they may not have recognised". However, where adult/legal intervention becomes obvious, the system fails. In attempting to set up these systems, practitioners need to bear in mind that obvious monitoring will shut down the conversation. Any anonymous app is in danger of becoming a panopticon with participants painfully aware of being observed.

Where real-life communities and interaction between adults and young people have existed over many years, through informal education and youth work practices, the focus of the successful worker has always been on allowing the young person to approach the worker in their own time and their own way, trusting in the conversation (Jeffs and Smith 2005). This can be a time-consuming process as trust is built gradually. In today's world, time to build relationships is at a premium. Young people are increasingly learning that impression management is the most important thing and are not learning emotional resilience where they are constantly being tested, examined and judged. Put this into the context of increasing levels of anxiety and stress among our young people.

As policy decisions take money from all but the most vital services, often youth provision is not included. This in turn means that opportunities for face-to-face interaction with trained professionals becomes increasingly difficult for young people to access. In this situation it is simpler for young people to turn to their peers online for support. In many ways student communities are unusual in that they often do have trained, accessible adult support to turn to. The availability of an online "helpdesk" may not appeal to all, although they have certainly gained

in popularity. The idea of anonymity gives a freedom which it is increasingly difficult to experience offline in a surveillance society. As we warn young people of the dangers of trusting adults online, it is hardly surprising that they turn to each other for support.

Left to their own devices, young people do feel able to ask for help where they feel that they are non-identifiable. This anonymity would appear to offer the same protection to "ask the stupid question" that it also offers to those who might be termed "keyboard warriors". The eventual demise of Yik Yak as an app was, perhaps inevitably, as a result of litigation in the USA. Publishing terms and conditions stating that people should be prepared for their comments to go public does not seem to deter anyone either from asking a question or throwing in an inappropriate comment. People and young people in particular do not read these disclaimers. Their language has been described by Fuchs (2014) as legalese and inaccessible to all but the best educated lawyer, so perhaps there is a need to rectify and simplify them. Should we monitor young people online? That is another debate but perhaps with a little encouragement from their elders they might learn to be even nicer to each other than they already, generally, are.

References

Berry D. M (2004), "Internet research: privacy, ethics and alienation: an open source approach", *Internet Research*, Vol. 14, No. 4, ABI/IMFORM Global, p. 323.

Boellstroff T., Nardi B., Pearce C. and Taylor T. L. (2012), *Ethnography and virtual worlds*, Princeton University Press, Princeton and Oxford.

British Sociological Association (2017), *Statement of Ethical Practice for the British Sociological Association*, available at www.britsoc.co.uk/media/24310/bsa_statement_of_ethical_practice.pdf, accessed 5 July 2020.

Brown B. (2015), *Daring greatly*, Penguin, London.

Denzin N. K. (1999), "Cybertalk and the method of instances", in S. G. Jones (ed.), *Doing internet research: critical issues and methods for examining the net*, pp. 107-26, Sage, Thousand Oaks CA.

Deventer J. P. (van) (2009), "Ethical considerations during human centred overt and covert research", *Quality & Quantity*, Vol. 43, pp. 45-57, available at DOI 10.1007/s11135-006-9069-8, accessed 5 July 2020.

Eisenstadt M. and Vincent T. (1998), *The knowledge web: learning and collaborating on the net*, Routledge, London and New York.

Ess C. and the AoIR ethics working committee (2002), "Ethical decision-making and Internet research: Recommendations from the AOIR ethics working committee", available at http://aoir.org/reports/ethics.pdf, accessed 5 July 2020.

Eysenbach G. and Till J. E. (2001), "Ethical issues in qualitative research on internet communities", *BMJ [British Medical Journal]*, No. 323, pp. 1103-5.

Fuchs C. (2014), *Social media: a critical introduction*, Sage, Los Angeles and London.

Herrera C. D. (1999), "Two arguments for 'covert methods' in social research", *British Journal of Sociology*, Vol. 50, No. 2, pp. 331-43, available at doi: 10.1111/j.1468-4446.1999.0033, accessed 5 July 2020.

Hughes J. (2012), *Internet research methods*, Sage, Los Angeles and London.

Jeffs T. and Smith M. K. (2005), *Informal education: conversation, democracy and learning*, 3rd edn, Educational Heretics Press, Shrewsbury.

Kietzmann J. H., Silvestre B. S., McCarthy I. P. and Pitt L. F. (2012), "Unpacking the social media phenomenon: towards a research agenda", *Journal of Public Affairs*, Vol. 12, No. 2, pp. 109-19, available at doi: 10.1002/pa.1412, accessed 5 July 2020.

Murthy D. (2008), "Digital ethnography: an examination of the use of new technologies for social research", *Sociology*, Vol. 42, No. 5, pp. 837-55, available at DOI: 10.1177/0038038508094565, SAGE Publications, Los Angeles and London.

Nemelka C. L., Ballard C. L., Liu K. et al. (2015), *You can Yak but you can't hide*, Proceedings of the 2015 ACM Conference on Online Networks.

Northcut K. M. (2015), *Dark side or insight? Yik Yak and culture on campus*, Professional Communication Conference 2015 IEEE International.

Paterson B L., Gregory D. and Thorne S. (1999), "A protocol for researcher safety", *Qualitative Health Research*, Vol. 9, No. 2, pp. 259-69.

Peterson S. (2015), "On slut shaming and rape culture", *Pamoja*, Vol. 5, No. 1, issue on Interpersonal Violence.

Safronova V. (2017), "The rise and fall of Yik Yak, the anonymous messaging app", *New York Times*, New York, available at www.nytimes.com/2017/05/27/style/yik-yak-bullying-mary-washington.html, accessed 25 July 2020.

Scott P. and Phillips M. (1998), "Developing Web-based student support systems: telling students stories on the Internet", pp. 79-96 in Eisenstadt M. and Vincent T. (eds), *The knowledge web: learning and collaborating on the net*, Routledge, London and New York.

Smith R. (2007), "An overview of research on student support: helping students to achieve or achieving institutional targets? Nurture or de-nature?", *Teaching in Higher Education*, Vol. 12, Nos. 5-6, pp. 683-95.

Spicker P. (2011), "Ethical covert research", *Sociology*, Vol. 45, No. 1, pp. 118-33.

Syverson M. (2015), *New media, new ethics?* Peg Syverson (Standard Copyright Licence), Austin TX.

Chapter 11

Virtual communities in intra-European mobilities as mechanisms of integration and social exclusion: the new Spanish migration in Europe

Antía Pérez-Caramés, Belén Fernández-Suárez and Alberto Capote Lama

Introduction

This chapter looks at the new trends in Spanish youth migration in the context of the global crisis of 2008-14. It deals with the socio-demographic profile of these migrants, their migratory projects and their networks of political activism. It is based on a research project, "New emigration from Spain: profiles, mobility strategies, and transnational political activism", which was funded by the Spanish Ministry of Economy and Competitiveness (CSO2016-80158-R) and produced as part of a larger research project dealing with the phenomenon of recent Spanish emigration to several European countries, including the United Kingdom, Germany and France.

In order to clarify the research approach, we first present the theoretical background and literature on which this research is based, then introduce the main concepts within this field of studies and finally present the specific methodology of the research. After this, we look at the data collected in order to find out the mechanisms that would explain the role of virtual communities among Spanish young people who have moved abroad and their role in the interaction of Spaniards living abroad. The conclusion invites the reader to reflect upon the role of digital diasporas as well as to think of the potential social exclusion situations that young people might face in their online interactions.

Theoretical background

As previous research has shown, the main reason for migration in Spain at the end of the economic crisis (2008-14) was the high unemployment rate among young people. The very few employment opportunities that did exist were not for highly qualified young professionals and this dramatically reduced career aspirations. At the peak of the crisis, in 2014, the unemployment rate for young people with tertiary education was 33%, but 61% among young people with only primary education,

according to the Spanish Labour Force Survey (Arango 2009; González-Ferrer 2013; López-Sala and Oso 2015; O'Reilly et al. 2015; Domingo and Blanes 2016; Bartolini et al. 2017; Pérez-Caramés 2017). In this situation, young professionals in Spain were the most prone to emigration, despite not being the most affected by unemployment compared to other youth groups or to other age groups.

The search for better employment opportunities, combined with being able to travel without restriction within the EU, led to over 4.2 million Spanish residents moving abroad. Of these Spanish migrants, 48% chose to move to European countries, mainly the United Kingdom, France and Germany. In addition, the prevailing profile in this intra-European mobility was of young people (aged 16-30) with a university degree looking for qualified employment in Europe (Alaminos et al. 2010; Favell 2014; Castro-Martín and Cortina 2018).

This profile – qualified young people – matches that of social network users: college-educated young people are the ones who are very present on social media (Pew Research Centre 2020; Van Deursen et al. 2011; Tirado-Morueta et al. 2018). The emergence of social networks, particularly on Facebook, has facilitated the creation of "virtual communities", a term first used by Rheingold (1993) to describe the webs of personal relationships in cyberspace. It refers to social spaces in an online environment where people create a place to socialise on the net and create a sense of belonging (Miño-Puigcercós et al. 2019). These social networks and virtual communities are also defined by a rapid exchange of information. In the context of migration, the virtual communities facilitate social integration into the host country and also create a support and socialisation network for the young migrants (Diminescu 2008; Oiarzabal 2012; Dubois et al. 2018).

Once Spanish young people moved abroad, they created networks of support, information and socialisation, using mainly Facebook to set it up (Diminescu 2008). Trying to look for mechanisms to keep their "self-identification" with the culture of origin, young Spaniards in France and Germany created imagined communities on Facebook (Rodríguez Salgado and Vázquez Silva 2018). The groups named "Spaniards in …" are virtual communities based on weak ties and diffuse associations. The concept of "weak ties" was proposed by the sociologist Mark Granovetter to account for the influence of tenuous interpersonal relations that nonetheless have an important bridging ability (Granovetter 1973). Nonetheless these communities have managed to gather an important number of members (Hannerz 2003; Karim 2018; Koikkalainen 2012; Bryman 2016).

These virtual communities of young people can be understood as digital diasporas, where "diaspora" means a collective of dispersed immigrants sharing their belonging, a certain hybrid identity and some common cultural codes (Brinkerhoff 2009). These social media groups are used by their members primarily for socialisation and when seeking help for different causes. More than this, at times, the Facebook groups would also be the place where members try to gather bigger groups for cultural events or are trying to convince other members to join different causes related to civic matters either in the hosting country or in the home country. At times, the online communities fulfil social functions, such as helping to cover basic needs like the search for housing or work, but they also offer group socialisation and, ultimately, advise on

the social and political functioning of the host society. Essentially for migrant young people, these social networks facilitate their interaction. And this determines an increase in social capital, that is, the real or potential resources linked to belonging to a network of social relations. These virtual relationships increase the possibilities of social inclusion in the country of destination.

In this chapter, along with their community functions, we also pay attention to the tensions in these virtual communities. The tensions are related partly to the negotiation of internal (regional) identities among their membership and also to the variety of people's profiles that reflect the residential trajectory in Spain: descendants of Spaniards born in Spain, onward migrants (that is, immigrants who have migrated to a second destination, different from their country of origin and from the country of first destination) and second generations born on Spanish territory. It is a community occasionally crossed by conflicts around identity that generate community divisions or generate diverse experiences in cultural identity (Sanz Sabido 2017).

The internet is now being used in everyday life and has become both a virtual meeting place that facilitates building up groups and communities, and also an instrument that might take us to a new form of sociability (Carter 2005). In this context, the connected young migrant is marked by the portability of these networks of belonging (Diminescu 2008): their contacts and links are no longer attached to a specific territory. But it must be stressed that the inclusion in these networks of belonging is determined by multiple factors and is not just based on pre-defined ethnic and/or cultural traits. Networks of belonging can form as a result of patterns of friendship, or of individual socialisation based on common interests, needs and lifestyles, but also young migrants can build networks with locals, with other migrants and with co-nationals (Neriman Duru and Trenz 2017).

The concept of digital diaspora highlights the fact that young people can keep in touch daily across geographical borders. In this case, "community" is understood as being a group that shares the same path (in terms of history, territory, culture) and has some economic, political and social interests in common (Nedelcu 2012). Such groups make it easier for young people to manage everyday tasks in the new hosting communities, in matters such as assessment for bureaucratic issues, finding a place to live, finding a job in the country of destination, or simply meeting up to socialise so that the virtual connection may actually cause itself (Neriman Duru and Trenz 2017).

In the case of such Facebook groups, we may understand them as an instrument that allows its members to share cultural features in order to handle identity, particularly against the pressure of acculturation (Christensen 2012). We can also see how social networks and the online world are used to reproduce hierarchies of race, gender and social class (Nessi García and Guedes Bailey 2018), and also how privileges related to age, technological skills and educational levels are explicitly present on the network (Christensen 2012)

Methodology

The methodological approach for this research is a qualitative one, combining semi-structured interviews with virtual ethnography. Using the research instruments,

we are aiming to examine the function of the digital diaspora in the migratory process and in the social inclusion of young Spaniards in France and Germany. For this purpose, semi-structured interviews were conducted with young migrants who had moved from Spain to France (Paris, Bordeaux, Nantes and Nice) and Germany (Berlin and Düsseldorf). The total number of interviews was 84, comprising 43 in Germany and 41 in France. Both males and females were interviewed and, despite not having a prior age limit, the majority of interviewees were under 40. The interviewees' migratory profile was composed of 40 autochthonous migrants (that is, Spaniards born in Spain), 30 onward migrants and 14 second generations born in Spain.

Field work was conducted in 2018 in both countries. The interview guide included questions related to the role of those social networks and online communities that helped the decision to migrate and helped to make inclusion at the destination easier. Subsequently, we decided to perform some virtual ethnography, comparing the cases of the Facebook groups "Spaniards in Paris" and "Spaniards in Düsseldorf", as examples of virtual communities (Freidenberg 2011). Access to these groups was achieved by creating a Facebook profile exclusively for this purpose and then joining the groups. We let both administrators and young members of the group know that we would comply with the EU regulation which establishes that the usage of personal details must happen with "lawfulness, honesty and transparency", for specific, overt purposes and in a secure, limited manner, both regarding the type of data being handled and the length of time during which such data are kept (European Commission 2016). Also, Facebook terms and conditions state that it is necessary to obtain the express permission of the Facebook group members in order to carry out research (Leurs and Prabhakar 2018), which we also did through direct communication with members and by contacting the group administrators. Observation took place during the months of May and June 2019. These discourses were coded by themes and analysed.

Results

From our analysis, we identified the main social functions of these virtual communities of young Spaniards as:

a. providing information for the migratory projects of young Spaniards;
b. social inclusion linked to the solidarity in virtual communities via catering for basic needs;
c. social exclusion through identity and through the conflict of membership; and
d. advocating for political rights for overseas citizenship.

We here present in detail how these functions are fulfilled though the membership for the virtual communities that were researched.

"Helping out"

The existence of virtual communities linked to the common origin of its members enables both the flow of information and the actual migratory process itself. The migrants of this new wave no longer need to wait to settle at their destination in

order to enter communities of migrants. Immediacy of access and the transnational nature of the new digital diasporas allow potential migrants to place themselves in a better position compared to migrants from previous waves. This advantageous position stems from the virtual community's location in an online space, which allows the young migrant to be both "here" and "there" at the same time, without it involving the physical settling at destination (Hirvi 2012). Consequently, the young digital diaspora incorporates its members before the mobility process takes place. They can be supported as a prior step to the migratory venture, performing an anticipatory exploration of the terrain, and raising interactions that enlarge their social capital, thus enabling social inclusion in the host society. In order for the interaction to happen, all that is needed is a connection to the network without users having to invest time and/or emotional resources when creating bonds. An example of this type of demand may be seen in the following Facebook posts from one of the studied communities:

> "Hi, I'm soon starting to work in Paris, I'm seeking a flat or studio flat in the outskirts, it would be for a long while. Thank you" [A post on the group "Spaniards in Paris"]

> "Hello! I've just arrived in Düsseldorf, if someone's up for meeting up and having a beer I'd appreciate it. I'm new in town and would love to meet new people." [A post on the group "Spaniards in Düsseldorf"]

Inclusion and exclusion processes in play in virtual communities of the new Spanish diaspora

The quest for an increase in social capital is reflected in a great number of posts on the Facebook wall, particularly those for supply and demand of employment, services, housing and sociability. As Koikkalainen (2012) pointed out, these interactions aim to solve daily tasks and basic needs using community support. This social capital increase is based on establishing weak links, that is, low-intensity social relations. For young people the digitalisation process is fundamental in their socialisation process, as is the meeting up with other members of these communities at virtual or physical spaces.

These groups of young Spaniards on Facebook also help combat migratory loneliness, as well as the loneliness of global cities. Care in these groups is still mainly provided by profiles related to names common for the female gender. Online interactions are characterised by being immaterial work, that is, they are tasks that create an economic and cultural value but are not paid (Terranova 2000). The gender dimensions of immaterial digital work are marked by an emotional work which is mostly performed by women on the networks and is based on the expression and handling of emotions. In these communities, sexual division of work is replicated, and digital care work is thus left to women (Arcy 2016). During the observation we ascertained greater participation of women in comparison to men in this community, most notably in their role as virtual caregivers. In this socialisation, beside network "care", physical meetups become necessary. Occasionally, such encounters seek to heighten typical festivals or simply to find specific affinities among members as a reason for the meetup.

In order to show how the digitalisation process may help to bear these processes, even if only emotionally, we can consider the following message on one of the Facebook pages:

> hi everybody. does anyone know of a job in which I can start today? I have no money left to live here, to rent or the ticket to go back. I made the effort to find a job but couldn't find any, I know it's difficult if you don't speak French but I had the hope I could find something. [Post on the group "Spaniards in Paris"]

These virtual communities of young Spaniards in European countries are not free from conflict situations linked to membership. Some interactions arise that show the verbal or symbolic exclusion of Spaniards with a migratory past, that is, those onward migrants who emigrated to Spain and then, during the economic crisis, moved to France or to Germany, and also second-generation migrants born in Spain. An example of a statement in such a situation may be the following comment on the group wall:

> I would advise you to return, finish your studies (cuz your Spanish is not too good either), and then with Spanish, English and some basic French you may try again. But do study, learn a trade, get some experience and go fight again. [Post on the group "Spaniards in Paris"]

Part of the dynamics observed in these social media conversations consists of making offensive comments to confront each other. The person who starts the conflict replies making comments on the other's language usage which points to a "Spaniard" from Latin America. Thus, stressing the otherness of the language and in turn pointing at their knowledge of French, which creates a distance in cultural capital. These were their words:

> mmmmmm the word ["ticket" in a Latin American variant] instead of ["ticket" in European Spanish] and take me back to my country have confused me. As you are Argentinian, I suppose you're here with *titre de séjour* which you have to renew when proving that you have a job or that you study. That's why you were advised to get a student visa. [Post on the group "Spaniards in Paris"]

The imagined community gathered under the "Spaniards in Paris" umbrella is not made up only of Spanish members, but also by individuals with some connection to Spain, for example: descendants of Spaniards, onward migrants and second generations born in Spanish territory. So, this is a cohabitation space with diverse migratory identities and from such a coexistence may arise, and in fact do keep arising, identity conflicts, prejudice or xenophobic-type comments towards people with origins in certain countries.

Virtual communities as places for transnational political activism

Finally, imagined communities also become political communities. This is particularly true during election campaigns when the exercise of the right to vote and the rights of Spanish citizens abroad are mentioned. The messages on the Facebook wall refer to the difficulties faced in requesting the right to vote while living abroad. The

erosion of the rights of young Spanish citizens abroad has been shown since 2011 in two aspects: more obstacles to vote and loss of rights to health care [on the NHS]. The electoral law reform (LO 2/2011) in 2011 removed the right to vote in municipal elections from residents abroad and it imposed the "requested vote", that is, the obligation to be registered at a consulate in order to vote when abroad (López-Sala 2017 and 2019). This resulted in reduced participation in the various elections as well as in campaigns from organisations such as Marea Granate, a transnational non-partisan organisation formed by emigrants from Spain which aims to combat the social and economic causes underlying the recent wave of Spanish emigration.

One of the most important demands of Spanish youth living abroad, articulated through social movements such as Marea Granate, is to put an end to the need both to be registered at the consulate and to request the exercise of this right to vote when abroad. In fact, it has been said that the shortcomings in the voting system from abroad translate into a decline of citizen rights (López-Sala 2019). There is a reversed exclusion process in two ways: on the one hand, migrants often face administrative paperwork barriers and repressions in the host country, while on the other hand they also face exclusion from rights that they would still have if they were in Spain.

Conclusion

This research has shown how the migration process of young Spaniards is supported by social networks and in virtual communities, used for obtaining valuable information for the purpose of getting settled abroad. In this sense, the EU could engage in informing these mobile Europeans of their rights and duties via a virtual office and set up social networks that could guide this young population on the steps to follow when moving abroad. It should also be noted that our research has identified how social networks can also be instruments for displaying discriminatory and stereotypical attitudes towards certain collectives, so there is room for European public policies to intervene and promote an adequate and tolerant use of social networks.

The digital diaspora of the young Spanish emigrants is part of an imagined community shaped around Facebook groups. It is a network of diffuse association. The virtual nature of relationships that are established in this type of network encourages the social inclusion of the diaspora. But this community also fosters a certain social distance among its members. These conflicts or processes of social exclusion, based on belonging to a nation, occur partly because of the virtual nature of the relationships, since social media users are not able to fully ascertain who is behind a profile and they must make (prejudiced) assumptions based on the profile's name, and on the vocabulary used in posts. Conflict also occurs because of the characteristic dynamics of social networks (offending comments, the presence of trolls). At the same time, such a network does collect together a variety of migrant identities. In fact, all through the analysis we have seen that the digital diaspora is heterogeneous. And the diversity, in this case, can lead to hostilities among its members on the grounds of gender, ethnicity, race, social class or cultural capital.

Because of the physical and social distance caused by the digitalisation process, these imagined communities first enable social inclusion by grouping a variety of

identities. Also, these communities have fewer restrictions than traditional migratory associations, which demand greater participation, requiring physical presence and time investment. However, the Facebook communities around which the Spanish diaspora in Paris and Düsseldorf gathers fulfil a similar social and institutional function. They act as a network for support, empathy and mutual help for young migrants, since they allow for immediate interaction without the need for investing time in cohabiting and socialising in order to receive something from the community. Their strength relies on weak links of people sharing information with the community members around job search, advice on paperwork or housing. It also seems that some relationships based on weak links have the opportunity to solidify beyond Facebook groups. Some members choose to create smaller groups that move towards non-virtual relationships, that is, encounters in person of other members of the virtual community who communicate by WhatsApp.

It has to be noted that, at the same time that Facebook's imagined communities for the digital diaspora work as true networks for socialising and mutual support of their members, they also enable expressions of conflict among their members; the social distance bestowed by the relationships and interactions mediated by the network and the logic of many such interactions online revolves around violence and hostility. In this way there are verbal statements that are overtly violent, no-filter comments or posts by trolls, which all lead to online spaces ending up like a battlefield for the participants. Apart from this, some posts on the wall are samples of national vanity: flamenco lessons and dance shows or cooking events.

Finally, any government involved in establishing and promoting a close relationship with its diaspora should consider the need to use social networks, since they have become one of the most important communication means for the young European population, and thus they could be a way to effectively target a physically dispersed community. The immediacy of communication, which is a key feature of social networks, allows for wide and quick distribution of any official information, so they could be a valid channel to reach the Spanish diaspora. Besides, Spaniards taking part in social media groups such as the Facebook groups "Spaniards in …" do also use it for advocacy of the social and civic rights of the diaspora, so such groups are also a good way keep in touch with the claims and needs of this community. This knowledge could help the design, development and implementation of diaspora-targeted public and social policies.

References

Al-Rawi A. (2017), "Facebook and virtual nationhood: social media and the Arab Canadians Community", *AI & SOCIETY, Journal of Knowledge, Culture and Communication*, available at https://doi.org/10.1007/s00146-017-0742-3, accessed 5 July 2020.

Alaminos A., Albert M. C. and Santacreu Ó. (2010), "La movilidad social de los emigrantes españoles en Europa", *Revista Española de Investigaciones Sociológicas*, No. 129, pp. 13-35.

Anderson B. (1991), *Imagined communities: reflections on the origin and spread of nationalism*, Verso, London.

Arango J. (2009), "Después del gran boom: la inmigración en la bisagra del cambio" in Aja E., Arango J. and Oliver J. (eds), *La inmigración en tiempos de crisis. Anuario de la inmigración en España,* Fundación CIDOB, Barcelona.

Arcy J. (2016), "Emotion work: considering gender in digital labor", *Feminist Media Studies*, Vol. 16, No. 2, pp. 365-8, available at https://doi.org/10.1080/14680777.2016.1138609, accessed 5 July 2020.

Bartolini L., Gropas R. and Triandafyllidou A. (2017), "Drivers of highly skilled mobility from southern Europe: escaping the crisis and emancipating oneself", *Journal of Ethnic and Migration Studies*, Vol. 43, No. 4, pp. 652-73, available at https://doi.org/10.1080/1369183X.2016.1249048, accessed 5 July 2020.

Barwick C. (2018), "Transnational and intra-European mobility among Europe's second generation: review and research agenda", *Global Networks*, Vol. 18, No. 4, pp. 608-24, available at https://doi.org/10.1111/glob.12181, accessed 5 July 2020.

Borkert M., Fisher K. E. and Yafi E. (2018), "The best, the worst, and the hardest to find: how people, mobiles, and social media connect migrants in(to) Europe", *Social Media + Society*, available at https://doi.org/10.1177/2056305118764428, accessed 5 July 2020.

Breazu P. and Machin D. (2019), "Racism toward the Roma through the affordances of Facebook: bonding, laughter and spite", *Discourse & Society*, Vol. 30, No. 4, pp. 376-94, available at https://doi.org/10.1177/0957926519837396, accessed 5 July 2020.

Brinkerhoff J. M. (2009), *Digital diasporas: identity and transnational engagement*, Cambridge University Press, New York.

Bryman A. (2016), *Social research methods*, Oxford University Press.

Burkart P. and Christensen M. (2013), "Geopolitics and the popular", *Popular Communication*, Vol. 11, No. 1, pp. 3-6.

Carter D. (2005), "Living in virtual communities: an ethnography of human relationships in cyberspace. Information" *Communication & Society*, 8 (2), 148-167, available at https://doi.org/10.1080/13691180500146235.

Castro-Martín T. and Cortina C. (2018), "Demographic issues of intra-European migration: destinations, family and settlement", *European Journal of Population*, Vol. 31, No. 2, pp. 109-25, available at https://doi.org/10.1007/s10680-015-9348-y.

Christensen M. (2012), "Online mediations in transnational spaces: cosmopolitan (re)formations of belonging and identity in the Turkish diaspora", *Ethnic and Racial Studies*, Vol. 35, No. 5, pp. 888–905, available at https://doi.org/10.1080/01419870.2011.628039, accessed 25 July 2020.

Diminescu D. (2008), "The connected migrant: an epistemological manifesto", *Social Science Information*, Vol. 47, No. 4, pp. 565–79, available at https://doi.org/10.1177/0539018408096447, accessed 25 July 2020.

Diminescu D. and Loveluck B. (2014) "Traces of dispersion: online media and diasporic identities", *Crossing: Journal of Migration & Culture*, Vol. 5, No. 1, pp. 23-39, available at https://halshs.archives-ouvertes.fr/halshs-01172505, accessed 25 July 2020.

Domingo A. and Blanes A. (2016), "La nueva emigración española: ¿una generación perdida?", *Panorama Social*, No. 23, pp. 157-78.

Dubois A., Zagheni E., Garimella K. and Weber I. (2018), "Studying migrant assimilation through Facebook interests" in Staab S., Koltsova O. and Ignatov D. (eds), *Social Informatics*, SocInfo 2018: 10th International Conference, Proceedings Part II. Lecture Notes in Computer Science, Vol. 11186, pp. 51-60, Springer, Switzerland, available at https://doi.org/10.1007/978-3-030-01159-8_5, accessed 25 July 2020.

European Commission (2016), Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), available at http://data.europa.eu/eli/reg/2016/679/oj, accessed 25 July 2020.

Favell A. (2014), "The fourth freedom: Theories of migration and mobilities in 'neoliberal' Europe", *European Journal of Social Theory*, Vol. 17, No. 3, pp. 275-89, available at https://doi.org/10.1177/1368431014530926, accessed 25 July 2020.

Freidenberg J. (2011), "Researching global spaces ethnographically: queries on methods for the study of virtual populations", *Human Organization*, Vol. 70, No. 3, pp. 265-78.

Gilck Schiller N. (1997), "The situation of transnational studies", *Identities*, Vol. 4, No. 2, pp. 155-66, available at https://doi.org/10.1080/1070289X.1997.9962587, accessed 25 July 2020.

Golan O. and Babis D. (2019), "Digital host national identification among Filipino temporary migrant workers", *Asian Journal of Communication*, Vol. 29, No. 2, pp. 164-80, available at https://doi.org/10.1080/01292986.2018.1541097, accessed 25 July 2020.

González-Ferrer A. (2013), "La nueva emigración española. Lo que sabemos y lo que no", *Zoom Político*, No. 18, Fundación Alternativas, Madrid.

Granovetter M. S. (1973), "The strength of weak ties", *American Journal of Sociology*, Vol. 78, No. 6, pp. 1360-80.

Hannerz U. (2003), "Being there … and there … and there!: Reflections on multi-site ethnography", *Ethnography*, Vol. 4, No. 2, pp. 201-16, available at https://doi.org/10.1177/14661381030042003, accessed 25 July 2020.

Hirvi L. (2012), "'Multi-sited Fieldwork amongst Sikhs in Finland and California" in (eds) Hirvi L. and Snellman H.*, Where is the field. The Experience of Migration Viewed through the Prism of Ethnographic Fieldwork*, Studia Fennica Editorial, Helsinki, pp. 23-44.

Howard A. (2011), "Diaspora no more? The role of Facebook in the development of a global Rotuman community", *Diaspora: A Journal of Transnational Studies,* Vol. 20, No. 2, pp. 177-203.

Karim K. H. (2018) 'Migration, Diaspora and Communication' in Karim K. and Al-Rawi A. (eds) *Diaspora and Media in Europe*, Palgrave Macmillan, Cham.

Khosravinik M. and Unger J. W. (2015), "Critical discourse studies and social media: power, resistance and critique in changing media ecologies" in: Wodak R. and Meyer M. (eds), *Methods of Critical Discourse Studies*, SAGE, London.

Koikkalainen S. (2012), "Virtual fields. How to study a scattered migrant population online. The case of highly skilled Finns in the European Union", in L. Hirvi and H. Snellman (eds), *Where is the field. The experience of migration viewed through the prism of ethnographic fieldwork*, Studia Fennica Editorial, Helsinki.

Lamela C., Pérez-Caramés A. and Fernández-Suárez B. (2012), "The effect of networks on the selection of migrants and destinations: Colombians in Galicia (Spain)", *International Migration,* Vol. 50, No. 6, pp. 83-108, available at https://doi.org/10.1111/j.1468-2435.2009.00580.x, accessed 25 July 2020.

Leurs K. and Ponzanesi S. (2018), "Connected migrants: encapsulation and cosmopolitanization", *Popular Communication*, Vol. 16, No. 1, pp. 4-20, available at https://doi.org/10.1080/15405702.2017.1418359, accessed 25 July 2020.

Leurs K. and Prabhakar M. (2018), "Doing digital migration studies: methodologial considerations for an emerging research focus" in Zapata-Barrero R. and Yalaz E. (eds), *Qualitative research in European migration studies*, IMISCOE, Rotterdam, available at https://doi.org/10.1007/978-3-319-76861-8_14, accessed 25 July 2020.

López-Sala A. (2017), "The new emigration issue in the public and political debate in Spain. Official discourses and new forms of mobilization", in Glorius B. and Domínguez-Mujica J. (eds), *European mobility in times of crisis. The new context of European South-North*, Verlang-Transcript*,* Berlin.

López-Sala A. (2019), "'You're not getting rid of us'. Performing acts of citizenship in times of emigration", *Citizenship Studies*, Vol. 23, No. 2, pp. 97-114, available at https://doi.org/10.1080/13621025.2019.1584156, accessed 25 July 2020.

López-Sala A. and Oso L. (2015), "Inmigración en tiempos de crisis: dinámicas de movilidad emergentes y nuevos impactos espaciales", *Migraciones*, No. 37, pp. 9-27, available at https://doi.org/10.14422/mig.i37.y2015.001, accessed 25 July 2020.

Miño-Puigcercós R., Rivera-Vargas P. and Cobo Romaní C. (2019), "Virtual communities as safe spaces created by young feminists: identity, mobility and sense of belonging", pp. 123-40 in S. Habib and M. R. M. Ward (eds), *Identities, youth and belonging. International perspectives*, Palgrave McMillan, Chan, Switzerland.

Nedelcu M. (2012), "Migrants' new transnational habitus: rethinking migration through a cosmopolitan lens in the digital age", *Journal of Ethnic and Migration Studies*, Vol. 38, No. 9, pp. 1339-56, available at https://doi.org/10.1080/1369183X.2012.698203, accessed 25 July 2020.

Neriman Duru D. and Trenz H-J. (2017), "From diversity to conviviality: intra-EU mobility and international migration to Denmark in times of economic recession", *Journal of Ethnic and Migration Studies*, Vol. 43, No. 4, pp. 613-32, available at https://doi.org/10.1080/1369183X.2016.1249049, accessed 25 July 2020.

Nessi García L. and Guedes Bailey O. (2018), "The Mexican European diaspora: class, race and distinctions on social networking sites", *Journal of Ethnic and Migration Studies*, Vol. 45, No. 15, pp. 3007-22, available at https://doi.org/10.1080/1369183X.2018.1483716, accessed 25 July 2020.

NurMuhammad R., Horst H. A., Papoutsaki E. and Dodson G. (2016), "Uyghur transnational identity on Facebook: on the development of a young diaspora", *Identities,* Vol. 23, No. 4, pp. 485-99, available at https://doi.org/10.1080/1070289X.2015.1024126, accessed 25 July 2020.

O'Reilly K. (2007), "Intra-European migration and the mobility-enclosure dialectic", *Sociology*, Vol. 41, No. 2, pp. 277-93, available at https://doi.org/10.1177/0038038507074974, accessed 25 July 2020.

O'Reilly J., Eichhorst W., Gábos A., et al. (2015), "Five Characteristics of Youth Unemployment in Europe: Flexibility, Education, Migration, Family Legacies, and EU Policy", *SAGE Open*, available at https://doi.org/10.1177/2158244015574962, accessed 25 July 2020.

Oiarzabal P. J. (2012), "Diaspora Basques and online social networks: an analysis of users of Basque institutional diaspora groups on Facebook", *Journal of Ethnic and Migration Studies*, Vol. 38, No. 9, pp. 1469-85, available at https://doi.org/10.1080/1369183X.2012.698216, accessed 25 July 2020.

Papacharissi Z. (2015), *Affective publics: sentiment, technology, and politics*, Oxford University Press, Oxford.

Pérez-Caramés A. (2017), "Una nueva generación española en Alemania. Análisis de las motivaciones para la emigración bajo el manto de la crisis", *Migraciones*, No. 43, pp. 91-116, available at https://doi.org/10.14422/mig.i43.y2017.005, accessed 25 July 2020.

Pérez-Caramés A., Ortega-Rivera E., López de Lera D. and Domínguez-Mujica J. (2018), "La emigración española en tiempos de crisis (2008-2017): análisis comparado de los flujos a América Latina y Europa", *Notas de Población,* No. 107, pp. 11-40.

Pew Research Center Internet & Technology (2020), "Social media fact sheet", available at www.pewresearch.org/internet/fact-sheet/social-media/, accessed 5 July 2020.

Portes A., Guarnizo L. E. and Landolt P. (1999), "Commentary on the study of transnationalism: pitfalls and promise of an emergent research field", *Ethnic and Racial Studies*, Vol. 40, No. 9, pp. 1486-91, available at http://dx.doi.org/10.1080/01419870.2017.1308528, accessed 25 July 2020.

Putnam R. (2001), *Bowling alone: the collapse and revival of American community*, Simon & Schuster, New York.

Rheingold H. (1993), *The virtual community: Finding connection in a computerized world*, Addison-Wesley Longman, Boston.

Rodríguez Salgado L. and Vázquez Silva I. (2018), " 'I believe people need to know us in order to integrate us': immigrant women's cultural attitudes and needs", *International Migration & Integration*, No. 19, pp. 451-71, available at https://doi.org/10.1007/s12134-018-0553-5, accessed 25 July 2020.

Sanz Sabido R. (2017), "Online communities of Spanish migrants in times of austerity", *JOMEC Journal*, No. 11, pp. 83-95, available at http://dx.doi.org/10.18573/j.2017.10144, accessed 5 July 2020.

Sayad A. (2004), *The suffering of the immigrant*, Polity Press, Cambridge.

Terranova T. (2000), "Free labor: producing culture for the digital economy", *Social Text*, Vol. 18, No. 2, pp. 33–58.

Tirado-Morueta R., Aguaded-Gómez J. I. and Hernando-Gómez Á. (2018), "The socio-demographic divide in internet usage moderated by digital literacy support", *Technology in Society*, Vol. 55, pp. 47-55, available at https://doi.org/10.1016/j.techsoc.2018.06.001, accessed 5 July 2020.

Van Deursen A. J. A. M., Van Dijk J. A. G. M. and Peters O. (2011), "Rethinking internet skills: the contribution of gender, age, education, internet experience, and hours online to medium- and content-related internet skills", *Poetics*, Vol. 39, No. 2, pp. 125-44.

Vertovec S. (2007), "Super-diversity and its implications", *Ethnic and Racial Studies,* Vol. 30, No. 6, pp. 1024-54, available at doi: https://doi.org/10.1080/01419870701599465, accessed 25 July 2020.

Werbner P. (2008), *Anthropology and the new cosmopolitanism: rooted, feminist, and vernacular perspectives*, Berg, New York.

Chapter 12

Power, participation and geographical isolation

John Taylor, Anja Johnston and Rachael Hatfield

Introduction

This chapter is co-written by John Taylor, an Area Youth Officer, with Rachael Hatfield aged 19 and Anja Johnston aged 21, two young people who took part in the co-design and development of the Highland project. Until 2018 they did not know each other and had never worked together.

Rachael had been engaged as a young person with the local authority youth service for six years and was a member of the Highland Youth Parliament. She had embarked on youth work more recently, transitioning to become a volunteer assistant youth worker.

Anja had come through the ranks of the Scouts and was volunteering with them locally in Thurso as a Young Leader and District Young Representative. She also had a national role as Scottish Commissioner for Youth Involvement for the Scouts.

Since 2015 John Taylor has been an Area Youth Officer based in the Highlands of Scotland with responsibility for operational delivery and workforce development of the local authority youth work service covering the South area of the Scottish Highlands, a service which is predominantly office based and which very rarely works directly with young people.

Young people in this setting do not have access to the internet or digitalisation experiences, so it is worth noting that in the period between 2011 and 2018 digitalisation had not been a feature of John's youth work practice, with the exception of using social media sparingly in his personal life during these formative years when social media exploded into the public arena. Until summer 2018 John had never understood the term digitalisation nor the concept of digital youth work. However, for the project discussed in this chapter, John was able to work directly with young people for the year.

This chapter was jointly written between the three of us, but throughout the chapter we have chosen to emphasise our different voices by including some direct quotes from our discussions, and you will find these quotes linked to each of our names throughout the text. We would also like to recognise and pay tribute to the other young people who were integral to the success of this digital project in Highland, who have now left the region for work and studies, and to the audience that contributed to the digital conversation on social media.

This account of the project has been constructed around the idea of seeing digitalisation when it intersects the area of youth work practice. Consequently, the chapter is developed as follows: we first analyse how digital platforms can be used positively within relationships between young people and adults, while identifying where power is constructed and shared. Then, we look at how digitalisation impacts upon the social inclusion of young people against the backdrop of the geography of the Scottish Highlands, and at the uniqueness of this setting in the context of youth work in the United Kingdom. Lastly, we explore outcomes and recommendations which have come from the project. To fully understand and appreciate how this project developed, and how youth work practice and digitalisation have evolved in the Highlands of Scotland, an understanding of the geography of the area where this project took place in Scotland and youth work practice there is contextualised through the case study: the Digital Project.

The context

The project took place in the Scottish Highlands, a rural area in the North of Scotland whose geography is unique in the UK. Highland has the largest area (26 484 sq. km) of all 32 Scottish local authorities and is larger in area than the country of Wales (Highland 2019), which is one of the countries that makes up the four nations of the United Kingdom (England, Scotland, Wales and Northern Ireland). Highland has a population of 235 000, and its main city is Inverness, which has a population of approximately 69 000 and is served by a very small international airport and train station. The region contains the most mountainous and remote areas of the mainland UK; many of the villages and small settlements are not served by public transport and the only access is by car or, in some cases, by boat. Young people who live outside the main residential areas and attend school have long journey times to get there. There are 29 high schools in Highland, five of which have hostels on the school site, where some young people live during the week to avoid excessive travel time each day from home to school.

Youth work in Highland is delivered by a variety of organisations from the voluntary and public sectors. Voluntary sector, third sector or civil society is the name given to the activities of non-government, non-profit organisations, including charities. Public sector or statutory sector is the name given to the activities of local and municipal authorities or central and devolved government. The organisation High Life Highland (HLH) is a charity registered in Scotland and a company, limited by guarantee, wholly owned by the Highland Council (local government). The charity was established on 1 October 2011 to deliver community learning and leisure services on behalf of the Highland Council. In this type of setup, known as an ALEO (Arms Length External Organisation) and unique to Scotland, a public body, in this case the Highland Council, can set up and own a registered charity. High Life Highland is one step removed or "at arm's length" from the Highland Council, delivering the youth work service through a workforce of paid youth workers, as well as a range of other public services, yet remains subject to to the council's control and influence (Audit Scotland 2019) by having a governance structure which has representatives from Highland Council. For the purpose of this chapter, High Life Highland will be known as the "local authority" youth work service. It was responsible, alongside the young people, for the development of the Digital Project.

The local authority youth work service has a youth worker presence in all 29 associated school groups (ASG) across the Highland region; some youth workers are based within the school and some in the community. Each youth worker has a small team of assistant youth workers and volunteers to deliver a local youth work service. The local authority youth work service is well structured and resourced, and has the geographical penetration to cover the region, albeit in many cases centred around the school community in the towns and villages outside the City of Inverness. The youth work focus is on the 11-25 age group, with a particular emphasis on 11-18. In Scotland, youth work has three essential and definitive features, which have been agreed by the youth work sector as laid out in the statement on the nature and purpose of youth work (YouthLink Scotland 2019a):

- young people choose to participate;
- youth work must build from where young people are;
- youth work recognises the young person and the youth worker as partners in a learning process.

These three tenets of youth work are a definition of how the relationships between youth workers and young people should be constructed and navigated. They were the building blocks of the relationship between John and the Year of Young People (YOYP) ambassadors, and how that was to be developed.

The Digital Project

The Digital Project that happened in Highland, which is used as the case study for this chapter, occurred during a Scottish themed year titled Year of Young People 2018. This was a Scottish national project, the focus of year-long activity to challenge negative stereotypes and champion the six key themes, which were Participation, Education, Health & Wellbeing, Equality & Discrimination, Enterprise & Regeneration and Culture. YOYP was placed at the core of work with young people. To start the journey towards 2018, the Scottish Government commissioned three organisations, Children in Scotland, the Scottish Youth Parliament and Young Scot, to form a partnership to engage with young people in co-designing what shape the year should take. The partnership recruited and supported an Interim Planning Group of 18 young people, aged 8 to 22, to lead a process of engagement with their peers and stakeholders across Scotland to develop the YOYP concept and prepare for the 2018 launch (SYP 2018). Not only were young people the focus, but they also played a fundamental part in every single step of the process, from the planning right through to the execution (Scottish Tourism 2018).

Young people from Highland applied to volunteer to become YOYP ambassadors, who were involved in making sure that young people and organisations in local communities knew about YOYP 2018 activities in Highland; together with other ambassadors across Scotland, they supported projects and activities developed with the local authority, third-sector partners and other organisations to showcase opportunities for young people to shine locally, nationally and globally. The project brought together young people who represented different organisations in Highland and who had volunteered to become ambassadors for Scottish Year of Young People 2018. These threads would now be picked up, hosted and

developed by the local authority, High Life Highland, but how this was to work in practice was still undecided.

Geography and social inclusion

YOYP ambassadors in Highland felt that using social media was the best way to connect with other young people across the region, to share lived experiences and as a place to connect with others throughout the year. The idea to use social media became apparent at a workshop in January 2018, which was part of the Highland region launch event of YOYP 2018. A social media workshop was partly delivered by a marketing and communications team.

Rachael – I remember at the launch sitting there with, admittedly they were lovely, two marketing communication guys, and being told "if you're going to be going on social media it's got to be like this, it cannot be like that". I remember sitting round with the other young people, wondering if they know they are talking to young people. We [young people] are not their team, we are not trained in marketing and communications. I think from that launch day and probably before, this was the one thing that we wanted to do that we could say was ours [social media platforms].

John – Understanding that young people wanted to be in control of social media platforms was the driver for the Digital Project. The youth service looked for support in bringing the idea to life, so worked closely with colleagues from our organisation's marketing and communication (M&C) team, who were really supportive of the concept, that young people had control of social media platforms. M&C provided the technical support and knowledge to get the project off the ground and a debt of gratitude is owed to them for this, as without them the project would not have happened.

Fundamentally the Digital Project evolved into two defining features:

- young people developing content through lived experiences and posting this across three social media platforms [Twitter, Instagram, Facebook] for which they had complete autonomy;
- young people and youth worker relationship being developed and maintained using digital means (Facebook and Skype messenger and video).

John – My organisation (High Life Highland) supported the development of this Digital Project alongside the YOYP ambassadors for Highland; however, digitalisation within the Youth Service hadn't matured beyond staff managing Facebook pages, so handing over control of three social media platforms to young people was a complete shift in ethos and was to be navigated organisationally.

According to young people, some of the barriers to access to youth work provision outside of their community are weather, poor public transport, time and money. It is not uncommon when bringing a physical group of young people from different parts of Highland to a central location that they travel for hours just to attend a youth work session that could last only an hour.

Anja – Through the use of social media we started to understand that these issues were not unique to the Highlands of Scotland but that other areas in Scotland faced similar barriers due to their geography.

Rachael – The Highlands are huge: it is not a case of let's go and meet up over a cup of coffee – we have no money to do this.

Part of the role of being a YOYP Ambassador was to attend meetings in the central belt, in the two Scottish cities of Edinburgh and Glasgow. Many of the Highland YOYP ambassadors lived outside of Inverness, which made the journey to the central belt arduous and in most cases a minimum of seven hours of travel to access these events, which meant very early starts and arriving home very late.

Challenges and opportunities

One of the challenges John encountered was working remotely with this group of young people who were spread across the vastness of the Scottish Highlands. Having not practised using digital tools as a way of communicating with a group of young people, and having no indication of how best to do this, was a scary but exciting proposition. Working through this dilemma with young people, they agreed and opted to use Facebook Messenger as a primary means of communication between themselves. It enabled everyone to overcome the traditional barriers of connecting with each other regularly, to enable facilitation of group work and one-to-one conversations. It also had the benefit of overcoming the traditional barrier of working with and connecting groups of young people who live in different towns and villages from each other over the Highland region.

Using Messenger made it easier to connect with young people from wherever they were located across the Highland region, not just with those young people from the main towns where a youth worker is physically present, or the towns and villages that are better connected by public transport. Working digitally extended the reach of a youth service and the youth work offer to young people, enabling social experiences and connections with other young people from across the region. What became apparent, while using Messenger, was that there was no need for young people or youth workers to occupy the same digital space at the same time; the ebb and flow of conversations were open-ended and dialogue would sometimes be taking place in a vacuum, where there could be a long pause of a few hours before a response was seen.

Responding to chat messages at a time and physical place convenient to young people supports the voluntary principle of youth work, where young people choose to be involved. This style of conversation becomes fluid, not bound by traditional time constraints that are found in a physical space, e.g. where young people would need to travel home once a youth club session is finished, which effectively ends the conversation. This new approach allowed for the development of long-term dialogue that was evolving in nature. Messenger allowed us to point to moments in time where chat text could be reviewed and it was used as a reflective tool, to support informal educational opportunities and future planning.

Using social media amplified the voice of young people, creating content and posts and sharing with a public audience what the difficulties of living in remote locations were like. They were able to draw attention to the reality of their lived experiences and how they are marginalised to opportunities of social experiences

by the geography of the Highlands and their locations within it. Using social media in this way also meant that young people from Highland were able to influence the starting times of meetings they attended, as organisations and other young people from across Scotland became more aware of the geography of Highland and its poor public transport.

Rachael – We cannot get to the central belt before 10am in the morning. This is what we face; this is what it's like to live in an area you think you know about, but you don't, in an area people from out of the Highland region think they know about.

Participation

During YOYP in Highland, young people decided there was to be specific focus on two of the national YOYP themes, those being Participation and Equality & Discrimination. These themes were presented, discussed and chosen by a small working group of stakeholders and Highland YOYP ambassadors. Focusing on two themes in Highland enabled us to home in on an approach specifically around participation; this was to be hugely beneficial. Participation was understood to be about how young people navigated relationships with adults and how adults could work more equitably with young people. Co-designing a project with young people, a project which used social media to share their lived experiences, where they would have the authority to develop and post content without organisational or adult censorship, could be a nerve-racking prospect. By nurturing a democratic process with young people, this is the space where youth work practice intersected with adults in authority.

Rachael – The young people are going to be involved from day one; we want them to be involved in how this year is going to be shaped.

What became apparent during YOYP was a change in language in how participation was talked about. The narrative changed, and young people and adults started to use the words co-producing and co-production. The subtle change in language seemingly made the concept of participation understandable and accessible by adults with no connection to youth work practice, therefore opening up the idea of participation to a wider audience, especially those adults who would come into contact with young people in terms of service design and delivery, so there was now a baseline to work from and a mutual understanding about the process of participation.

Involving young people in decisions that affect them (United Nations 1989) in the context of this project also meant sharing power with adults where possible. Sharing power throughout the lifespan of the project came in many forms, and an example of where this took place was how the concept of the Digital Project in Highland was conceived and how it evolved. From the 15 YOYP Highland ambassadors, a core of six shared the view of wanting to use social media during YOYP 2018 to connect with a wider audience by sharing local stories and events. Potentially, young people could have done this individually or as a collective without any youth work support, but they articulated that they wanted to work with the youth service to achieve this. How this was to happen in practice was still for John to navigate organisationally, so the youth service could offer a level of support technically, practically and educationally to bring the project to life.

John – Organisationally as a youth service there was much to do to get ourselves in a position to proceed on the wishes of young people and find digital solutions that were workable so we could share power, working collaboratively. After finding support through our marketing and communications department, which rarely had much involvement with the youth service let alone with young people, solutions to how the social media platforms would work were agreed where young people could have control and autonomy to post what they wanted.

Safeguarding young people who are using social media was a primary concern, especially if the platforms were to be hosted by a youth work organisation with young people in control of them. The public perception and negative assumptions around internet safety, and around young people using the social media platforms responsibly, were at the forefront. Using social media in this way with young people within the youth service had not been tried before, so there was a perceived risk to the organisation that young people could post inappropriate things, although this could be seen as part of the learning journey for young people. However, in a public arena like social media the audience can be much larger and can be subsequently exposed to a level of scrutiny that is not found in, say, an open access youth club.

Anja – We had a working document of Dos and Don'ts around the social media platforms. We were able to add to this as anything came up that might affect the project. This is where having the organisation still in control of the platforms was beneficial as we could go to Marketing and ICT if there was anything we were unsure of and needed clarification, therefore bringing youth work to a service that doesn't have contact with the youth work sector.

Part of the response to this was to create small teams of young people around a Facebook page and Twitter using Tweetedeck, because this built in safeguards around sharing passwords while allowing editorial rights to work autonomously. The Instagram account was dealt with differently: the youth service owned the account; however, the password was shared between young people. This was a bold move and certainly not without an element of risk, but there are also huge social and educational risks to not working with young people digitally, as shown in the "Risk assessment for not implementing digital youth work" (YouthLink Scotland 2019b). The sharing of the password was an investment in the relationship between young people and youth worker; it was central to the ethos of the power sharing within the project and a cornerstone of a participatory approach that underpinned it. The maturity of young people grew as a result of this investment, recognising the level of responsibility they had. The layout, logos and naming of the three social media platforms by young people as "YOYP Highland" was also pivotal in sharing power between young people and adults and enabled them to have identity and a real sense of responsibility and ownership. This meant that there was a perception by young people that they had a high level of ownership of and responsibility for the social media platforms, despite the youth work organisation having overall administrative rights and owning the accounts.

This methodology built upon the concept of the "social media takeover" (YouthLink Scotland 2019c) that is used by youth work organisations, whereby young people have access to an organisation's social media platform for a specific event. In Highland

the aim was to have something different and longer-term that had been borne out of a sharing dialogue and power sharing, where there was an aspiration for equity within the group work process to arrive at the final destination of using social media platforms. Prior to using the social media platforms, young people had an opportunity to negotiate the identity, look and feel of the platforms, latterly having dialogue about the audience they wanted to create and share content with, recognising the learning they had through dialogue, the influence they had as they got to know and build relationships with a targeted audience. Within this process, opportunities for social education come. This was the key difference between young people taking over social media channels already designed and owned by an organisation with an established audience, as opposed to developing the platforms from scratch and the adults negotiating with a group of young people how this was to be done and the direction the platforms should take, incorporating evaluation points along the way to support learning.

The pluralist approach set the tone for the rest of the year and was an indicator to young people that ownership and power were relative terms and were negotiable between themselves and adults. The social benefits of confidence, trust and respect germinated and grew in the young people, as did the level of responsibility they took on, as common ground was forged between the YOYP ambassadors and youth workers.

Digital platforms and relationships

When young people are navigating relationships with adults, they are not only negotiating those relationships but also the organisational systems and structures that are supporting the adults in those relationships with them. Young people are marginalised in this manner, so John's role was to tip the balance in young people's favour, supporting young people navigating those relationships with other adults and organisations (IDYW 2009). This was the paradigm of the youth work process.

When young people from Highland volunteered to be YOYP ambassadors, they decided they wanted to use social media to connect with other young people and the world around them with a clear rationale for this based upon lived experience.

Anja – having large events in a single area is just not possible in Highland because of the spread of towns and villages and not having transport links to support it, costs for young people to get to places on public transport or commitment from family members would have been high, this put us on a digital platform very quickly.

John – The Highland YOYP ambassadors varied in age, location and socio-economic factors. Many of them were not known to my youth work organisation or to each other. The recruitment and selection of YOYP ambassadors was done through Young Scot, a national organisation. Once the recruitment and selection of YOYP ambassadors was completed, responsibility for working with the young people was handed back to each local authority, and this was the starting point for the YOYP Highland Digital Project.

This presented an interesting dynamic as the Highland YOYP ambassadors were representative of a cross-section of youth work organisations found in Highland

and had no existing relationship to John, or in some cases no existing relationship with each other or the local authority youth service.

Rachael – Coming from a number of different organisations meant we were able to bring different perspectives to policies, procedures and practices that didn't necessarily reflect those of Highland Council or our host organisation. This was translated into the work around our digital calendar, as we were able to pitch it as a way that any organisation or young person could engage with, while highlighting the potential for collaborative working.

Anja – Coming from a uniformed youth organisation, I understand the difficulty that young people face in trying to gain control of a social media platform: there are policies, procedures that you need to follow and you have to go through multiple people to get to the end goal. Often what you would like to post is changed so it fits with the strategic aims of the organisation. We wanted to challenge that and show that young people are capable.

Rachael – Using social media platforms to share the lived experiences of the YOYP ambassadors and other young people in Highland with a digital audience proved to be something that we, as young people, used as a way not only to show the barriers we faced in the North of Scotland, but to enable us to participate in the national Year of Young People Project in our own little way.

Using personal messenger services like Skype and Facebook to hold conversations with young people was the only way the project could have worked within the time constraints of a year, due to the financial and staffing resources available to the youth work service and the geographical spread of young people across the region. Young people were dispersed across the vastness of the Highlands, and it wasn't practical and nigh on impossible due to inclement weather, poor public transport links and after-school times, to find a time, date and location suitable which allowed everyone to be in the same physical space at the same time. Even when we did try and meet physically as a group, not everyone could attend. Working digitally to have conversations was the only way to be able to work and keep the momentum of the project. Throughout the year of the project, the group of young people met only four times in a physical space.

Anja – I missed the first initial meeting way back in January when everyone came together because I was snowed in. The north of the Highlands gets the snow way before everyone else does, so I woke up that morning and thought "I cannot get there".

Rachael – It wasn't until the day I sat down with Anja that I thought "I can work with her" because I never had a conversation with her that wasn't on messenger and just about the project. So meeting Anja in person and being able to notice what she was wearing and asking, "Is that a rugby top? What team is it?" – just something that we would class as being casual and being able to have a conversation.

In the beginning of using messenger services there were about 10 YOYP ambassadors and one youth worker in a group chat. This proved unwieldly in terms of a coherent conversation. What was interesting was the group chats that evolved into smaller working groups of three or four and PMs (personal messages). It was young people

who created these group chats and invited the youth worker into the spaces they had created. As well as having these shared spaces, John was to learn that the young people had group chats that they created with each other and without a youth worker present. It was in these chat spaces where we worked together, discussing events that were happening, who would attend, who could create a post and deciding what platform was to be used. We were also able to share documents, videos and pictures to collaborate on content for posts.

The chat spaces were more than just task-based discussion: young people got to know each other, they agreed and disagreed with each other, fell out with each other. So in this sense they were a true reflection of the forming-storming-performing-norming of a group process found in Tuckman's stages of group development (Tuckman 1965) that was now observable in a digital sphere whereas it traditionally occurs in a physical space. This digital space is where a youth worker is able to observe and work alongside young people in a group chat setting, as they get to know, understand and form relationships with each other. What is hugely beneficial, if there are issues within the group dynamics while working in a group chat, is that you can simultaneously PM different individuals at the same time; this is not possible in a physical space and it supports a different perspective and intervention than can be provided in a digital space – especially where there were differences of opinion in the group chat and the conversation would get heated.

The YOYP Highland social media platforms saw their audience grow across the Highland region, which was expected as the buzz of YOYP grew and youth work organisations and those working with young people shared and swapped stories digitally. What happened next was unexpected: as the online audience grew, it started to gain traction nationally. It was in this public-facing digital space of social media that young people started to interact with those people in positions of power, sharing stories of what they and other young people were doing locally, without realising the influence they were having, while simultaneously and unknowingly changing the structure of how a conversation would take place.

Under normal circumstances young people rarely have access to parliamentarians or people in positions of power, to be able to demonstrate and articulate the activities they are undertaking in their communities, let alone those young people from Highland. If they did, it would mostly be on an adult's terms and in a time frame suitable to them. Digitally we had a group of young people tagging adults and organisations who, young people felt, should be seeing the content they were posting; over time they began being targeted in this approach and gradually became critically aware of the influence and effect they had in the way content was created, what they said and who it was shared with. The targeting of content was aimed at policy makers, chief executives, locally elected councillors, government ministers and members of the Scottish Parliament (MSPs), as well as the National Youth Work Agency (Youth Link) and local youth work organisations. This really brought Highland YOYP ambassadors into scope and connected them to a much larger community beyond the realms of the offer found in the physical location of the small populations and remote places they lived. It widened their social spheres, and the young people grew in confidence as a result of seeing the comments, replies and interactions from posts they had created.

Lessons learned

Digital youth work has enabled young people in Highland to go beyond the realms of the physicality of their small and isolated communities. When travelling to other parts of Scotland, even continental Europe, they were still able to create content of their lived experiences using smartphones, while still having contact and the support of John from the Highland region through messenger services. This brings a new meaning to the concept of an international residential or offsite excursion without the physicality of youth work support present at the event a young person is attending – bring forward the digital youth worker of no fixed place of work. The sharing of lived experiences and the physical location where these experiences happen and where they are shared from allow for a shift in a young person's social perspective, to understand what connectedness means and how being connected to the world around them is constructed and understood.

Digital youth work should be seen as part of a mixed mode and not in competition with physical face-to-face delivery, as each has its merits and should complement each other in matching how young people want to engage with youth workers and youth work. As young people and the youth worker sat behind the firewalls of their engagement devices, there was still a desire to meet physically and this should be valued, because some of the nuances of meeting face to face are not apparent from behind a screen. When people are smirking, smiling, laughing and engaging with the social complexities of cooking and eating together, this can cement the social capital that is formed in a digital sphere.

Conclusion

Digitalisation of youth work in Highland has brought into scope a way of working, connecting young people and youth workers together that overcomes many of the traditional geographical challenges of living in a rural area comprised of remote and isolated communities, creating opportunities for socially marginalised young people to meet, discuss and share and develop relationships with others.

Anja – It let us interact with so many more young people that we would never have had the opportunity to interact with … and it made me realise that there are so many like-minded young people in Highland that are trying to work toward goals. I know, for myself, coming on to the project I didn't know youth work existed up north; it is something that I had never had the option to be a part of, but coming onto the project I have met like-minded people.

The spaces that are created and occupied for youth work to take place have evolved, from buildings and the streets. The digital spaces that messenger services and video conferencing provide should be seen as an evolution of these traditional spaces and woven into them, not sitting in isolation as parallel spaces operating independently of each other. Digital spaces have as much credence as the well-established forms of youth work methodologies where young people choose to occupy those spaces with the voluntary principle at the heart of youth work practice, where young people are free to come and go as they please.

It is important to recognise that there are subtle differences in having conversations digitally: it lays a filter between a youth worker and a young person, and some of the conversational nuances like intonation are missed when using a messenger chat. Video conferencing is not without its issues as you occupy a two-dimensional space where there is no depth: the points of reference and connection to the physical space found at the end of each person's device – and how people are seated within that space, are affected and respond to it – are negated, as the sense of periphery is lacking. Although this might be off-putting and a perception that it might limit aspects of social development, these are not insurmountable to engagement, nor to developing secure relationships with young people. One could advocate that digitalisation can support social and relationship development between a youth worker and young person. Even cushioning the physicality of a meeting when both occupying the same physical space, especially when a young person becomes vulnerable and discloses information about themselves. This can be less intimidating for some young people during a messenger conversation as it forms a social barrier when sharing intimate details about themselves where confidence is an issue.

Informal educational opportunities should start from young people's concerns and interests (IDYW 2009), having equity and equality of opportunity when entering and interacting in the orbit of systems and structures of youth work organisations. We saw informal educational opportunities present themselves, as the digital project grew, by listening to and encouraging thoughts and ideas while having an awareness of and understanding of the power the youth worker holds. Recognising and creating space in the discussions, and encouraging young people to bring forward ideas, is no different in a digital or physical dimension and should be part of the youth work process that is taken into consideration when dialogue is nurtured and when opportunities for critical examination are within reach and explored in a supportive way.

Digitalisation in the Highland region of Scotland has shone a light, brought into focus young people's experiences of how geography and social isolation need not define social experiences and informal educational opportunities. The use of social media brings into view the lived experiences of young people, which can have the power to influence conversations and alter discourse of a public audience which they engage with in a digital dimension.

Bringing this chapter to a close, it is worth remembering that if given the right conditions adults and young people can both be learners in the process of working on a project they have crafted together, keeping in view the importance of a democratic process throughout, because John learned as much about digitalisation and digital youth work on this journey with young people as they learned through social experiences and working with each other, communities and adults in positions of power from a perspective of rurality. Digitalisation does bring an alternative dimension to youth work, though it should be seen in context, since youth work principles and theory still exist and operate in this digital sphere. They were crafted decades before digital youth work existed, and I would advocate that these core youth work principles are still just as relevant and valid today, when relationships are formed in these new digital spaces.

Anja – If I was to give advice to other young people who are undertaking a similar project it would be to just go with it. It is a long process and it takes time to get adults on board with the idea and for you to gain a following. If you have an issue that is affecting you, do not be afraid to @, DM (direct message), Tag any individuals that can help you to make a difference. You will come to a crossroads and you need to make the decision on what journey you are going to take. It is a learning process for everyone and will take time to get right, but stick with it because this is the future of youth work.

References

Audit Scotland (2019), available at www.auditscotland.wordpress.com/2016/08/01/what-is-an-aleo-and-does-it-matter/, accessed on 22 October 2019.

Highland 2019 (2019), available at www.highland.gov.uk/info/695/council_information_performance_and_statistics/165/highland_profile_-_key_facts_and_figures, accessed on 31 October 2019.

IDYW (In Defence of Youth Work) (2009), "The open letter", IDYW, available at https://indefenceofyouthwork.com/the-in-defence-of-youth-work-letter-2/, accessed 2 September 2019.

Scottish Tourism (2018), available at www.scotland.org/features/looking-back-on-scotlands-year-of-young-people, accessed on 2 September 2019.

SYP (Scottish Youth Parliament) (2018), available at https://syp.org.uk/project/year-of-young-people-2018/, accessed on 8 November 2019.

Tuckman B. (1965), "Developmental sequence in small groups", *Psychological Bulletin*, Vol. 63, No. 6, pp. 384-99.

United Nations (1989), Convention on the Rights of the Child, available at www.unicef.org.uk/what-we-do/un-convention-child-rights/, accessed on 2 September 2019.

YouthLink Scotland (2019a), "The nature and purpose of youth work", available at www.youthlinkscotland.org/media/1255/statementonthenatureandpurposeofyouthwork.pdf, accessed 2 September 2019.

YouthLink Scotland (2019b), "Risk assessment: not implementing digital youth work", available at www.youthlinkscotland.org/media/3546/risk-assessment-not-implementing-digital-youth-work.pdf, accessed 2 September 2019.

Youth Link Scotland (2019c), "Case study: Instagram takeovers at YouthLink Scotland", available at www.youthlinkscotland.org/media/3548/social-media-youth-worker-guide-branded.pdf, accessed on 2 September 2019.

Chapter 13

Coding promotes the social participation of young people with disabilities

Thomas Schmidt, Jutta Schneider and Katrin Schuberth

Introduction

Algorithms and software already dominate large parts of our society, not only theoretically, but also very concretely. It is clear that the transformation of our world cannot be stopped – on the contrary, it is part of our lives and shapes our actions. And we cannot forever claim that this is all new territory (Schmidt 2015). There are codes in every piece of software all over the world. The Chief Executive Officer of Apple, Tim Cook, once said that codes could reach seven billion people globally. For each daily activity or learning subject, software and apps are relevant tools to facilitate, control or support them. The aspect of the holistic perspective that digital education should focus on was declared in *Dagstuhl* (Gesellschaft für Informatik 2016): confident citizens should not only know how to use software and apps, but they also should be equipped with coding literacy. It is nothing less than the basis for active social participation and co-determination, as a 14-year-old boy mentioned in one of our coding workshops: "Behind all software are humans who defined its functions and usage – I know how to draw a picture at the screen now and how to give commands to the computer in order to make my own digital moves."

Those who do not have a basic knowledge of computer science today will not be able to grasp many important questions of our time and will certainly not be able to actively participate in shaping digital worlds. It is, therefore, a matter of reaching all young people and imparting the necessary knowledge to them – regardless of their gender, social origin, physical limitations or individual learning capabilities and whether they are privileged or marginalised adolescents. Only those who understand the language of computers, the codes, or who can even program themselves, can understand the functioning of the digital world because code is the interface between humans and technology. Those who master the languages of code have already taken the first step from passive users to active designers.

This chapter is based on the experience of the German NGO Helliwood media & education, which is part of fjs e. V. Helliwood, which has facilitated coding workshops, trained educators in coding and developed teaching and learning material for computer science for over five years and within various projects (e.g. CODINC with

Erasmus+, the German CS-Initiative Code your Life, the 21st Century Competence Center, etc.). This chapter introduces the practical approach to coding activities which empower young people's understanding of the digital world, and points out which conditions are required for success in inclusive scenarios. This chapter also demonstrates the importance of raising awareness of the algorithms of the digital world and of understanding coding processes, alongside the principles and methods of learning.

The challenge: understanding the digital world

The world is constantly changing. The rapid pace of developments and drastic, sometimes disruptive, changes are increasingly affecting society as a whole and thus every individual.

This leads to three main challenges. We have to ensure that:

- young people are able to understand and reflect on the digital world;
- we reach all young people and nobody is left behind, regardless of gender, social and cultural background, learning status or any physical or mental limitations;
- the activities we offer to young people awaken their interest in coding, algorithms and technology.

The application areas of digital technologies are becoming more and more diverse and have an impact on almost every area of life. Therefore it cannot be an option, especially for young people, to face digital innovations unprepared. Digital technologies are being used eagerly by young people today. For example, almost 100% of them are on the internet every day or several times a week via different access points (Rathgeb and Behrens 2019a: 6). However, even one of the simplest digital applications, namely surfing the internet, is by no means trivial. There are countless configurations and intentions of use. In addition, it is hardly possible to separate online and offline, simply because too many devices are permanently connected. Those who do not have even basic knowledge here will not be able to grasp many important connections. Digitalisation also means that our society is becoming more opaque. The algorithmic processes that control the digital processes in the background are not even visible from the outside. In view of this fundamental change, for which we are still inadequately prepared, a fundamental question is, therefore: how do we get young people to understand the digital world?

Speaking, writing and reading are basic skills, even conditions of social participation in our society. Conversely, social connection and the possibility of participation are lost or at least considerably restricted if a person cannot speak, write or read. This is one of the reasons that led to the United Nations Convention on the Rights of Persons with Disabilities (United Nations 2006: Article 9). The UN Convention demands inclusion, that is, the equal participation of all people in social life. Inclusion is, therefore, a human right and also indispensable in the context of digital transformation. In the context of education and youth work, it is a matter of addressing all children and young people and imparting the necessary knowledge to them – gender, social background, physical limitations and individual learning strength must not play a

role. So the question is: how can we reach the extremely diverse group of young people in equal measure?

Digitalisation is a very complex topic. Teachers, educators and youth workers face the challenge to create learning situations that do justice to this complexity and at the same time open children up to learning. If it is possible to design learning processes in such a way that "Eureka" experiences are triggered as often as possible, this strengthens the willingness to learn, because a sense of achievement generates motivation. This requires learning opportunities that foster skills but that also reach children and young people emotionally and inspire them. Therefore, the question is: how do we create learning opportunities that link up with the life and experience of children and young people in order to arouse their interest and positive emotions?

As it turns out, there are many very good reasons to impart knowledge of the digital world to as many children as possible. The success of corresponding learning is closely related to the questions listed above. In the next section, we show why learning how to code might be the answer to all these questions. We also take a closer look at what exactly is to be conveyed to young people and what framework conditions are necessary for this, especially in inclusive settings.

Code – the unifying language of the future

In the past five years of our experience in coding workshops with children and young people aged from 8 to 16, one thing has been proven: coding is a language that mutually connects children and young people in learning situations and indeed encourages them to learn in co-operative learning settings – even (and especially) when it comes to very diverse learning groups. If you look at the practice of coding experts, the software developers, this obviously also applies to the professional context. In software development, programmers often come to a point in carrying out complex tasks where they have difficulty making progress on their own. Even if they were able to solve the problem themselves, it would at least take a very long time. That is why they generally chose a different path: They ask others for advice. This is more efficient because many problems have arisen somewhere in the world in the past. Therefore, there is no reason to laboriously search for a solution when it has long since been found elsewhere. Even in cases where a problem occurs for the first time, it is much easier to come close to a joint solution than a solution of one's own all alone.

When software developers network and exchange information with each other, it is primarily for professional reasons. However, similar things can also be observed far away from professional applications, especially in coding projects. Coding implies activities of several kinds, but it also animates the coder to analyse a problem and to face it, to implement creative ideas and to find pragmatic solutions. Our workshops have shown that in such learning situations there is a variety of interactions between the extremely diverse participants. Young people interact with each other in a completely relaxed way because coding is creative, colourful, diverse and fun, and it quickly leads to visible results. Thus, coding increases the motivation to face greater challenges. Low-threshold offers enable young people to get started without any previous knowledge. Codes represent a universal language, which – once

its basic rules have been understood – can be applied worldwide and equally by everyone. The learning objective – that code is the interface between people and technology – is underlined by those methods:

Young people can program

Programming is generally considered to be very difficult, abstract and incomprehensible to amateurs. Even experts doubtfully ask why children should have to deal with these complicated program codes. The discussion about implementing coding as an obligatory school subject is controversial. On the one hand, informatics is an individual subject. On the other hand, the curricula of other German federal states provide only a media literacy frame, which can be conducted in and adapted to each school subject (Lehrer Online 2019).

After all, the coding activities of our workshops serve to enhance code literacy by understanding the basics for realising code. In the right learning environment and with appropriate didactic support, young people can start immediately and write their first real codes in a very short time. They learn that writing a program is not a mystery, but ultimately a combination of creativity and logical thinking: "Now I communicate with my computer and create my own digital picture" (15-year-old girl). Adolescents quickly feel that it gives them a great advantage to be able not only to understand code but also to generate it themselves.

Dimensions of learning in terms of coding activities

From our long-standing experience in coding activities, especially with inclusive learning groups, we can identify crucial lessons as good practice examples for how to focus on different dimensions of learning. We describe this below and give advice on implementation at the end.

Learning coding like a language

Modern programming languages like JavaScript, PHP or Python emerged in the 1950s with the advent of computer technology. But the use of codes is much older and begins with the evolution of mankind. One needs to think only of rock paintings or later of the oriental cuneiform scripts, which developed from a pictorial script. The Chinese numerical notation, for example, is a very logical variant that is reminiscent of a programming language. In addition, music notation, of which there are several types, by the way, is an encoding. Also well-known is the use of pictograms and symbols, shorthand or the use of bar and QR codes, which are both widespread today. Young people have already learned secret languages or even perhaps made up their own as a child, and they may have learned the Morse alphabet to send each other coded messages with flashlights.

All the different forms of code mentioned above have two things in common: the code is always used to communicate and it can be learned. Although programming languages cannot easily be equated with natural languages, in both cases it is a matter of representing cognitive processes and making something understandable to a counterpart. Using a programming language, the computer should perform

a task the way we want it to. It's about understanding. And those who can make themselves understandable to others can understand them too. The same applies to communication with the computer. Whoever speaks the language of the computer not only can communicate with it but can also understand its elementary functional principles.

Like natural languages, code languages consist of words and syntax. But in comparison with natural languages, programming languages have a tiny vocabulary. There are not many words (respective commands) and rules (programming principles) needed to get immediate results. Young people quickly understand the structures of a programming language and apply the new words and rules. They "speak" the language, which means that they give the computer the correct commands (Helliwood 2018, 2019a-d). To give an example: as early as the late 1960s, Seymour Papert developed the programming language Logo especially for children at the Massachusetts Institute of Technology. This forms the basis for the programming app TurtleCoder, a modern interpretation of the programming language developed by Helliwood. The idea of TurtleCoder is to give commands to a small turtle on a drawing surface, which immediately leaves comprehensible "traces". TurtleCoder has a "vocabulary" of fewer than two dozen terms, which are used according to the syntactic rules of the programming language. The users can even invent new words/commands with the output they want to have and teach them to the turtle. The reduced vocabulary makes it possible for young people to quickly get into the systematics and structure of the new language.

Our advice for coding activities with young people with mental disabilities, cognitive impairment or learning difficulties is to choose coding apps that are clearly focused and get along with few commands. The interface of coding resources needs to be easily accessible and needs to have a simple structured usability. That way the young people can focus on the essentials and are not overstrained. If a coding app consists of too much complexity and provides too many functions, such as colours, options and commands, young people will be distracted from the actual coding tasks.

Learning by doing

"An ounce of experience is better than a ton of theory", wrote the educator John Dewey at the beginning of the 20th century. "An experience, a very humble experience, is capable of generating and carrying any amount of theory (or intellectual content), but a theory apart from an experience cannot be definitely grasped even as theory" (Dewey 2001: 150). For Dewey, experiences are "experiments with the world", with the help of which the world is recognised and thus forms the basis for learning (ibid.). From these convictions came what we understand today as "learning by doing". Following this motto, our coding workshops aim to enable the participant's own learning path and enable them to discover many structural elements of programming independently. For example, with the TurtleCoder, young people start with simple strokes to create complex figures. Word for word, rule for rule, children and young people can work through the programming language and its special features.

Even the developer of the programming language was convinced that young people learn best when they don't get the knowledge presented to them, but can gradually figure it out themselves. For example, during our learning activities young people start by giving simple programming commands to a human turtle (represented by a classmate). Later these commands are transferred to the programming app and learners realise that they can influence the result by adding lines of code or changing parameters. After only a short time, the learners develop the need to use further structuring elements, so that more complex programming principles such as loops and variables can be introduced. In the process, young people learn the things they need exactly at the moment when a problem requires that element for a solution. As a result, they trust their own achievements, which can enable the individual to grasp new opportunities. This strength-oriented attitude allows everyone, but especially people with negative learning experiences because of disabilities, to have a totally new learning experience. The applied principle of self-efficacy leads to a sense of achievement. Our advice is that, in inclusive learning activities, the right solution must not be given but is there to be discovered by the learners themselves in a team with pedagogical support.

Addressing different senses

It has long been known that emotions play a very important role in learning (OECD 2018). Those who are emotionally involved are more committed and are therefore more motivated. Motivation, on the other hand, gives the necessary stamina and helps a person to focus on a topic. Based on positive emotions, children and adolescents learn more easily and more persistently when it comes to overcoming problems. Furthermore, it's an accepted fact that fun and emotions play a very important role in learning success and motivation.

In addition, everybody learns differently and needs different appeals. To enable learning success and motivation for all participants, it is necessary to address different senses and to include physical activity as well as multi-sensory learning as consciously chosen components of the didactic concept of the activities. This is one main brick in our inclusive offers: children with disabilities may miss some senses. This must not be a disadvantage. For example, if a child is not able to see, we need to stimulate other senses to experience the tasks and outputs. But also children with learning difficulties benefit from activities that address more senses. If learners have the opportunity not only to see but also to feel and hear something, the learning material is stored deep in their long-term memory rather than in the short-term memory. When emotions are addressed, the joy of learning increases and with it comes the motivation to learn. Coding activities are perfect for this because coding is creative and has various outputs.

Firstly, there are programming apps that address different senses. You can code music and hear your programmed sounds, you can do art and animations to see wonderful visualisations or you can experiment physically with microcontrollers and robots to arouse the interest and motivation of the learners. An amazing example of this is the software Sonic Pi, a code-based music creation and performance tool. With just a few lines of code, complete pieces of music can be put together. Commands, sounds

and samples, loops and effects are inserted into the program and then played back. The simple syntax ensures a low entry threshold. The results can be heard straight away and provide an immediate sense of achievement. This empowers young people and motivates them to persevere and learn or experiment more.

Secondly, coding does not just take place in front of the screen. In order to support and internalise what has been learned, the tablet is repeatedly set aside from time to time. For work with the turtle, for example, structural principles can be stimulated offline without having a computer in use, but together with the other learners. The children step into the role of the turtle and run the required figures themselves. This makes it easier for them to understand the right angles and directions: they have to consider exactly how far they have to turn and how many steps have to be taken. Once they have understood these principles, they are better able to program more complex functions and find new solutions. Such offline coding helps learners to understand abstract processes with several senses by imitating these processes analogously. By including everyday situations, many algorithms from real life can be associated with programming principles. For example, the folding instructions for a paper airplane and a recipe for a delicious chocolate cake both resemble the sequence of a computer script that has to be processed exactly in the specified order. Thus, programming becomes an everyday process that can be experienced and reproduced analogously with the senses. For young people, coding is not an abstract process anymore and has a strong connection to their life.

It is our belief, especially if young people are missing one or more senses, that it is important to offer tools that have a big variety of outputs and address different senses. Young people with disabilities are often cut off from learning how to code, as it usually appears complicated. But with creative coding apps, they get insights into coding without being overstrained.

Learning together

The aim is to involve all young people, so that no one is left behind regardless of gender, social and cultural background, learning status or any physical or mental limitations. Coding activities are predestined for shared learning, teamwork and collaboration because coding connects people. This is manifested in the idea of professional programming to share code to make things easier and even better. In our coding activities, students always work in pairs or even groups to share and discuss ideas or solve problems and face challenges together. Once students know the basics, they can teach younger learners or their peers and help out when problems occur.

Thus coding offers the possibility to think more broadly about the topic of inclusion. Working in a group, every participant can bring in their own strengths and the team can split tasks with regard to individual skills and preferences. Just to name one example in a scenario with coding the turtle offline: a child that is more practical-minded might mark the figures on the floor with masking tape when the group wants to code, e.g. a large square. Another child in a wheelchair follows the line representing the turtle. This child has the strength to even better understand the commands for the turtle, because the child's movements (for example, turning) follow the same logic as in the coding. Other children, who are able to speak, can

then give the commands. Coding can be learned particularly well together, even and especially in diversely composed groups. Our experiences demonstrate that, regardless of the individual requirements of the participants, young people code with great curiosity and an incessant thirst to explore.

Providing access for all

In Germany, 13% of the total population are people with a recognised disability (Aktion Mensch 2019). Many of these people are subject to (sometimes considerable) restrictions in their movement, their senses and/or their ability to speak. For people with a disability, digital technology can become a practical and essential aid for coping with life, which replaces limited or missing bodily functions. It thus offers those affected the chance at a self-determined life. Not only because of the special importance of digital technologies for people with disabilities, it is essential to also give children and young people with disabilities the chance to learn how to code. And we are convinced that every child can learn how to code. In inclusive learning scenarios, however, the technologies and apps in use need additional assisting options for some children.

Our programming app TurtleCoder (www.code-your-life.org/turtlecoder), for example, includes assistance functions that go beyond the familiar standard applications. The app has a clearly structured and focused appearance which improves usability for people with learning difficulties. For users with physical disabilities the Xbox Adaptive Controller with a variety of connection options for additional devices, such as buttons, pads and joysticks, can be plugged in. For users with mental difficulties and with problems in reading and writing, the commands for the turtle can be controlled solely via the computer keyboard. TurtleCoder can be used as a Web-based app or downloaded from www.code-your-life.org/Praxis/Logo_Turtle/1349_Der_TurtleCoder.htm as an offline version for Windows. Commands are in English, so it can easily be used in different countries or with young people of different languages. TurtleCoder is free of charge and available for everybody. No registration is needed. It can be used by individuals as well as education institutions or youth workers.

The didactic approach of coding activities

As with all teaching and learning situations, some advice and didactic principles apply to code learning units as well, and these are also decisive for learning success.

Start at the age of 8

The best age for starting coding activities with programming apps is at the age of 8. This opinion is justified from several perspectives. First of all, at this age, children are very curious, full of desire to discover and very open to new technologies, devices and applications. But also, from this age on, media activities of one's own are carried out more autonomously (Rathgeb and Behrens 2019b: 15). Autonomy in dealing with the digital world then increases drastically and one's media literacy, therefore, becomes ever more important. At the same time, with increasing age, the interests of boys and girls become vastly different. Conversely, this means that children can

be equally interested in the topic if they start coding at an early age, regardless of gender. According to developmental psychologist Jean Piaget, children between the ages of 7 and 11 begin to apply logical thinking in concrete situations. At this stage, using logic, they can perform tasks such as mathematical operations at a more complex level (Piaget 2003: 156ff).

Young people have already gone through those steps of their personal development. Having this in mind educators can take up young people's analytical skills, build upon them and foster them especially with coding activities. After using digital media autonomously for several years, young people have already been confronted with the different challenges of a digitalised world (e.g. fake news, hate speech, excessive media usage). On their way to becoming a competent media user, young people at the age of 15 still need to understand those challenges. Coding helps them to understand the processes behind the screen.

Teach not only fun but computer science

Of course, coding activities are mostly fun and often playful, but in the end they are not just that. To go beyond fun-filled activities, "real" computer science needs to be taught, in which real, logically and syntactically correct codes are written. Young people then gain completely new and deep insights into the functioning and structure of the digital world – they learn to understand this world with its special circumstances.

One of the main aims of coding workshops is to provide young people with basic informatics education in accordance with the German strategy of the Conference of Education Ministers "Bildung in der digitalen Welt", or education in the digital world (German Conference of Education Ministers 2017). They will get to know and use a programming language. They use code and the required syntax and learn why an integrated development environment (IDE) is an important tool for software development. In this way, they can not only identify and understand basic principles and functionalities of the digital world but also make more conscious use of them. Young people learn what an algorithm is and which patterns and structures algorithms have (such as loops and conditions). On this basis, they can ultimately perform (simple) calculations, use variables and operators to develop problem-solving strategies and implement them using an algorithmic sequence. An important aspect of coding is to break down problems into smaller subproblems. They learn functions so that they can ultimately understand, describe and reflect on the meaning of algorithms and their impact on the digital world.

By doing so, and by actively exploring coding for themselves, trying out solutions, evaluating results and testing new approaches, young people have the important learning experience that they can also change and directly influence something in the digital world itself. This is an important step from passive user to active, reflective designer of digital technologies. Young people not only learn how to code, but they also foster 21st-century skills like problem solving and critical thinking. This is important in school, in everyday life and especially in the digital world. Once you are trained to challenge problems and find different solutions, you will be able to apply your skills to other areas.

Think differentiation from the start

Most learning groups are made up of individuals with different characteristics and capacities, even at the same age level. Young people are at different individual stages of development, have different affinities and learning motivations, and various levels of competence. Of course, there are different genders in the group, young people with and without physical limitations and disparate levels of learning. In addition, their social backgrounds and experiences in dealing with digital technology differ. Various attitudes, values, mentalities, needs and cultural characteristics also influence the learning situation.

The aim of the – highly relevant – topic of coding should be to do justice to the young people's different learning preconditions and offer all young people good learning opportunities. Differences must not be ignored; rather, they should be considered in advance. In consequence, coding activities need to be versatile and adaptable to different learning speeds and situations. This means, from a technological point of view, a focus on accessibility within the digital coding tools, and, from a didactic point of view, designing versatile workshops that can be adapted and adjusted to the level of difficulty. With individual help and an activating form of teaching, coding can be made accessible to practically every adolescent.

Stigmatisation-free learning situations

An essential basis for the successful conduct of a coding workshop is confidence in the skills and intuitive problem-solving competence of young people. The work needs to be deliberately kept gender-neutral. The focus is on young people's individual learning strengths. Differentiated approaches – for example, for persons with particularly strong learning skills or persons with a disability – are used when the situation demands it.

Instead of a rigid concept, coding takes place in an open learning environment. The right solution is never given. Rather, it is discovered within a team by the learners themselves. This approach has shown time and again that the gain in knowledge can be even greater if the most direct and simplest solution is not found immediately. In programming, detours can lead to equivalent, often even better solutions. This requires a learning environment without stigmatising evaluations, which in turn enables young people to develop the learning content in a sophisticated, independent way, considering individual approaches. Here, the learners often have a sense of achievement which they themselves were not expecting beforehand.

Lessons learned

During our workshops with almost 120 000 young people who have benefited from our content, we have identified four main lessons for successful inclusive coding workshops.

Creating open learning situations

One way to deal constructively with the heterogeneity of inclusive learning settings is to create open learning situations. In practical terms, this means structuring

learning content, methods and objectives in such a way that different processing and solution methods are possible. Rigid teaching units are replaced by more individual ways of dealing with teaching content. This means that the organisation of the instruction is no longer primarily derived from the subject matter. Instead, the learning processes are increasingly taken into account, along with different forms of appropriation and learning paths.

Guiding rather than teaching

Creating open learning situations is a complex matter. Therefore, we have to change the educator's role. Trainers of workshops and coding activities must leave behind the lecturing perspective and become learning companions. This enables a more individual design of the teaching content and an overall open learning situation. Learners then can be guided on their individual learning paths.

Allowing mistakes

In learning situations, we need to establish a culture of error. This means that a positive culture of error is permitted in the first place, especially in opposition to the deficit-oriented assessment of performance that still dominates today, which can easily lead to the exclusion of young people who are less able to learn or who are sensitive. In addition, mistakes help learners ask the right questions, become creative and think about various solutions. The aim is to recognise and use mistakes as learning opportunities. Coding shows again and again that there is no one single solution, but that several different solutions are possible.

Where there is a culture of error avoidance, many potential learning opportunities are lost. Young people with disabilities are often confronted with the recognition of their weakness and deficits. A positive learning environment with opportunity orientation values their individual strengths. This strengthens learners because it promotes confidence and trust in one's own learning potential, rather than limiting it. Because: "From mistakes learns he who gets the chance to understand in retrospect what the mistake actually consists of and how it came about. In this sense, only those who are allowed to make mistakes learn to avoid mistakes" (Althof 1999: 8).

Creating a positive and flexible learning environment

By changing forms of learning we also have to change the environment we are learning in. Open, activating and collaborative learning with greater consideration of individual skills and characteristics requires different spatial structures. This naturally concerns the integration of new technical equipment into learning environments, such as the use of computers and the associated didactic concepts. It can be assumed that the progress of technical development will lead to an even stronger integration of this technology into teaching in the future. This integration of ICT will be accompanied by numerous architectural, infrastructural and organisational challenges. Modern learning spaces must be equipped differently and must be used much more flexibly than is usually the case nowadays. One has to also have in mind that the technical equipment itself has to be flexible. One of the most important lessons we

have learned about coding activities is that we need coding apps and tools that are low-threshold but challenging at the same time, and must come with accessibility solutions. This also applies to the coding resources, tools and apps used. Most coding apps for children are either too complex for children with mental disabilities and/or learning difficulties or too easy and simple for faster learners. Thus, the motivation to develop one tool that fits all individual needs and facilitates inclusion inspired the design of TurtleCoder.

Conclusion

Educational practice has shown that young people quickly understand the principles and structures of a programming language and can work with this new language within a very short time. If the conditions are right, young people can learn to program and thus gain knowledge and develop the skills necessary to understand the full implications of digitalisation. Those skills will support them in developing an attitude towards change in societies, which will be necessary to exist in society and deal with fast-changing processes. Learning how to code and understanding algorithms are becoming more and more important and they are somehow becoming a cultural technique. Therefore, it is imperative to design and offer coding learning activities in inclusive contexts too. If offering coding workshops in inclusive settings, there is some advice that needs to be considered:

- Choose a tool and programming language that is both low-threshold and simply structured for slow learners or young people with mental disabilities, but also adjustable in level of difficulty for fast learners.
- Cross-check if the tools can be used by young people with physical disabilities, e.g. is it possible to navigate the interface via keyboard for young people who are physically unable to use a trackpad or touchscreen? Or are there different aids, such as audible support?
- Make sure that you help the learners to really understand coding principles; do not only code for fun.
- If possible, integrate tools that address different senses and allow the learners different learning approaches.
- Prefer open learning situations that give the learners more freedom in choosing their own ways, learning paths and tempi. Allow mistakes and create a positive atmosphere.
- Create learning situations that enable diverse methods of processing the learning content, address several channels of perception, link new content with everyday experience and existing knowledge, and allow for different solutions. Change the teachers' or educators' role from conveyors of knowledge to learning guides who create the framework conditions for contemporary and sustainable learning, which can take place as independently as possible of individual dispositions or restrictions.

While educational habits in schools have to change as a result of digital transformation, coding activities support individual learning strategies, as well as open and active learning situations. Therefore, coding activities are well suited to inclusive learning.

A coding activity is modular in construction, each step within it can be made at different speeds and it involves learners independently of their personal abilities. Additionally, coding workshops support the European Guidelines for Digital Youth Work (European Expert Group 2019) and contribute to social inclusion because they engage and empower young people in being active and creative with digital technologies. Young people are enabled to become the constructors of technology. The critical thinking competences support them in developing an attitude towards permanent digital transformation with rapid technological changes. In the end, we strongly believe that all young people should be able to code and should have the opportunity to do so. Inclusion is where everybody may take part and everybody is involved.

References

Aktion Mensch (2019), *Menschen mit Behinderungen*, available at www.aktion-mensch.de/dafuer-stehen-wir/was-ist-inklusion/un-konvention.html, accessed 1 September 2019.

Althof W. (ed.) (1999), *Fehlerwelten – vom Fehlermachen und Lernen aus Fehlern*, Springer Fachmedien, Wiesbaden GmbH.

Dewey J. (2001*) Democracy and Education. A Penn State Electronic Classics Series Publication*, The Pennsylvania State University, Pennsylvania.

European Expert Group on Digitalisation and Youth (2019), Report: European Guidelines for Digital Youth Work, available at www.jff.de/fileadmin/user_upload/jff/projekte/digitalisierung_jugendarbeit/DAYW_training_material/european-guidelines-for-digital-youth-work-web.pdf, accessed 25 October 2019.

German Conference of Education Ministers (2017), Strategie der Kultusministerkonferenz "Bildung in der digitalen Welt", available at www.kmk.org/themen/bildung-in-der-digitalen-welt/strategie-bildung-in-der-digitalen-welt.html, accessed 1 September 2019.

Gesellschaft für Informatik (2016), *Dagstuhl Erklärung – Bildung in der digitalen vernetzten Welt*, available at https://gi.de/fileadmin/GI/Hauptseite/Themen/Dagstuhl-Erkla__rung_2016-03-23.pdf, accessed 22 October 2019.

Helliwood (2018), Best practice from Helliwood media & education at fjs e.V: Code Camp 2018 am ZKM in Karlsruhe, available at www.code-your-life.org/Blog/Archiv_2019/1453_Rueckblick_IdeenExpo_2019.htm, accessed 1 September 2019.

Helliwood (2019a), Best practice from Helliwood media & education at fjs e.V: So war die IdeenExpo 2019, available at www.code-your-life.org/Blog/1453_Rueckblick_IdeenExpo_2019, accessed 1 September 2019.

Helliwood (2019b), Best practice from Helliwood media & education at fjs e.V: Peer learning workshops in Berlin, available at http://codinc.fun/blog/peer-learning-workshops-berlin, accessed 1 September 2019.

Helliwood (2019c), Best practice from Helliwood media & education at fjs e.V: ERROR – The Art of Imperfection, available at https://drive-volkswagen-group.com/driven-by-kids/, accessed 1 September 2019.

Helliwood (2019d), Best practice from Helliwood media & education at fjs e.V: CODINC | Programmieren füp alle!, available at www.das-lernzentrum.de/Angebote/Medienkompetenz_vermitteln/1274_CODINC.htm, accessed 1 September 2019.

Lehrer Online (2019), Curricula of the Federal States, available at www.lehrer-online.de/fokusthemen/dossier/do/lehrplaene-der-bundeslaender/, accessed 22 October 2019.

OECD [Organisation for Economic Co-operation and Development] (2018), Study on social and emotional skills, available at www.oecd.org/education/school/UPDATED%20Social%20and%20Emotional%20Skills%20-%20Well-being,%20connectedness%20and%20success.pdf%20(website).pdf, accessed 21 October 2019.

Piaget J. (2003), *Meine Theorie der geistigen Entwicklung,* ed. Fatke R., Band 142, Beltz, Weinheim.

Rathgeb T. and Behrens P. (2019a), *JIM-Studie 2018: Jugend, Information, Medien. Basisuntersuchung zum Medienumgang 12- bis 19-jähriger*, Medienpädagogischer Forschungsverbund Südwest, Stuttgart.

Rathgeb T. and Behrens P. (2019b), *KIM-Studie 2018: Kindheit, Internet, Medien. Basisuntersuchung zum Medienumgang 6- bis 13-Jähriger*, Medienpädagogischer Forschungsverbund Südwest, Stuttgart.

Schmidt T. (2015), *Neuland: 40.000 Jahre Medienkompetenz*, BusinessVillage, Göttingen.

Schmidt T. (2017), *Es lernt der Mensch und nicht das Gehirn*, ed. Erpenbeck J. and Sauter W., Handbuch Kompetenzentwicklung im Netz: Bausteine einer neuen Lernwelt, Schäffer-Poeschel, Stuttgart.

Schmidt T. and Schneider J. (2020), "Das Turtle-Buch – Ein Handbuch zum Programmieren für alle in inklusiven Lernszenarien, Förderverein für Jugend und Sozialarbeit e.V.", available at http://player.edudesk.de/Book/cyl_das-turtlebuch, accessed 21 August 2020.

Sonic Pi (2019), [a code-based music creation and performance tool], available at https://sonic-pi.net/, accessed 17 December 2019.

Turtle Coder (2019), [a coding tool for young people] at www.code-your-life.org/turtlecoder, accessed 17 December 2019.

United Nations (2006), Convention on the Rights of Persons with Disability, Article 9, available at www.un.org/disabilities/documents/convention/convoptprot-e.pdf, accessed 21 October 2019.

Chapter 14

From digital skills to digital ethics: uncovering the politics of exclusion and empowering strategies of self-inclusion in digital ecosystems

Björn Bohnenkamp and Lukas Findeisen

Introduction

Youth workers are faced with the effects of digitalisation in several areas. On the one hand, digitalisation enables young people to communicate with friends from other countries, in a rich and interactive way. It offers new and more complex ways of accessing information, education and entertainment. Furthermore, it improves the efficiency of organisational matters, such as time management, shopping or research. On the other hand, youth workers, like teachers or social workers, see some young people without access to digital infrastructure or – possibly worse – lacking the relevant skills to reflect on the impact of their digital activities.

These phenomena can be described as facets of social exclusion or, in other words, the lack of social inclusion. Social inclusion has been defined by the Council of Europe, in the context of youth work, as "the process of [an] individual's self-realisation within a society, acceptance and recognition of one's potential by social institutions, integration (through study, employment, volunteer work or other forms of participation) in the web of social relations in a community" (Council of Europe 2020). Digitalisation leads to many challenges in society, by changing self-realisation in different contexts, like familiar communications, workplaces, markets and political participation (Wangler and Botthof 2019). Thus, it leads to new facets of social inclusion or exclusion.

The fact that people suffer from new forms of social exclusion as a consequence of digitalisation is often defined as the digital divide. Traditionally, the digital divide has been seen as a problem of access to digital technology. However, more recent research frames the digital divide as a "disparity of skills" (Epstein et al. 2011) or as a "second-level digital divide" (Hargittai 2002) – for example, in how people perform online searches depending on their skill in using this tool. Policy makers also focus on the necessity of skills and knowledge as essential requirements for an "inclusive information society" (ITU 2005; Carretero et al. 2017).

In this chapter, we present a framework for addressing social exclusion in the digital world based upon several levels of digital skills and educational approaches. This framework has been developed, tested and implemented at Karlshochschule International University ("Karls"). Its mission is a holistic and reflective perspective on management skills. This leads to a strong emphasis on sustainability, ethics and emancipatory issues. It applies an educational approach which also helps bridge traditional forms of youth work and academic teaching.

The SENSE digital framework: making SENSE of the digital world

In 2018, a Centre for Civic Engagement and Responsible Management Education was established at Karlshochschule. It was funded by the government of the state of Baden-Württemberg in Germany. It was called the SENSE Centre, the name symbolising the idea that sense-based experience is required to make sense out of one's own identity. The starting point for socially responsible management of education is that future challenges will not be only economic and technological but lie also in the "inner infrastructure" (Welzer 2011). This infrastructure can not only be described and learned but must also be experienced in practice.

SENSE is based on the idea that ethical beliefs and behaviours are not adequately described by rules, norms or principles. Rather, one's identity must incorporate an idea of "lived ethics" as a spontaneous and non-codifiable practice. Ethical values are, thus, integrated through the senses and experiences in the personality. Like the rest of Karlshochschule, SENSE pursues an experiential learning approach, which means "learning from experience" or "learning by doing". Here, the traditional formal education approach of a university is combined with, and challenged by, non-formal educational arrangements – similar to educational approaches in youth work. According to this arrangement, experience-based learning allows the learners to immerse themselves in a real experience. It encourages them to reflect on their experience to develop new skills, attitudes or ways of thinking. Additionally, through this approach social inclusion can be fostered.

Within the SENSE Centre, one of the main projects is the development and evaluation of a curriculum on digital skills and knowledge, benefiting from experiences in previously presented activities. All parts of society are being transformed drastically right now through the process of digitalisation. Therefore, the aim of this project is to deal with the effects of digitalisation on communication and collaboration structures in business and society. The progressive digitalisation of society requires new skills. This includes young people's ability to assess the potential impact on themselves and others in digital environments, the ability to understand and use automation and digitalisation in a SENSEitive way, the ability to build trust and sustainable relationships in digital environments, and the capacity to analyse and involve ethical implications in decisions (including decisions by artificial actors) in (semi)automated environments.

In the next section, we present the three main conceptual building blocks for this project. First, we present our leading objective, known as "digital sustainability", and we sketch out the different fields or "digital ecosystems" in which sustainability has to be achieved. Second, we differentiate between three different levels of education that lead to different competences, how these might lead to stronger inclusion and digital skills, and how

these competences are addressed in the learning processes at Karlshochschule. Third, we discuss an outlook leading towards a concept of digital ethics and virtual virtues.

Sustainability in digital ecosystems

The term "digital sustainability" has often been used for the potential of digital means for fostering economic, social and ecological sustainability (Linkov et al. 2018). Recently, digital sustainability has also been shaped as a term reflecting the fact that digital ecosystems can be sustainable or not (Stuermer et al. 2017). Based on personal critical reflection on usage possibilities, strategies are developed that are sustainable on many levels; that is, they do not consume resources but preserve them in the long term.

We discuss the concept of sustainability in four different ecosystems. The term "ecosystem" reflects a holistic perspective that does not only include the egocentric perspective of utility maximisation – which characterises the leading academic paradigm of other management schools. Young people are faced with digital technologies and processes in many different ecosystems. The authors of this chapter suggest that we should differentiate between a personal ecosystem, an institutional ecosystem, a transactional ecosystem and a global ecosystem to lay out a framework for digital skills.

The personal ecosystem includes personal relationships with all digital interfaces. It addresses questions about the self, such as "How do I use digital media, and what influence does this have on my everyday life?" Moreover, it covers the challenge of a "digital career": how do I portray myself online, how do others see me, how do I want to be – especially with regard to my future career? Last but not least, questions about changes in consumption are addressed: how is digitalisation changing our purchase behaviour, or our consumption of media, time and products? A first contribution is the development of workshops, where young people learn to reflect on their behaviour in social media. They understand how they see themselves, and then we discuss how others see them and if they really want to change this situation.

The institutional ecosystem can be a school, a university or a company. It can also include social initiatives, unions, NGOs and youth organisations. When software and apps, like WhatsApp, Skype, Slack, Basecamp or Yammar Workplace, are used, it transforms the way organisations work, particularly their organisational structures and communication processes. Questions arise, like Does my organisation have a strategy for the digital era?, How is the strategy implemented? or What may be achieved through this strategy? These questions are very important for any kind of management education because management is nearly always organised in an organisational ecosystem.

Transactional ecosystems are all kinds of arenas where data, knowledge, money, products and services are exchanged. In our society many of these arenas take the form of a marketplace. Here the important questions are different. How do markets and other ecosystems interact with each other or change? How do the roles of producer and consumer change? How do power relationships change? Who has rights and access to data? How do marketing strategies and target groups change accordingly? How can the digital world be connected to the analogue? These questions transform the education of marketing. Marketing should not only be discussed

as a discipline to promote products and services in a more profitable way, but as a discipline to study the nature of exchange relations.

The global ecosystem addresses all kinds of questions, which go beyond institutions and marketplaces. How does the internet change global and social power structures, political forms of communication and representation? But also how does the internet pose new challenges to ethical reasoning in the social ecosystem? Questions like these have been discussed at the Digi.Talk (Effekte 2019), an open talk format organised by Bohnenkamp in co-operation with the city of Karlsruhe and hosted by Karlshochschule. We think that this establishment of a local forum that addresses digitalisation or the social and global challenges can lead to a greater (local) awareness of future inclusion or exclusion. It is important to emphasise how, through the adoption of practices like this in other places, open spaces for a diverse background can be created. From experience in Karlsruhe it is certain that youth workers of all kinds use these opportunities to discuss their ways of dealing with young people's digital experiences and share them with formalised institutions.

Levels of education: digital literacy, digital skills, digital ethics

Although the European Training Strategy (SALTO 2019) does not explicitly refer to the relevance of developing training elements for the challenges of digitalisation, some member states have recognised the necessity of developing such a strategy (Youth Council of Ireland 2015). In Germany, there has also been a vibrant discussion about a relevant model for education in the digital world. Our framework builds on the model presented by German research groups, including the German Association of Computer Science, the "Frankfurt Dreieck" (Weich 2019). This model includes analytical, reflective and creative components.

Figure 4: Ecosystems

In all of these relevant ecosystems – personal, institutional, transactional and global – young people can learn on three different levels. They can learn the rules of digital ecosystems (analytical perspective: instructive knowledge), they can learn to use the tools for working with digital infrastructures (creative perspective: constructive knowledge), but they can also learn to reflect on digitalisation in an ethical way (reflective perspective: reflective knowledge). These different types of knowledge negotiate the topic of inclusion/exclusion, as we discuss in the following paragraphs.

Concerning instructive knowledge, the students are informed about the changes resulting from digitalisation, the new possibilities and the technical solutions. The goal on this level is to gain digital literacy (Payton and Hague 2010). Fields of study on this level include the impact of digitalisation for marketing strategies, project management or scientific methods. Instructive knowledge uncovers processes of political and/or economic exclusion. In the market ecosystem, students explore how the usage of online services enables companies to establish data-driven strategies. These strategies can imply politics of exclusion, especially of young consumers (cf. Boyd 2014; Coyette 2015).

The next step is constructive knowledge. Students with digital literacy are trained in the use of relevant technologies and have the opportunity to practise. At Karlshochschule, these digital skills can be practised in company projects or in a semester specifically dedicated to digitalisation. In this semester, students discuss the future of hybrid events, new business models for the games industry or strategies of digital communication. Digital skills enable young people to actively include themselves in fields of digital interaction. In general, this activation strategy is an established practice in youth work to enable young people to "shape their own biographies" (Pohl and Walther 2007). These digital skills can particularly enable students to apply for interesting jobs in a range of industries.

In a later stage, students are supported to reflect on the new possibilities and the personal, social or ethical implications of their use. We encourage our students to write diaries about their personal learning experiences or to contribute to (digital) group discussions. These didactical practices happen in modules covering topics like Ethics or Change and Innovation. The reflection level is intended to be sensitive to digital ethics.

We want to motivate our students to change the rules of the game and to find solutions for less social exclusion in our world. Socially constructed power structures have to be deconstructed. In the Ethics module, they learn basic historic approaches to reflect on management, economics and practice in general. In the module Change and Innovation, young people learn to discuss the impact of (mainly digital) innovations in a digital environment. They learn strategies to facilitate change and reflect the changes in their personal learning process in a learner's portfolio.

Applying SENSEual learning: digital ethics and virtual virtues

We believe that many of the concepts that have been developed at SENSE, particularly those around digital ethics, can be useful in education and youth settings elsewhere. The necessity to address the issue of digital ethics on a European level has been

mentioned by researchers (Floridi 2018) and policy makers, like the European Data Protection Supervisor, who organised a public consultation on digital ethics in 2018 (EDPS 2018). However, digital ethics is not limited to data security. Royakkers et al. map six different areas where digital ethics is involved: privacy, autonomy, safety and security, balance of power, human dignity and justice (Royakkers et al. 2018).

What can be a guiding principle for developing digital ethics? Floridi mentioned that sustainability in the biosphere needs a counterpart in the digital world, which he calls "the infosphere" (Floridi 2018). He argues that acceptability and preferability go even beyond sustainability. In this chapter, Floridi's idea is followed to formulate the vision of virtual virtues as part of an embodied ethicality (Küpers 2015).

To lay out an approach for digital ethics and virtual virtues, a separate look at the different terms is required. Ethics is a part of philosophy. It tries to conceptualise ways of making a "good" decision or "doing the right thing". In ethics, there are various approaches to how to reason (Sahakian and Sahakian 1966). Teaching digital ethics does not mean telling learners what's right or wrong, but enabling them to make the right decision on their own. Therefore, we need embodied abilities of analysing situations, the potential impact of behaviour and personal tactics, to decide what to do. These abilities must go beyond known situations and scenarios, because digitalisation will provide new situations with new ethical challenges in the future.

Youth workers should be able to establish digital literacy or develop digital skills, as well as going beyond them to foster the evolution of a critical mindset, including a set of virtual virtues. What could these virtual virtues be? Defining these virtues is part of our ongoing project at Karlshochschule. In our SENSE project, we hope to present some more comprehensive ideas about the possible future nature of virtual virtues. Currently, we discuss digital updates for concepts like honesty, authenticity, justice or responsibility. A didactical way of putting these considerations into practice is the usage of simulations, interactive games or case studies. To do so, the authors have developed various hypothetical cases, of which two are presented in this chapter. In a seminar or workshop the case is presented to the participants and then a group work or discussion about ethical issues is facilitated. Both cases are meant to be used by groups at any level of civil society organisations. The first case is a situation of adapting privacy regulations in a local organisation; the second case deals with the influences of invisible algorithms on the decision-making process.

Digital ethics case 1: implementing privacy regulations in a youth club

Clara is in a leadership position (on the board) in her local youth club, which has around 200 members, and she needs to plan for the year ahead. The general assembly is approaching, with a variety of needs arising. Most people want to discuss the design of the new t-shirts at the assembly. However, due to the new GDPR, she needs to prepare information for the meeting and develop an approach on how to raise sensibility for the topic of data. The challenges range from using the blind carbon copy (BCC) function, and the way the lists of events are stored online, to using a messaging application. Although the youth club is devoted to creating a safe space for meaningful engagement and dedicated to people of the ages 12-22, many of the

people who contribute to running it (volunteers and staff) are elders who are – as digital migrants – more sceptical about all these changes.

Guiding questions: Where is the conflict in this situation? How should she prepare the meeting? What needs to be taken into consideration?

Going back to the idea of the four different ecosystems, all of them can be displayed and discussed on the basis of this scenario, and so can the ethical implications. The personal ecosystem, here, is the relation between the person embodying the leadership position (as well as all the members of the group) and digital interfaces. So, the values, especially inclusion, of each person influence the way the interaction will take place in the digital world. The choice of media to communicate may include or exclude a certain group – consequently one virtue to be highlighted here is awareness in this new dimension of the consequences of personal actions.

The institutional ecosystem is displayed through the youth organisation itself being part of other umbrella organisations (national youth councils, international organisations) and society. Each of these layers provides legislation, recommendations or strategies that the organisation has to meet in order to keep running, and these lead to the transactional ecosystem. One example is the digital services that an organisation uses. These services are provided sometimes by third parties, driven by their particular (economic) mission (for example, Facebook, Slack, Basecamp, Yammer) or, looking even further, by the attitudes of the individual people creating the services. As Collmann points out, "The attitudes that big data researchers have are as important as any tools or laws" (Collmann and Matei 2018). Building on the awareness of these challenges, as a virtue to be highlighted, is the self-understanding of being part of multiple systems, each with their own rules and tools. Choosing to use a service and becoming part of its system while following the virtues provided from the grass-roots level is becoming more and more challenging, because of the lack of transparency of such systems, for example in their privacy policies. (When was the last time you read through one of them?)

The global ecosystem addresses all kinds of questions which go beyond institutions and marketplaces. It explores, for example, current political developments and how they influence the youth club or financial dangers such as the funding of the youth sector of the Council of Europe, which was almost cut in 2019. For each of the layers, virtual virtues have to be developed further on a local and situational level. This can only be done by individuals and organisations embracing the process. Investing resources – such as time, funding and competences – is necessary on all levels to ensure a long-term cultural fit between the virtual civic society, its infosphere and its analogue counterpart.

Digital ethics case 2: inclusion politics in awarding scholarships

Our second example further explores the direct impact of the dimensions of inclusion, from the perspective of a foundation offering funding for young people.

Getting a scholarship is not easy, but finding the right applicants always proves to be a challenge as well, and reaching them can sometimes be even more complicated. To advertise the offer, various media can be used – print media, social media or websites.

Furthermore, to implement the process a couple of decisions need to be taken, first where the data of the applicants will be stored and who has access to them, and at which point. The profile of the possible candidates needs to be sketched out, and a budget for the process defined. Which part of the process is to be outsourced to a third party (for example: Web host, registration software, selection software) and what should remain on the servers at the foundation?

After starting to advertise the offer it may turn out that the social backgrounds of the applicants vary, depending on which channel (social media platform, job advertisement platform, professional networks) is picked.

Guiding questions: How can a digital process be designed in a way to ensure inclusiveness? Which factors play a role in who reads which information?

With this example, various challenges can be addressed. Relating to the topic of this chapter the focus is on all aspects that overlap with digital ways of communication.

First, it is important to emphasise that people of different age groups like to use media in different ways. Persons aged 13-16 tend to combine various online activities, whereas people aged 50-65 prefer to read printed materials while listening to the radio (Voorveld and van der Goot 2013). If one group were to design a communication process for the other, it is highly unlikely that it would be successful (and most likely to exclude the other).

Second, the digital tools itself contribute to the process (Rainie and Anderson 2017). Software may provide invisible digital barriers leading to social exclusion (Miller et al. 2018) or a lack of inclusion. Google's image recognition software still cannot differentiate between animals and humans (Barr 2015). Job advertisement algorithms show high-profile offers more frequently to men (Spice 2015) and many organisations apply algorithms to select future colleagues, while governmental organisations use digital platforms as the main way to access funding.

All these services perform the dedicated task, but at the same time have dynamics of their own. Especially social media platforms have been at the centre of attention when it comes to the use of data. For example, in 2014 Facebook performed a mass-scale study about the impact of news on the use of emotional expression among its users – without the consent of the users contributing to the study (Kramer et al. 2014). This kind of action is within the terms of usage, but whether it is equally ethical is an open question. This example underlines how a certain algorithm that is used to reach a certain goal or group is programmed by a third party that has unknown intentions, making it almost impossible to ensure that its creation and accordingly its usage are bias-free.

One way to counter this challenge is so-called anti-bias training, which has become more and more common, especially in the tech industry, though with no significant improvement (Mundy 2017). From the authors' perspective, one solution is to provide a digital environment embodying virtual values. This is, and will be, one of the core challenges for youth workers and youth organisations if they are to ensure social inclusion. Designing any process now integrates digital tools (How many e-mails did you write today? How many times did you do an online search?) and, when we reflect about the digital world, it is important to remember that digital systems themselves do embody values (Nissenbaum 2001; Noorman 2018). Technology

itself has a social dimension that needs to be considered, rather than just its effect, to ensure inclusiveness.

At the same time, digital tools offer the opportunity to reach more people with lower costs and, through an aware design, inclusiveness and transparency can be guaranteed from the very beginning. Digital tools have the potential to create a better world just as they can cement existing biases.

As usual, education also has an essential role to play. To empower all members of society to engage in the conversation, Wendelin Küpers calls for "more embodied ways of learning that are part of a morally informed and integral form of education" (Küpers 2015). Thus, having developed certain virtues in the analogue world, they will be reflected as virtual values as well. The idea of embodied values works as a mediator between the worlds. To do so, digital ethics, literacy and skills – which range from understanding the technologies to navigating the different interpretations of data – need to become an integral part of all forms of education.

Recommendations

Concluding from our experiences in the SENSE project, we call for further dialogue between universities and non-formal and informal educators. We would encourage more approaches like the ones described above, to bridge this gap. The method of service learning offers benefits for all actors involved in the learning process and strengthens civic society at the same time. Digitalisation has the potential to lead to more social inclusion, or to more social exclusion. We need more integration of formal and non-formal education to foster virtual virtues, empathy education and digital ethics.

To embrace this process in the next decades when more and more services, tools and pathways will be digitalised, it is necessary to prepare. Every organisation and individual should ask the following questions, at grass-roots as well as leadership level.

- How has my (organisational) culture changed since we started using digital tools?
- What are our organisation's core values in the analogue world and how do we want to project/live them in the digital realm?
- Which skills need to be developed within my organisation to be ready for responsible decision making in the future and to counter the digital divide?
- What ethical reasoning do we, as an organisation, support and want to see in the digital world?
- Are there, or will there be, any automated systems that select either who will engage in which organisation or who will get to see which offer?
- How can we ensure that all digital tools we use are, by design, fostering social inclusion?
- Are we applying digital methods which allow people of all backgrounds to participate in our programmes?
- What is our reaction strategy in case of unexpected situations in regard to digitalisation?

These questions even go beyond the current situation. As digitalisation is an ongoing and innovative process, more and more challenges are arising. How can we prepare ourselves, but also young people, for a process of lifelong learning? How can we be prepared for the future challenges arising through a society built on more digitalised processes? In this chapter, we have provided the experiences of the Karlshochschule International University and what we have learned from them, and now we are looking forward to further exchanges of insights.

References

Barr A. (2015), "Google mistakenly tags black people as 'gorillas,' showing limits of algorithms", *Wall Street Journal*, 1 July 2015, available at https://blogs.wsj.com/digits/2015/07/01/google-mistakenly-tags-black-people-as-gorillas-showing-limits-of-algorithms/, accessed 25 July 2020.

Boyd D.M. (2014*), It's complicated. The social lives of networked teens*, Yale University Press, New Haven and London.

Carretero S., Vuorikari R. and Punie Y. (2017), *DigComp 2.1: The digital competence framework for citizens with eight proficiency levels and examples of use*, Publications Office, Luxembourg.

Collmann J. and Matei S. A. (eds) (2018), *Ethical reasoning in big data: an exploratory analysis*, Springer International Publishing, Cham, Switzerland.

Council of Europe (2020), "Social inclusion: definition and state of affairs", available at https://pjp-eu.coe.int/en/web/youth-partnership/social-inclusion, accessed 20 July 2020.

Coyette C. (2015), *Being young in Europe today. 2015 ed.* Luxembourg, Publication Office of the European Union (Eurostat Statistical books), available online at http://dx.doi.org/10.2785/59267.

EDPS [European Data Protection Supervisor] (2018), *Public consultation on digital ethics – summary of outcomes*, European Commission, Brussels, available at https://edps.europa.eu/sites/edp/files/publication/18-09-25_edps_publicconsultationdigitalethicssummary_en.pdf, accessed 14 September 2019.

Effekte (2019), *#digitalk Karlsruhe: Werden in 20 Jahren Maschinen alle wichtigen Entscheidungen für uns treffen?*, available at www.ka-news.de/wirtschaft/karlsruhe-innovativ/digitalk-karlsruhe/digitalk-Karlsruhe-Werden-in-20-Jahren-Maschinen-alle-wichtigen-Entscheidungen-fuer-uns-treffen;art516981,2389291, accessed 5 November 2019.

Epstein D., Nisbet E. C. and Gillespie T. (2011), "Who's responsible for the digital divide? Public perceptions and policy implications", *The Information Society*, Vol. 27, No. 2, pp. 92-104.

Floridi L. (2018), "Soft ethics and the governance of the digital", *Philosophy & Technology*, Vol. 31, No. 1, pp. 1-8.

Hargittai E. (2002), "Second-level digital divide: differences in people's online skills", *First Monday*, Vol. 7, No. 4.

ITU (ed.) (2005), *Outcome documents*, International Telecommunication Union: World Summit On Information Society, available at www.itu.int/net/wsis/documents/doc_multi.asp?lang=en&id=1161|1160|2266|2267|2316|2369, accessed 21 July 2020.

Kramer A. D. I., Guillory J. E. and Hancock J. T. (2014), "Experimental evidence of massive-scale emotional contagion through social networks", *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 111, No. 24, pp. 8788–90.

Küpers W. (2015), "Embodied responsive ethical practice: the contribution of Merleau-Ponty for a corporeal ethics in organisations", *Electronic Journal of Business Ethics and Organization Studies*, Vol. 20, No. 1, pp. 30-45.

Linkov I., Trump B., Poinsatte-Jones K. and Florin M.-V. (2018), "Governance strategies for a sustainable digital world", *Sustainability*, Vol. 10, No. 2, p. 440.

Miller F., Katz J. and Gans R. (2018), "AI x I = AI2: The OD imperative to add inclusion to the algorithms of artificial intelligence", *Organization Development Practitioner*, Vol. 50, No. 1, pp. 6-12.

Mundy L. (2017), "Why is Silicon Valley so awful to women?", *The Atlantic* [online], available at www.theatlantic.com/magazine/archive/2017/04/why-is-silicon-valley-so-awful-to-women/517788/, accessed 10 October 2019.

Nissenbaum H. (2001), "How computer systems embody values", *Computer*, Vol. 34, No. 3, pp. 120-119.

Noorman M. (2018), "Computing and moral responsibility", *Stanford Encyclopedia of Philosophy* (Spring 2018 online edn), available at https://plato.stanford.edu/archives/spr2018/entries/computing-responsibility/, accessed 20 July 2020.

Payton S. and Hague C. (2010), *Digital literacy in practice: case studies of primary and secondary classrooms,* Futurelab.

Pohl A. and Walther A. (2007), "Activating the disadvantaged. Variations in addressing youth transitions across Europe", *International Journal of Lifelong Education*, Vol. 26, No. 5, pp. 533-553.

Rainie L. and Anderson J. (2017), *Code-dependent: pros and cons of the algorithm age*, available at www.pewinternet.org/2017/02/08/code-dependent-pros-and-cons-of-the-algorithm-age/, accessed 22 October 2019.

Royakkers L., Timmer J., Kool L. and Est R. (van) (2018), "Societal and ethical issues of digitalisation", *Ethics and Information Technology*, Vol. 20, No. 2, pp. 127-42.

Sahakian W. S. and Sahakian M. L. (1966), *Ideas of the great philosophers*, Barnes & Noble, New York.

SALTO-YOUTH (2019), *European training strategy in the field of youth*, available at www.salto-youth.net/rc/training-and-cooperation/trainingstrategy/, accessed 2 July 2020.

Spice B. (2015), "Questioning the fairness of targeting ads online", *Carnegie Mellon University News*, available at www.cmu.edu/news/stories/archives/2015/july/online-ads-research.html, accessed 10 October 2019.

Stuermer M., Abu-Tayeh G. and Myrach T. (2017), "Digital sustainability: basic conditions for sustainable digital artifacts and their ecosystems", *Sustainability Science*, Vol. 12, No. 2, pp. 247-62.

Voorveld H. A. M. and Goot M. (van der) (2013), "Age differences in media multitasking: a diary study", *Journal of Broadcasting & Electronic Media*, Vol. 57, No. 3, pp. 392-408.

Wangler L. and Botthof A. (2019), "E-Governance: Digitalisierung und KI in der öffentlichen Verwaltung", in Wittpahl V. (ed.), *Künstliche Intelligenz: Technologie, Anwendung, Gesellschaft,* Springer Vieweg, Berlin, pp. 122-41.

Weich A., (2019), Das "Frankfurt-Dreieck". Medienimpulse, Bd. 57 Nr. 2 (2019): 2/2019-Freies Heft / Medienimpulse, Bd. 57 Nr. 2 (2019): 2/2019 - Freies Heft. DOI: 10.21243/MI-02-19-05.

Welzer H. (2011), *Mentale Infrastrukturen: Wie das Wachstum in die Welt und in die Seelen kam*, Heinrich-Böll-Stiftung.

Youth Council of Ireland (ed.) (2015), *Screenagers: guidance for digital youth work*, available at www.youth.ie/sites/youth.ie/files/Screenagers-Guidance.pdf, accessed 4 September 2019.

Chapter 15

Young people, social inclusion and the digital age: a human rights perspective

Nuala Connolly and James Kenny

Introduction

Social exclusion is a multidimensional phenomenon. Addressing social exclusion and promoting social inclusion has been linked to realising rights. Human rights apply to all, but it is acknowledged that certain groups face particular challenges. Young people in particular are vulnerable to inequality, discrimination and unequal access to civic and political rights. In this chapter, we explore the impact of the digital world on the realisation of young people's rights at the intersection of social and digital exclusion. Drawing on, and adapting, the Office of the United Nations High Commissioner for Human Rights framework for consultation on rights in the digital age (OHCHR 2019), along with policy, existing evidence and literature, this chapter seeks to respond to a range of questions.

1. How do we understand young people's engagement with the digital world? What are the opportunities experienced and challenges faced by young people? How can we better understand the intersection of social and digital exclusion?
2. What are the existing frameworks, and do they work? How can states better realise their obligations to young people's rights in relation to the digital environment? How should the practices of businesses operating in the digital environment support the realisation of young people's rights?
3. How can young people's views and experiences be expressed and taken into account when formulating policies and practices which affect their access to, and use of, digital technologies?
4. How can we ensure that all young people have their rights realised in a digital world?

The chapter also seeks to explore the overarching question of whether the realisation of young people's rights in the digital environment is necessary to realise

young people's rights in other environments. The chapter draws on academic and grey literature and policy documents. The chapter also incorporates primary data from the European Social Survey (ESS); statistical operations are included, with summary tables presented where relevant. The realisation of rights in the digital environment depends on balancing protection and risk with opportunity and freedom of expression, supporting the social inclusion of young people in many aspects of their lives. This chapter seeks to advance the knowledge and evidence base on rights in the digital environment, contributing to the dedicated policy agenda for young people.

Young people in the digital age

For many young people, technology pervades all aspects of day-to-day life. The age at which they begin internet use is dropping, while the locations where children go online are diversifying (Livingstone et al. 2011). Computers are increasingly popular in the school environment, with the EU average at between three and seven students per computer (European Commission 2013). Cross-national survey research affords researchers key descriptive insights from which to gauge a pattern of internet usage throughout EU member states. In our analysis we use the 8th round of the ESS (data from 2016) and all countries are subjected to analysis.

Figure 5 shows the pattern of internet usage across all ages, measured in minutes per day, across Europe. There is a statistically significant negative correlation between age and internet use, indicating that younger age is associated with more time spent online. In the 8th round of The European Social Survey there are 30 115 cases from which scores for the internet variable (measured in minutes per day) can be subjected to analysis. The average amount of time spent online per day in round 8 of the European Social Survey was 197.63 minutes (CI 95%: 195.69 to 199.57 mins). A Pearson product moment correlation coefficient was used to examine the relationship between age and internet use. There was a statistically significant negative correlation between age and internet use in the sample, suggesting that younger age tended to be associated with more time spent online ($r = -.255$, $n = 30{,}005$, $p < .001$), while r^2 (the coefficient of determination for this analysis) = 0.65 indicating a medium effect size (Cohen 1988).

Table 2 displays frequency of internet usage in terms of young people aged up to 24. Some young people are spending as much as four hours online per day, with the older individuals spending roughly an hour less per day. An independent samples t-test was used to examine statistically significant differences in reported levels of internet usage among youth. The younger people reported on average 256.62 minutes of internet use (std dev. = 181.67 minutes) the previous day, while the older ones among them reported on average 183.06 minutes of use (std dev. = 167.33); and statistically significant differences were observed in the frequencies [$t (12253.70) = 35.85$, $p < .001$].

The use of digital media has also escaped the boundaries of professional and formal practice (Barron et al. 2014). As portable devices continue to diffuse, they expand the range of places and social situations where children and young people can access the internet (Mascheroni et al. 2013).

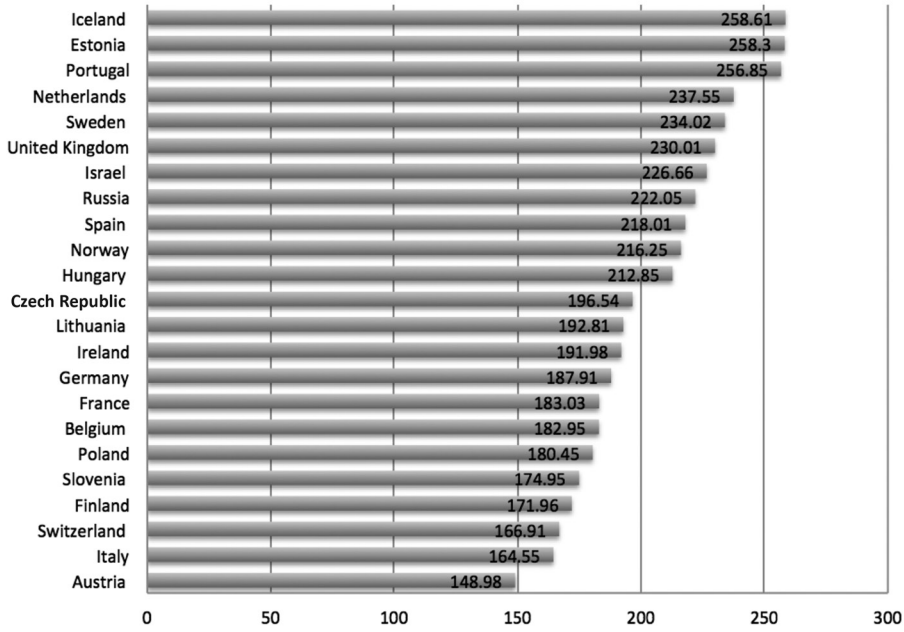

Figure 5: Average minutes per day spent using the internet

Table 2: Descriptive statistics of internet usage in minutes per day among youth

Age category	n=	Mean	Median	Std dev.
Youth (Up to 24 years)	7 854.00	256.62	240.00	181.67
Over 24 years	25 394.00	183.06	120.00	167.33

Young people are afforded many opportunities online. Technology, the internet and new media can bring new opportunities to learn, stay connected, build networks and develop skills. Interactive games and coding projects can support skills development. Assistive technology can be beneficial for children with disabilities. Alongside the opportunities afforded by technology, the internet and digital media bring the risk of harm, and can reinforce and present new forms of social exclusion.

Young people also experience a range of risks online, from encountering inappropriate or illegal material, to cyberbullying and phishing activities. Evidence also suggests that while young people are concerned about privacy, they are more likely to disclose personal information online (Hoofnagle et al. 2010). While this leaves them more vulnerable to unauthorised access or exploitation, there have also been occurrences of large-scale data breaches of young people's personal data (Techcrunch 2019). A meta-analysis of young people's exposure to unwanted content online found that one in five had encountered unwanted explicit material and one in nine had experienced solicitation or "grooming" (Wolak et al. 2007). A systematic review of cyberbullying among children and young people (John et al. 2018) found

that young victims are at greater risk of self-harm. There have been many efforts to conceptualise the extent of young people's experiences of the digital world, and such conceptualisations have evolved over time.

Conceptualising young people online

The once popular term "digital native" (Prenksy 2001) has been demystified (Connolly and McGuinness 2018) in the acknowledgement that the ubiquity of technology represents a new condition of social life for young people. The discourse of the "Google Generation" (Rowlands et al. 2008) and "Net Geners" (Tapscott 1999) has been interrogated, and the theory of a digital divide advanced, leading to new discussions of a digital skills divide (Van Deursen and Van Dijk 2011) and the concept of digital exclusion, as distinct from social exclusion (Office for National Statistics 2019). There have been some attempts to explore the interaction between social and digital exclusion, drawing on definitions of social exclusion and the ways in which exclusion can influence experiences of the digital space.

The concept of social exclusion has been variously defined but, in general, definitions focus on the exclusion and isolation of particular groups in society, and members of those groups not feeling part of society. Studies on social exclusion have often focused on impoverishment, or exclusion from adequate income or resources; labour market exclusion; service exclusion; and exclusion from social relations (Gordon et al. 2000). Young people can be particularly vulnerable to social exclusion, and have been identified as a group that merit specific protections in this regard (Youth Partnership 2019). Further, the intersection of youth with other variables and externalities (e.g. gender, socio-economic status, ethnicity) may increase susceptibility to social exclusion.

Research has begun to focus on the ways in which exclusion in the digital space is compounded by existing social disadvantage. For example, it is known that the young people least likely to have digital skills are those most likely to be facing multiple forms of chronic and acute disadvantage. This may include poor literacy skills, living in households affected by drug or alcohol misuse, experience of the care system, or experience of the criminal justice system (Ashworth 2017). Contrary to the myth of the digital native, it is now known that contact with digital technologies may not be enough to ensure that one acquires advanced digital skills (Calderón Gómez 2019). It has also been found that services that incorporate features of automation may add a layer of exclusion for those already socially and digitally excluded, reinforcing power asymmetry between those with access and processing capabilities, and the individuals who are the subject of sorting or profiling (Park and Humphry 2019). Park and Humphry argue that digital inclusion can only be realised if all dimensions of access, affordability and digital literacy are resolved.

The notion of young people as a largely homogeneous group in the digital world is no longer accepted. Group analysis of Round 8 of the ESS indicates that young women report higher levels of internet use than young men. An independent samples t-test was used to examine statistically significant differences in young people's reported levels of internet usage in terms of sex. Women reported on average 273.10 minutes of internet use (std dev. = 192.30 mins) the previous day while men reported on

average 258.61 minutes of use (std dev. = 170.85) and statistically significant differences were observed in the frequencies [t (7595.59) = −3.52, p<.001].

A statistically significant difference was found among those born in their country of residence and those born elsewhere. It was found that young people born outside their country of residence spent more time online than their peers born in their country of residence. An independent samples t-test was used to examine statistically significant differences in reported levels of internet usage in terms of birth in country of residence. Young people born in their country of residence reported on average 263.73 minutes of internet use (std dev. = 179.49 mins) the previous day while those born outside their country of residence reported on average 293.20 minutes of use (std. dev. = 209.29); statistically significant differences were observed in the frequencies [t (552.96) = −3.080, p = .002] suggesting that those who were born outside their country of residence spent more time online. Other studies have supported the idea that migrants may place increased dependence on the internet and electronic media (Komito and Bates 2011).

An exploration of the relationship between social and digital capital exposes the reciprocal influences between social capital and the digital divide, emphasising how digital capital is a distinctive form of capital, but strongly intertwined with other types of capital (Ragnedda and Ruiu 2017). According to that study, digital capital is an independent source of power, having an impact on both social and digital inequalities. In addition to the access divide and the subsequently conceptualised skills divide, the study sets out a third-level divide with a focus on the returning benefits of using digital technologies, which are considered as potentially helpful in understanding how social inequalities produce digital inequalities and therefore reinforce social stratification. In advancing theories of the digital divide, access to the internet (first level of digital divide) influences and is influenced by social capital, but above all by how users/citizens use the internet, what they use it for (second level of digital divide) and the returning benefits of using it (third level of digital divide). Essentially, those with a high endowment of social capital are more likely to reproduce that capital online, applying similar mechanisms. This in turn will benefit their offline activities, creating a reciprocal relationship. If those with social capital offline are benefiting from digital capital, we must give consideration to those further excluded and how those groups can be supported to engage and participate in the digital world.

Protecting rights in the digital age

The protection and realisation of human rights and fundamental freedoms are determining factors in all young people's well-being internationally. There are many legal frameworks, policies and mechanisms protecting young people's rights. In principle, human rights protect all and are universal. Many of the same rights apply to children, young people and adults. They are often split into civil and political rights, and economic, social and cultural rights. The modern system was forged with the establishment of the United Nations and the Council of Europe.

For children and young people under 18, the United Nations Covenant on the Rights of the Child consists of 41 articles of interacting rights spanning a range of themes.

Under the UNCRC, children are afforded a range of dedicated rights, including the right to give an opinion, the right to privacy and the right to be protected from hurt or mistreatment in body or mind. The European Convention on Human Rights (the Convention) is also an important treaty, setting out rights for children, young people and adults in Europe. The relationship between citizenship and human rights has become an increasingly important socio-political issue. While it has been argued that children should be protected because of their vulnerabilities and this cannot be best achieved through the promotion of rights (O'Neill 1988; Huntington 2006), it has also been asserted that these views fail to take account of children's agency (Cockburn 2013).

As people get older, they gain additional rights, of voting or marriage for example. The human rights of young people aged 18 and over are largely protected under the international human rights treaties that apply to adults, including the European Convention of Human Rights Acts 2003 and 2014, and the EU Charter of Fundamental Rights.

While rights are universal in principle, certain groups face barriers in accessing their rights. Special groups also require additional protection in order to avoid exclusion or mistreatment, such as ethnic minorities and people with disabilities. Access to rights is interwoven with social inclusion. There are also additional protections in the online space. For instance, the Council of Europe has created international conventions in fields such as cybercrime, personal data protection and the protection of children. The Convention is a key instrument in the protection of human rights online. A number of judgments by the European Court of Human Rights have related to the online environment, especially the right to freedom of expression and to access to information, and the right to privacy (Council of Europe 2019).

Young people transitioning from the rights afforded under the UNCRC to adulthood can be particularly vulnerable. Recommendation CM/Rec(2015)3 of the Committee of Ministers to member states, on access of young people from disadvantaged neighbourhoods to social rights, asserts that access to quality education, secure employment, decent living conditions, adequate transport, health care, technology and opportunities for social, cultural and economic participation is a prerequisite for the inclusion and active citizenship of all young people. The recommendation advocates, *inter alia*, investment in improving public access to information technologies through existing public services (youth centres, public libraries, media centres, youth information and counselling centres).

While the various existing frameworks afford important protections, access to rights – including health, education, opportunities for self-determination and non-discrimination – is increasingly interwoven with access to and skills associated with technology and the digital space. In order to advance the rights agenda as it relates to young people in the digital world, it is necessary to better articulate what is required in the digital space.

Some existing mechanisms afford young people protections and rights in the digital space. For example, the EU Youth Strategy fosters youth participation in democratic life; supporting social and civic engagement and aims to ensure that

all young people have the necessary resources to take part in society. Through its three core areas of function, namely engage, connect, empower, it promotes 11 Youth Goals. Included within those goals are actions relating to young people as producers and consumers of information, young people's ability to recognise and report hate speech and discrimination online and offline, and the need to ensure that parents and carers are equipped with the necessary media and digital literacy skills (European Commission 2018). Youth work has also gained ground in the policy arena, with a range of policy instruments reflecting the policy imperative of digitalisation. Notably, Recommendation CM/Rec(2017)4 on youth work (Council of Europe 2017) recommends that the governments of the member states, within their sphere of competence, renew their support for youth work across a range of domains, including digital and information literacy.

Realising rights for young people in the online world

Despite the complexities of the socio-political landscape associated with social exclusion, digital exclusion and access to rights, this chapter sets out to propose ways in which states may draw on the existing knowledge base to realise their obligations in a range of ways, by taking local, national and international collaborative and holistic approaches to policy development. This can include striving to better understand children's and young people's experiences online, committing to consultative and evidence-informed policy development. A strong national, European and international evidence base documents the circumstances of young people, along with the risks and opportunities associated with the digital world.

The Global Kids Online Study is an international project developed as a collaborative initiative between the UNICEF Office of Research-Innocenti, the London School of Economics and the EU Kids Online network (Global Kids Online 2019). The study has generated a cross-national evidence base on children's use of technology. The study found that, in general, older children engage in more advanced online activities, including civic engagement. While children reported good privacy skills, their abilities to verify online information varied considerably. Researchers have developed a global research toolkit for academics, governments, civil society and other actors to undertake national research with children, young people and parents on the opportunities, risks and protective factors of internet use.

The EU Kids Online multinational research network co-ordinates research on children and young people, and new media across 33 countries in Europe (EU Kids Online 2019). Reports and findings explore advice for parents, attitudes of children and young people, and policy implications. The final report sets out policy recommendations, including the need for e-inclusion policies, a balance of empowerment and protection and a mix of regulation and increased media literacy (Livingstone and Haddon 2009). Similarly, the Net Children Go Mobile European study focused on mobile internet. It provided reports, country fact-sheets and cross-national comparative research on the use of mobile media (Net Children Go Mobile 2014). A range of policy recommendations are set out, including promoting initiatives fostering inclusive use of technology in the classroom, and improved content in national languages (Mascheroni and Cuman 2014).

A further body of evidence explores the impact of screen time on children's and young people's well-being, with screen time adversely associated with sleep outcomes (Hale and Guan 2015), and adherence to recommended guidelines for leisure-time screen use associated with fewer odds for depressive symptoms (Kremer et al. 2014). There is evidence that some college students' academic performance might be impaired by heavier use of the internet (Kubey et al. 2001). A range of research explores approaches to improve digital literacy among young people (Connolly and McGuinness 2018; Thomas 2011). The Screenagers International Research Project explores opportunities and challenges in the use of ICT in non-formal learning contexts (Harvey 2016). The partnership between the European Commission and the Council of Europe in the field of youth has set about better understanding young people in the digital world through publications and events, including the series Perspectives on Youth, which includes *Young people in a digitalised world* (2018).

Policy development within such a complex system requires an evidence-informed and evidence-based approach, drawing on such research and administrative data, and evaluating approaches and policy responses for efficacy, reach and sustainability. Approaches must also be proportionate and co-designed in collaboration with relevant stakeholders, including young people. Evidence to date, including findings from the studies above, sets out a direction of travel and additionality across a range of domains, including the following.

1. Advancing the digital skills policy agenda in formal and non-formal learning contexts.
2. Supporting parents and caregivers to better understand and respond to children's online experiences (Zaman and Nouwen 2016).
3. Promoting empathy and moral reasoning in children and young people, and the need for empathy education or training to support that process (O'Moore 2013).
4. Working with partners in industry and beyond to promote rights in the digital environment.
5. Supporting the work of Data Protection Commissions and Online Safety Commissions (or equivalents) in realising information rights in the digital space, particularly as they relate to children and young people.
6. Exploring how potential frameworks of social dialogue and collective bargaining can be utilised in some contexts to reach consensus on shared goals (Eurofound 2016).

Research has emphasised the need for new competences and a new skills orientation for children and young people in the context of digital media (Buckingham and Willett 2013). Responding to the concept of the digital skills divide (Van Deursen and Van Dijk 2011) could increase the opportunities for children and young people to participate in a meaningful way in the digital world. Digital literacy education should encompass a broad suite of skills, including self-expression, identity formation, rights and participation in the online world (Connolly and McGuinness 2018). Ireland's Digital Strategy for Schools 2015-2020 refers to the need to embed digital literacy content in the curriculum. Existing initiatives include short courses on coding and digital media literacy. There are also opportunities to support digital skills

development and digital literacy in the non-formal learning environment, through digital youth work for example (Connolly 2017).

There are opportunities for business and enterprise to share this mutually beneficial space, through engagement, responsibility and self-regulation. Dialogue should be interactive, with a view to better understanding the tensions that arise in this space. This is particularly relevant in the context of children and young people. Because the internet has to date been largely regulated by a generic approach to "users", namely adults, a key challenge is to find ways to better consider and realise the rights of children and young people (Livingstone et al. 2015). Potential approaches include the following.

- There is a need to develop policies that children and young people can understand, including guidelines for the drafting of privacy policies that make a difference, by improving the comprehensibility of privacy policies encountered by children and teens as they surf the internet (Micheti et al. 2010).
- A co-design approach to developments, with young people as experts on their own experiences, has the potential to better support young people's rights online, leading to developments that are more engaging, satisfying and useful (Thabrew et al. 2018).
- Self-regulatory initiatives can improve momentum among signatories towards shared goals in protecting young people online.
    - The ICT Coalition is a group of ICT industry signatories driving the integration of child online safety in the development of services and devices across Europe. Members of the ICT Coalition have pledged to encourage the safe and responsible use of online services and internet devices among children and young people and to empower parents and carers to engage with and help protect their children in the digital world. Members of the ICT Coalition have signed up to a set of guiding principles to ensure that the safety of younger internet users is integral to the products and services they develop (ICT Coalition 2019).
    - The European Commission's Alliance to Better Protect Minors Online encourages companies to tackle existing and emerging risks through user empowerment, enhanced collaboration and awareness raising (European Commission 2019a). Signatories include Facebook, Google and Samsung.

This consideration of the rights and needs of children and young people online should be undertaken in the spirit of collaboration and knowledge sharing, with ongoing commitments to exploring mechanisms to advance the agenda on existing and emerging issues.

Listening to young voices

Meaningful consultation with young people is key to ensuring that both policy and practice best realise and protect children and young people's rights in the digital world. Meaningful engagement should capture the views of a representative cross-section of society, using age-appropriate methodologies, taking an inclusive

approach. Age-appropriate language should be at the centre of all policy making concerning children and young people. According to Lundy (2007), voice alone is not enough and, in order to effectively implement the right to participation, a new model should include the four key elements of space, voice, audience and influence. Indeed, Arnstein's ladder of citizen participation also set out a typology, contending that to move from tokenism to citizen power and meaningful consultation requires more partnership and delegation (Arnstein 1969). Increasingly, young people's voices are encouraged and valued in the ICT and digital media policy arena, as the following examples show.

- The EU Youth Dialogue serves as a forum for continuous joint reflection and consultation on the priorities, implementation and follow-up of European co-operation in the field of youth. At a European level, the Structured Dialogue on Youth is a process enabling young people to be involved in the shaping of policies that affect them, through continuous co-operation among youth representatives and decision makers. The work is overseen by a Steering Committee in order to ensure that the approach is implemented correctly and to ensure follow-up. EU Youth Dialogue is intended as a mutual communication between young people and decision makers in order to implement priorities of European youth policy.
- Young Voices (as part of the EU's Structured Dialogue process) is managed by the Department of Children and Youth Affairs on behalf of the National Youth Council of Ireland. During the Cycle IV Consultation Phase, young people identified both opportunities and challenges associated with digital media, notably emphasising the need for youth-friendly approaches (NYCI 2018).
- Ireland's Data Protection Commission undertook a phase of public consultation on the processing of children's personal data and the rights of children as data subjects under the GDPR, Stream II of which sought to involve children and young people directly, with young people identifying the need for simplicity of language, transparency of process, better access to companies to ask questions or learn about data processing, and improved flexibility in privacy protection (Data Protection Commission 2019).
- Ireland's Action Plan for Online Safety 2018-2019 was the Government's first Action Plan for Online Safety, setting out and implementing a range of actions, aimed at realising online safety for everyone in Ireland. Among the key objectives was to build understanding of the relevant issues, with a deliverable action to consult with children and young people. Young people have participated in the development of videos and articles on key internet safety topics (Government of Ireland 2018).
- Ireland's Department of Education and Skills consulted with young people on a Digital Strategy for Schools (2015). A range of methodologies were adopted, culminating in a series of recommendations on the use of technology in schools and in the daily lives of students as they learn.

The extension of the approach to meaningful involvement of young people to other spaces would facilitate co-design. Ernst and Young's EY Foundation has established a Youth Advisory Board in the UK to serve this function (EY Foundation 2019). Likewise, the Royal Shakespeare Company has established a Youth Advisory Board

in the UK to contribute to their overall direction and strategic planning (*The Stage* 2019). The Rugby Football League (RFL) has also established a Youth Board, realising a commitment to engage with young people in sport to better achieve corporate goals (RFL 2019). Youth advisory councils or youth boards in this way may represent new models by which young people have a say, are included and are listened to in a broader range of spaces.

Addressing exclusion in the digital world

Throughout this chapter, a range of possibilities has been discussed, setting out a direction of travel towards effectively addressing social exclusion and discrimination in the context of young people's lives. Likewise, some existing cross-national survey research has been explored to place some of these conceptualisations within readily available data. States have opportunities to advance the agenda through digital literacy education, empathy education, supporting parents and caregivers, exploring new mechanisms for social dialogue and collective bargaining on topical issues. Businesses have opportunities to develop youth-friendly policies, to explore opportunities for co-design and youth consultation and to join and report on commitments to self-regulatory initiatives. More broadly, relevant policy and legislation should be developed with child- and youth-specific protections, targeted at hard-to-reach and seldom-heard groups and tailored to individual needs. Meaningful consultation with children and young people should be central to all policy and strategy development. It is also evident that a key challenge facing states and supranational organisations alike will be the planning to deliver digital literacy programmes across all socio-economic groups.

Against this backdrop of analysis, it is apparent that the translation of social rights to the digital world, and indeed the links between social and digital exclusion, require further conceptualisation. Helsper indicates that while offline exclusion can be divided into four interrelated broad fields, economic, cultural, social and personal, all four cannot be mapped onto digital exclusion (Helsper 2012). The research on digital exclusion tends to focus on access, skills and attitudes. Helsper argues for a focus on practical engagement and on whether the nature of use enhances the lives of users. In addition, the notion of young people online as a socially homogeneous group may constrain further capacity to respond effectively to exclusion in this context. Further attention must be given to lived experiences of excluded groups. Failure to do so may carry the potential to obscure significant digital inequalities that exist, associated with gender, education, ethnicity, economic situation and disability (Calderón Gómez 2019).

While digital media can afford young people new possibilities for learning and skills development, self-expression and identity formation, civic and political engagement and social inclusion, at the same time young people are faced with risks of abuse, exploitation, harmful content online and reinforced social exclusion. The realisation of rights in the digital environment depends on balancing protection and risk with opportunity and freedom of expression, providing all young people with opportunities to benefit in many aspects of their lives from a better and safer digital world.

References

Anderson S. E., Economos C. D. and Must A. (2008), "Active play and screen time in US children aged 4 to 11 years in relation to sociodemographic and weight status characteristics: a nationally representative cross-sectional analysis", *BMC Public Health*, Vol. 8, No. 1, p. 366.

Ang R. P. and Goh D. H. (2010), "Cyberbullying among adolescents: the role of affective and cognitive empathy, and gender", *Child Psychiatry & Human Development*, Vol. 41, No. 4, pp. 387-97.

Arnstein S. R. (1969), "A ladder of citizen participation", *Journal of the American Institute of planners*, Vol. 35, No. 4, pp. 216-24.

Ashworth C. (2017), "Bridging the digital divide: how to stop technology leaving young people behind", *The Guardian* (24 July 2017), available at www.theguardian.com/voluntary-sector-network/2017/jul/24/bridging-digital-divide-technology-youth-skills, accessed 22 July 2020.

Barron B., Gomez K., Pinkard N. and Martin C. K. (2014), *The digital youth network: cultivating digital media citizenship in urban communities*, MIT Press, Cambridge MA, USA.

Buckingham D. and Willett R. (eds) (2013), *Digital generations: children, young people, and the new media*, Routledge, London.

Calderón Gómez D. (2019), "Technological capital and digital divide among young people: an intersectional approach", *Journal of Youth Studies* (2019), pp. 1-18.

Cockburn T. (2013), "Children's rights and their limitations", in: *Rethinking children's citizenship: studies in childhood and youth*, Palgrave Macmillan, London.

Cohen J. (1988), "Set Correlation and Contingency Tables", *Applied Psychological Measurement*, Vol. 12 No. 4, pp. 425-434.

Connolly N. (2017), *Young people, youth work and the digital world: thinking seriously about youth work and how to prepare people to do it*, Youth Knowledge Series, Vol. 20, Council of Europe, Strasbourg.

Connolly N. and McGuinness C. (2018), "Towards digital literacy for the active participation and engagement of young people in a digital world", *Young people in a digitalised world*, Perspectives on Youth series, Vol. 4. Council of Europe, Strasbourg.

Council of Europe (2017), Recommendation CM/Rec(2017)4 of the Committee of Ministers to member States on youth work, available at https://rm.coe.int/1680717e78, accessed 22 July 2020.

Council of Europe (2019), *Safeguarding human rights online*, available at www.coe.int/en/web/portal/council-of-europe-and-internet, accessed 22 July 2020.

Data Protection Commission (2019), "Some stuff you just want to keep private", Preliminary report on Stream II of the DPC's public consultation on the processing of children's personal data and the rights of children as data subjects under the GDPR, Data Protection Commission/Ombudsman for Children, available at www.dataprotection.ie/sites/default/files/uploads/2019-08/Some%20Stuff%20You%20Just%20Want%20to%20Keep%20Private_Consultation%20Report.pdf, accessed 22 July 2020.

Department of Children and Youth Affairs (2017), *Report of consultations with children on after-school care*, Government Publications, Dublin.

Department of Education and Skills (2015), *Report on the consultation with young people on the digital strategy for schools*, available at www.education.ie/en/Publications/Policy-Reports/Report-on-the-Consultation-with-Young-People-on-the-Digital-Strategy-for-Schools.pdf, accessed 22 July 2020.

EU Kids Online (2019), available at http://globalkidsonline.net/eu-kids-online/, accessed 22 July 2020.

Eurofound (2016), *Addressing digital and technological change through social dialogue*, available at www.eurofound.europa.eu/publications/report/2017/eu-member-states/addressing-digital-and-technological-change-through-social-dialogue, accessed 22 July 2020.

European Commission (2013), *Survey of schools: ICT in education: benchmarking access, use and attitudes to technology in Europe's schools*, available at http://ec.europa.eu/information_society/newsroom/image/document/2016-20/surveyofschoolsictineducation_15585.pdf, accessed 22 July 2020.

European Commission (2018), *European youth goals*, available at https://ec.europa.eu/youth/policy/youth-strategy/youthgoals_en, accessed 2 July 2020.

European Commission (2019a), *Alliance to better protect minors online*, available at https://ec.europa.eu/digital-single-market/en/alliance-better-protect-minors-online, accessed 22 July 2020.

European Commission (2019b), *Digital skills and jobs*, available at https://ec.europa.eu/digital-single-market/en/policies/digital-skills, accessed 22 July 2020.

EY Foundation (2019), Youth Advisory Board, available at https://www.ey.com/en_uk/corporate-responsibility/ey-foundation/trustees.

Global Kids Online (2019) Global Kids Online study, available at www.globalkidsonline.net, accessed 22 July 2020.

Gordon D., Levitas R., Pantazis C. et al. (2000), *Poverty and social exclusion in Britain*, Joseph Rowntree Foundation, available at www.jrf.org.uk/sites/default/files/jrf/migrated/files/185935128x.pdf, accessed 22 July 2020.

Government of Ireland (2018), *Action Plan for Online Safety*, Government Publications, Dublin.

Hale L. and Guan S. (2015), "Screen time and sleep among school-aged children and adolescents: a systematic literature review", *Sleep Medicine Reviews*, Vol. 21, pp. 50-58.

Harvey C. (2016), *Using ICT, digital and social media in youth work*, National Youth Council of Ireland, Dublin.

Helsper E. J. (2012), "A corresponding fields model for the links between social and digital exclusion", *Communication Theory*, Vol. 22, No. 4, pp. 403-26.

Holloway D., Green L. and Livingstone S. (2013), *Zero to eight: young children and their internet use, EU Kids Online Study*, London School of Economics, London.

Hoofnagle C. J., King J., Li S. and Turow J. (2010), "How different are young adults from older adults when it comes to information privacy attitudes and policies?", available at www.ssrn.com/index.cfm/en/ [SSRN 1589864], accessed 22 July 2020.

Huntington C. (2006), "Rights myopia in child welfare", *UCLA Law Review*, Vol.53, pp. 637- 699.

ICT Coalition for Children Online (2019), available at www.ictcoalition.eu, accessed 3 July 2020.

Irish Digital Skills and Jobs Coalition (2019), *Digital Skills and Jobs Coalition*, available at https://ec.europa.eu/digital-single-market/en/policies/digital-skills, accessed 22 July 2020.

JISC (2015), *Building digital capabilities: the six elements defined*, available at https://digitalcapability.jisc.ac.uk/what-is-digital-capability/, accessed 22 July 2020.

John A., Glendenning A. C., Marchant A. et al. (2018), "Self-harm, suicidal behaviours, and cyberbullying in children and young people: Systematic review", *Journal of Medical Internet Research*, Vol. 20, No. 4, e129.

Komito L. and Bates J. (2011), "Migrants' information practices and use of social media in Ireland: networks and community", *Proceedings of the 2011 iConference*, ACM 2011.

Kremer P., Elshaug C., Leslie E. et al. (2014), "Physical activity, leisure-time screen use and depression among children and young adolescents", *Journal of Science and Medicine in Sport*, Vol. 17, No. 2, pp. 183-7.

Kubey R. W., Lavin M. J. and Barrows J. R. (2001), "Internet use and collegiate academic performance decrements: early findings", *Journal of Communication*, Vol. 51, No. 2, pp. 366-82.

Livingstone S. (2002), *Young people and new media: childhood and the changing media environment*, Sage, London.

Livingstone S., Carr J. and Byrne J. (2015), "One in three: internet governance and children's rights", Innocenti Discussion Paper, available at www.cigionline.org/publications/one-three-internet-governance-and-childrens-rights, accessed 22 July 2020.

Livingstone S. and Haddon L. (2009), *EU Kids Online: final report*, London School of Economics, London.

Livingstone S., Haddon L., Görzig A. and Ólafsson K. (2011), *Risks and safety on the internet: the perspective of European children*, Full findings and policy implications from the EU Kids Online survey of 9- to 16-year-olds, London School of Economics and EU Kids Online, London.

Lundy L. (2007), "'Voice' is not enough: conceptualising Article 12 of the United Nations Convention on the Rights of the Child", *British Educational Research Journal*, Vol. 33, No. 6, pp. 927-42.

Madigan S., Villani V., Azzopardi C. et al. (2018), "The prevalence of unwanted online sexual exposure and solicitation among youth: a meta-analysis", *Journal of Adolescent Health*, Vol. 63, No. 2, pp. 133-41.

Mascheroni G., Ólafsson K., Cuman A. et al. (2013), *Mobile internet access and use among European children: initial findings of the Net Children Go Mobile project*, Educatt, Milan.

Mascheroni G. and Cuman A. (2014), *Net children go mobile: final report*, Educatt, Milan.

Micheti A., Burkell J. and Steeves V. (2010), "Fixing broken doors: strategies for drafting privacy policies young people can understand", *Bulletin of Science, Technology & Society*, Vol. 30, No. 2, pp. 130-43.

Net Children Go Mobile (2014), available at https://netchildrengomobile.eu/, accessed 22 July 2020.

NYCI [National Youth Council of Ireland] (2018), *Youth in Europe: what next?* Structured Dialogue Cycle 6: Consultation Phase, available at www.youth.ie/wp-content/uploads/2018/11/Full-Version-Report-on-Structured-Dialogue-Consultations-with-Young-People-in-Ireland_0.pdf, accessed 22 July 2020.

Office for National Statistics (2019), *Exploring the UK's digital divide*, available at www.ons.gov.uk/releases/exploringtheuksdigitaldivide, accessed 22 July 2020.

OHCHR (2019) Office of the United Nations High Commissioner for Human Rights, "The Rights to Privacy in a Digital Age", available at: www.ohchr.org/en/issues/digitalage/pages/digitalageindex.aspx.

O'Moore M. (2013), "Bullying of young people in Ireland: what we know and what we can do", *Childlinks*, No. 1, available at www.ncn.ie/images/PDFs/Barnardos-childlinks-bullying.pdf, accessed 22 July 2020.

O'Neill O. (1988), "Children's rights and children's lives", *Ethics*, Vol. 98, No. 3, pp.445-463.

O'Neill B. and Dinh T. (2014), *Net Children Go Mobile: initial findings from Ireland*, Technological University, Dublin, available at https://arrow.dit.ie/cserart/57/, accessed 22 July 2020.

Park S. and Humphry J. (2019), "Exclusion by design: intersections of social, digital and data exclusion", *Information, Communication & Society*, Vol. 22, No. 7, pp. 934-53.

Prensky M. (2001), "Digital natives, digital immigrants", part 1, *On the Horizon*, Vol. 9, No. 5, pp. 1-6.

Ragnedda M. and Ruiu M. L. (2017), "Social capital and the three levels of digital divide", in Ragnedda M. and Muschert G. (eds) (2017), *Theorizing digital divides*, Routledge, London, pp. 21-34.

RFL [Rugby Football League] (2019), "RFL seeking members for new youth board", available at www.rugby-league.com/article/54621/rfl-seeking-members-for-new-youth-board, accessed 3 July 2020.

Rowlands I. et al. (2008), "The Google generation: the information behaviour of the researcher of the future", Aslib Proceedings, Emerald Group Publishing Limited.

Tapscott D. (1999), "Educating the net generation", *Educational Leadership* Vol.56, No.5, pp. 6-11.

Techcrunch (2019), "Youth-run Agency AIESEC exposed over 4 million intern applications", *Techcrunch*, available at https://tcrn.ch/2R5buRw, accessed 22 July 2020.

Thabrew H., Fleming T. M., Hetrick S. and Merry S. N. (2018), "Co-design of eHealth interventions with children and young people", *Frontiers in Psychiatry*, No. 9, p. 481.

The Stage (2019), "Royal Shakespeare Company creates youth advisory board to assist with future planning", available at www.thestage.co.uk/news/royal-shakespeare-company-creates-youth-advisory-board-to-assist-with-future-planning, accessed 3 July 2020.

Third A., Bellerose D., Dawkins U. et al. (2014), *Children's rights in the digital age: a download from children around the world*, Young and Well Cooperative Research Centre, Melbourne.

Thomas M. (ed.) (2011), *Deconstructing digital natives: young people, technology, and the new literacies*, Taylor & Francis, London.

Van Deursen A. and Van Dijk J. (2011), "Internet skills and the digital divide", *New Media & Society*, Vol. 13, No. 6, pp. 893-911.

Wolak J., Mitchell K. and Finkelhor D. (2007), Unwanted and wanted exposure to online pornography in a national sample of youth Internet users, *Pediatrics*, Vol. 119, No. 2, pp. 247-257.

Youth Forum (2019), *Human rights and young people*, available at https://tools.youthforum.org/youth-rights-info-tool/human-rights-and-young-people/, accessed 22 July 2020.

Youth Partnership between the Council of Europe and the European Commission (2019), *Social inclusion of young people*, available at https://go.coe.int/3FCyY, accessed 22 July 2020.

Zaman B. and Nouwen M. (2016), "Parental controls: advice for parents, researchers and industry", EU Kids Online, London, available via *LSE Research Online* at http://eprints.lse.ac.uk/65388/, accessed 22 July 2020.

Chapter 16

Managing digital youth work and its risks

Lasse Siurala

Introduction

This final chapter describes the political background for the rapidly emerging interest of the EU in promoting digital youth work. An important element in this context is concern for youth at risk and also social exclusion. The chapter argues that, instead of jumping from one project to another, youth work organisations should create a sustainable strategy to manage both digital opportunities and digital disadvantages facing young people. A step-by-step proposal is presented to develop a digitalisation strategy and to manage its implementation. The starting point must be a broader understanding of digitalisation and its opportunities and threats for young people and youth work. The effects of digitalisation on democracy and social inclusion and its role in climate change can serve as examples for the versatile nature of digitalisation. The leadership challenge for the transformation to digital youth work requires managers to give their support to the changes and to construct a strategy together with young people, staff and key stakeholders. The literature on successful implementation of digitalisation suggests that people are more important than technology: what matters are the digital skills of youth workers and an organisational culture which favours agility, networking and user-centrism.

Discussion on the "digital divide" overemphasises access to media devices and their technical mastery and neglects the importance of broader media use competences. Research has shown that media competences vary considerably according to social background factors; and they do not come "naturally" just by having access to technology, but need to be learned (Park 2012). This means that critical and creative media literacy is also a paramount challenge for youth work. According to the literature on digital literacy most current approaches have serious limitations (Pangrazio 2016). This chapter briefly introduces these approaches and proposes guidelines for further development of critical digital literacy.

Political background

The Estonian EU presidency during the latter half of 2017 launched the term "smart youth work" (Estonian Youth Work Centre n.d.), which focused on:

1. activities aimed at youth;
2. the development needs of youth workers for implementing smart youth work;

3. developing the quality of youth work and a better knowledge of youth using digital means.

Later in 2017 the Council of the EU adopted "Council conclusions on smart youth work", which strongly emphasised the importance of digital youth work in social inclusion (Council of the EU 2017: 2). It further "recognised" the role of technologies and the digital media in promoting young people's future job market and career prospects; it also recognised the digital gap and, in general, the management of risks of the digital era. The Council's conclusions were essentially based on the report "Developing digital youth work" (EU Expert Group 2017) which further elaborated the key elements of smart youth work and digital youth work.

The Commission's proposal for a new EU Youth Strategy (2019-2027) titled *Engaging, connecting and empowering young people* starts by saying "young people enrich the EU's ambitions: this generation is the best educated ever and among the most creative in using Information and Communication Technologies and social media" (European Commission 2018: 1). It is because of the virtual world:

> digital technologies have revolutionised young people's lives in many ways and policies need to consider both opportunities and challenges, by tapping the potential of social media, equipping youth with digital skills and fostering critical thinking and media literacy. (ibid.: 3)

Furthermore,

> youth workers themselves, on the other hand, need to adapt to changing needs and habits of young people and technological change. Youth workers have to upgrade their skills to understand the issues youth face online and exploit new opportunities offered by digital learning including for example online activism, media literacy and virtual youth exchanges. (ibid.: 7)

Finally, the strategy wants also to focus on supporting mutual learning and evidence building in digital youth work and on adapting to digital opportunities. The structure, methods and communication channels of youth work should adapt to the digital world: youth work should use technology and pedagogical practices to increase access and help young people cope with digital means. Digital youth work should be incorporated into youth workers' training and – where they exist – youth work occupational and competence standards (ibid.: 7).

Before the Commission's proposal was adopted by the Council of Ministers on 26 November 2018 (Council Resolution 2018/C 456/01), youth organisations heavily lobbied governments to promote their interests. To the deep disappointment of those seeing the potential of digitalisation, all references to digitalisation were removed from the Council resolution. However, the 2019 Finnish EU presidency Conclusions on youth raised again digitalisation as a key developmental factor in youth work. During quite a short period of time EU youth policies have moved from almost complete silence to become an active and determinate proponent and driver of digital youth work. Even if technological scepticism exists among the youth field actors, the overall political support for digitalisation is quite strong. It is reasonable to expect that digital youth work will be reflected in the EU's financial instruments.

Digitalisation and social inclusion

What do we know about young people and social exclusion? First, we know that social exclusion is a multidimensional phenomenon, not to be reduced only to unemployment or income poverty (Eurofound 2015). Thus, we must avoid narrow definitions of it and, as a policy response, we must build on a collaborative approach with the necessary partners. Therefore, digital exclusion cannot be perceived as a technological problem only. Second, the socially excluded are not a homogeneous group (Colley et al. 2007: 20). Thus, we need proper data and knowledge to identify who are, for example, the digitally excluded young people. Third, social exclusion is "the accumulation of interrelated difficulties" (MacDonald and Marsh 2005) and calls for multi-agency co-operation. Fourth, social exclusion concentrates in disadvantaged neighbourhoods and lower social classes. Fifth, social exclusion is a consequence of political economy and social policies, making it a youth policy issue. Sixth, social exclusion is a fluid state of affairs: According to research, many individuals constantly move in and out of a marginal status. Seventh, research has identified that part of the risk of unemployment and poverty appears to be intergenerational. According to extensive statistical data from the Finnish National Institute of Health and Welfare, socio-economic status, parents' educational background, mental health problems (NIHW 2016), dropping out of school after compulsory education, unemployment and receipt of social assistance (Vauhkonen et al. 2017) all have an effect on children's outcomes, well-being and social exclusion.

We do not yet have enough knowledge about the nature of digital exclusion, but most probably the known characteristics of social exclusion (above) are applicable to digital exclusion in phenomena like the digital divide, lack of media literacy, screen dependency and the adverse social and health effects of too intensive media use. Apparently, the same factors which in general cause social exclusion also affect digital exclusion. Young people with higher socio-economic status use the internet for information while those in lower socio-economic status groups use it for entertainment (Peter and Valkenburg 2006; Melvin 2017: 191) – giving the former certain advantages in relation to the latter. "A meta-study of 46 empirical studies on knowledge gap found a consistent gap between high- and low-socio-economic status individuals" (Hwang and Jeong 2009). Political participation is more a function of socio-demographics and not necessarily related to technological competence (Livingstone, Bober and Helsper 2005). The politically active young people are those that make use of digital participation more often than the politically passive, and new media widen the gap between those who are politically engaged and those who are not (Davis 2010). To conclude, a lack of media skills and the media-use practices typical of disadvantaged young people rather increase their marginalisation than mitigate it (Hargittai and Hsieh 2013; Kaarakainen and Muhonen 2016). Our knowledge of social exclusion in general most probably applies to digital exclusion also.

Digital youth work, even if it still is in its early phases, provides a large array of promising methods and activities to implement youth work tasks and objectives (see, for example: Lauha and Nölvak 2019; EU Expert Group 2018; National Centre of Expertise 2017; Kiviniemi and Tuominen 2017). Most of these and the constantly

emerging new digital means appear very encouraging. However, the digital world is not an island with only positive options. It is reasonable to assume, as discussed above, that social inequality and the processes of marginalisation cut across it. Thus, in digital youth work we should also prepare ourselves to combat digital exclusion. Finally, there is a youth work policy question: where do we focus? Are we providing targeted services for those most in need or are we trying to offer universal services as early prevention – youth work for all young people? How do we balance the provision of digital opportunities for all young people with targeted activities for digital risks? Within limited resources we need management and a strategy for a coherent response.

The many faces of digitalisation

The term "digitalisation" is used when diverse forms of information, such as text, sound, image or voice, are converted into a single binary code. Digitalisation has had a drastic effect on people's lives, private business and the economy, and gradually also public services and the third sector, but there is also a fierce debate about its broader societal impact. How is it affecting, positively and negatively, issues such as jobs, wages, inequality, health, sustainable development, security, access to information and, more recently, democracy?

The business world typically regards digitalisation as a developmental opportunity – "the catalyst, enabler and engine of societal development throughout the previous decennia" (Bengtsson 2014: 50) – which in the future will allow for developmental possibilities in almost every sector. According to survey results from *Digitalist* magazine, about 70% of young people think that digitalisation has a positive impact on their careers and on their lives: "The results demonstrate that young people are aware of the tremendous impact that an increasingly digital area has on the potential for good that it can have on the world we live in" (*Digitalist* 2016). In countries like Finland, the orientation of municipal youth workers and their managers to digitalisation is also quite positive; on a scale from 1 (very negative) to 7 (very positive) the average response was 5.8 in 2019 (Verke 2019: 11).

Industry, digital corporations, young people and many youth workers have a very positive attitude to the promise of digitalisation. At the same time, there are increasing research results on the negative dimensions of digitalisation, which also have to be considered.

Despite the popular wisdom of young people as "the digital natives", not everybody is a critical enough user of digital media. "Some 20% of children believe everything they read online is true, and 35% of UK teachers say pupils have cited fake news or false information found online as fact in their work" (Douglas et al. 2017: 1). Furthermore, a report from the Stanford University School of Education showed that middle-school students have a difficult time distinguishing ads from news articles (Wineburg et al. 2016).

It's clear that, in many areas, not enough is known yet to draw strong conclusions. Still, use of social media is reported to induce stress as people become aware of other people's stress (Hampton et al. 2015), anxiety and lower self-esteem (Primack

and Escobar-Viera 2017). Frequent viewing of selfies through social network sites like Facebook is linked to a decrease in self-esteem and life satisfaction because users compare themselves to photos of people looking their happiest (Wang and Yang 2016). At this stage of the development of the digital media, like social media or digital gaming, more needs to be known about their positive and negative effects. Further negative effects include inadequate sleep, bullying, FOMO ("fear of missing out") and dependency equal in effect to alcohol and drugs (RSPH 2017). A recent study on the health and well-being effects of YouTube, Facebook, Snapshot, Twitter and Instagram showed that Instagram was the worst (RSPH 2017: 18). Instagram has more than a billion users. One can post pictures, like or dislike them or technically alter the images. The effect can be that likes can either boost self-esteem and self-expression or that dislikes and altered images can decrease self-esteem and possibly lead to depression. The research evidence is somewhat contradictory, but suggests that girls, in particular those with already low self-esteem, are vulnerable to the negative effects (Lockhart 2019; RSPH 2017). A further negative effect specific to Instagram is unsatisfactory body image (how you feel about how you look).

Overall, young people report more often positive effects than negative effects of social media. These include emotional support and community building, making, maintaining and building up social (peer) relations, self-expression and identity development, and access to other people's health experiences and expert health information. At the same time the list of negative effects is long and often well documented. From the viewpoint of youth work, the point is to admit both, know about them and construct activities and services which respond to both. Studies of the effects of gaming are somewhat controversial, but many studies indicate that excessive gaming causes aggression, poor academic performance, health problems (obesity, insomnia, back pain) and addiction (Prot et al. 2014).

An important milestone in this debate was the decision of the World Health Organization in September 2018 to add "gaming disorder" to its International Classification of Diseases (ICD-11) as a pattern of gaming behaviour ("digital gaming" or "video-gaming") characterised by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences. For gaming disorder to be diagnosed, the behaviour pattern must be of sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning and would normally have been evident for at least 12 months. National implementation of the new classification is expected to begin in 2022.

There is still some ambiguity and controversy over the exact definition and measurement of gaming disorder, but research seems to suggest that 1-5% of gamers develop the disease. An often-used figure is 2% (Kuss and Griffiths 2012). For example, 90% of the 1.6 million Finnish children and young people (ages 5 to 29) play digital games (Statistics Finland 2019). A gaming disorder prevalence of 2% equals 32 000 children and young people. Furthermore, research has identified "problematic gaming" as people at the risk of developing gaming disorder.

This risk is estimated to affect between 8% and 12% of young people (Kuss and Griffiths 2012; Adiele and Olatokun 2014; Brunborg et al. 2013; Kuuluvainen and Mustonen 2019: 43). A 10% prevalence would equal 144 000 Finnish children and young people being at a certain risk of developing gaming disorder. The scope of the problem deserves attention. It is also a challenge to youth work because, for example, in Finland 41% of youth workers report that they use digital games in their work (Verke 2019: 15).

Finally, as a further example of a critical view, the economist and Nobel prize winner Joseph Stiglitz has recently warned about the negative effects of the global monopoly of the big technology corporations: they cut wages, raise prices, obstruct competition by buying out smaller companies, use unethically big data, create inequality, impose their ideas of leisure (gaming) and so on (Stiglitz 2012; Stiglitz 2018). Are young people aware of the interests and the business logic of global technology corporations (like Facebook, Apple, Amazon, Neflix, Google, Huawei and gaming companies)? Almost all Finnish municipal youth workers (88%) agreed with the statement "I understand what are the societal effects of digitalisation" (Verke 2019: 21) – but it will be a task for the future to further explore what is the exact scope of "understanding" in this respect.

As further examples of the many faces of digitalisation we might mention the literacy gap, digital authoritarianism and the Greta Thunberg narrative; young people are active internet users, but many lack digital literacy; digitalisation provides new opportunities for active citizenship, but has also created digital authoritarianism; and social media seem to have played a key role in turning Greta Thunberg's story into a global youth movement narrative.

The myth of "digital natives" and the literacy gap

There are two myths about young people and the digital media. One is that we do not have to worry about young people's media use because they are "digital natives". However, according to research there are marked differences between young people: "as many as 300 000 young people in the UK still lack basic digital skills, and that although more are becoming digitally engaged, the division is deepening for those that remain excluded" (Carnegie Trust 2017). The other myth is that, as all young people have access to digital media and are intense users of it, their media literacy is not a problem. According to media researcher Sora Park (2012), it is a common misunderstanding that access automatically leads to competences to search and understand the content, to communicate and to create content. In this respect there are marked inadequacies among and differences between young people. Digital exclusion refers not only to exclusion from access, but even more to exclusion from media skills and competences.

Park says that: "As media are becoming increasingly important in our everyday lives as a result of digital media expanding into the realm of human communication, the ability to use them well is crucial to a person's participation in the digital society" (Park 2012: 2). According to her, youth work and youth workers should support young people to critically search, understand, communicate and create media messages.

Digital authoritarianism

No doubt digitalisation has facilitated access to information and provided means of digital participation. Social movements in particular have been effective in making good use of social media. The recent youth mobilisation against climate warming, the global school strike movement, was originally inspired by a single Swedish 15-year-old schoolchild Greta Thunberg – apparently through different digital media channels. However, despite the positive examples and experiences, there also are some alarming signals.

Freedom House, an independent NGO tracking the development of democracy, titled its 2019 report "Democracy in retreat" because it witnessed through its indicators the 13th consecutive year of decline in global freedom. The report further noted that "The offensive against freedom of expression is being supercharged by *a new and more effective form of digital authoritarianism*". The organisation also publishes "Freedom on the Net". The 2018 index was titled "The rise of digital authoritarianism". According to the report, "Governments around the world are tightening control over citizens' data and using claims of 'fake news' to suppress dissent, eroding trust in the internet as well as the foundations of democracy". In the big picture, democracy is not progressing due to digitalisation. As Freedom House says, "Declines outnumber gains for the eighth consecutive year". Overall, the organisation estimates that only about 20% of the world's citizens are free and safe from digital surveillance. The situation is worst in authoritarian regimes like China, Russia, Iran, Syria and Turkey.

The European Commission's youth strategy strongly recommends youth work to engage in digitalisation and it takes due note of the "risks of the digital era". Considering how prominent youth participation and democracy education is in youth work, it is also important to understand the risks that digitalisation carries in relation to democracy and active citizenship. Possible elements for digital literacy training for young people include unethical use of data, understanding privacy rules, ethical use of information, critical attitudes at global media corporations, political misuse of data, fake news and digital surveillance.

The Greta Thunberg narrative

ICT as such has a significant carbon footprint, but also has potential to reduce it (Hilty and Bieser 2017). Young people, as experienced ICT users, can add to this potential; they can be significant players in supporting and innovating sustainable development through digital participation and activism. The School Strikes for Climate movement started in autumn 2018 in Australia and soon spread all over the world. On 24 May 2019 more than 1.6 million young people from over 125 countries and 1 600 towns participated in the demonstrations, demanding that their governments take quick action against climate warming. No doubt the media coverage created global solidarity, increased awareness and strengthened motivation to continue.

Other additional opportunities like the UNICEF Climate Change Map can boost young people's awareness of and agency to act against climate change. Furthermore, young

people must critically understand the public debate and rhetoric of climate change. Young people's active use of digital media (social media, art, video and visualisations) offers an opportunity for alternative climate imagery, raising awareness of the effects of climate change and suggesting ways to counteract it (Wang et al. 2018).

The core of youth work is to support young people's agency. The school strike movement is an interesting process for youth work to reflect and analyse. What role did the digital media play in creating a global narrative from Greta Thunberg's individual story? How did the Australian school demonstrations go viral? Against all the odds, why didn't the demonstrations just wither away? What is the role of the social media? And is it the digital media or the young people that have shaken elections, parties, decision makers, consumers, even business, to think seriously about climate change? Reflecting on these questions might help youth work to understand how digitalisation could make a difference in their efforts to promote young people's agency.

To sum up, the task for a digital youth work strategy is to utilise digitalisation, but at the same time to put the hype around it into a broader context. There are sizeable negative effects related to inequality, health, bullying, reputation management, harmful content, the ways big media technology corporations control our lives, the lack of media literacy and the problems of electronic surveillance, which also must be included in the strategy. Interestingly, youth workers seem to be divided into the optimists, who admire young people's mastery of the digital media and their quickness to be early adopters, and the more traditional youth workers, who prefer face-to-face work, are critical of young people's media habits and who have a negative attitude towards the virtual world. The task of the strategy is to bring those approaches into dialogue, acknowledge the negative effects and work with the hype, the negative phenomena and the resistance.

What is digital youth work and why do we need to manage it?

> Innovation is not just about "light bulb" moments of creativity, but requires strategic leadership (Bessant et al. 2010)

The Expert Group on digital youth work defined digital youth work (EU Expert Group 2018: 10) thus:

> Digital youth work means proactively using or addressing digital media and technology in youth work.
>
> Digital youth work is not a youth work method – digital youth work can be included in any youth work setting (including open youth work, youth information and counselling, youth clubs and detached youth work).
>
> Digital youth work has the same goals as youth work in general, and using digital media and technology in youth work should always support these goals.
>
> Digital youth work can happen in face-to-face situations as well as in online environments – or in a mixture of these two. Digital media and technology can be used either as a tool or an activity, or as content, in youth work.
>
> Digital youth work is underpinned by the same ethics, values and principles as all youth work.
>
> The term "youth workers" in this context refers to both paid and volunteer youth workers.

Why we need to manage youth work

The world is becoming digitalised and young people are at the heart of this development. Youth work cannot stay outside this space. Depending on how we adapt to digitalisation we will either lag behind or create a better way of reaching young people. The Expert Group promotes a proactive use of digital media and technology in order to make digitalisation an integral part of youth work. To arrive there, we need leadership and management.

Digital youth work is a complex phenomenon linked with a global trend of digitalisation and the digital cultures of young people – the ways that young people use, modify and are used by digital media. Most probably all this has a crucial effect on youth work as we know it. The definition above argues that digital youth work is not separate from youth work, but an essential element of it.

New and quickly developing phenomena like digitalisation tend to create two kinds of reaction among youth workers: high positive expectations, even "hype", or resistance and criticism. Management is needed to facilitate a smooth transition and to meet resistance and criticism – and to balance the two. This means, among other things, awareness of digital risks and digital exclusion and readiness to attend to them.

To summarise, the key reasons for the need for management of digital youth work are:

- proactive use of the new media needs support from management;
- agile organisational culture is a leadership challenge;
- innovation requires leadership;
- reconciling the "hype" with the "resistance";
- empowering sceptical youth workers to see digital youth work as an opportunity;
- building a strategy to combat digital exclusion and the harm related to digitalisation;
- complexity of the phenomenon – building a coherent common framework;
- ensuring implementation;
- bringing different actors together – managing collaboration.

Key leadership challenges for a transformation to digital youth work

According to recent literature on the management of digital change in private and public organisations (Andersson et al. 2018; Soule et al. 2016; Gupta 2018; Galunic 2017), the key challenges can be summarised as follows:

1. visible leadership, clear objectives, their implementation and measures to combat resistance; and
2. a working culture which supports digitalisation (networking capability, digital skills and focus on continuous development).

These challenges are likely to also apply to the management of digital youth work in its public and third-sector organisational contexts.

A visible leader

Manager(s) must give support to digital youth work. As Andersson et al. (2018: 35) conclude: "The presence of a dedicated CEO and a central team to propel the new digital development is central in achieving successful transformation." A common mistake is that the directors nominate the IT unit of the organisation, an external expert or a group of digitally minded employees to promote the digital development of the organisation. However, these actors lack either credibility or power in the eyes of the employees to make the necessary changes. As the directors fade into the background, this approach is easily understood as a message that "it is not that important". To be successful the manager(s) must publicly and clearly make digital change their priority.

The North Star and its implementation

Digital change in youth work requires clear objectives, whether it be "digital literacy", "a safe place for finding and meeting friends", "digital creativity", "active e-citizenship", "better access to youth services through digital media" or the like. It can be a long-term, high-level objective, a North Star which shines brightly indicating the direction; it can be a road map and a GPS to indicate the journey to be taken and to find out what point you have reached at a given moment; it can be a strategic plan with aims, expected results, time horizon, means and criteria for evaluation or a priority plan indicating what is at the moment most important for your organisation to achieve. All this requires strategic management, which can be anything from strict top-down management to horizontal teamwork and networking.

Establishing a common framework and objectives for local digital youth work

The Finnish study on digital youth work (Verke 2019) looked at the main obstacles for municipal youth workers in doing and developing digital youth work. Instead of a single obstacle, three stood out. First, the lack of sufficient digital competence (54%), second, a lack of clear organisation with specific objectives for digital youth work (53%) and third, a lack of time for digital youth work (50%). Interestingly, managers raised these same three obstacles as the most important ones (Verke 2019: 32). Nearly a half (46%) of managers also stated that digital youth work is either included in their municipal youth work strategy or that their youth services have a specific digital youth work strategy (Verke 2019: 35). Thus, setting clear guidelines for digital youth work is a good starting point, followed by provision of digital competences and allocation of time for digital work.

Ten steps are needed to establish the objectives for digital youth work and to manage their implementation.

1. Gather knowledge on local digital youth work, young people's use of digital media and technology and the digital youth work competences of youth workers.

2. Devise objectives for digital youth work and put them within the framework of existing objectives and values of local youth work (a road map, strategic plan, priority plan, North Star).

3. Communicate and discuss the objectives within the organisation.

4. Establish a training plan for all youth workers (see EU Expert Group report).

5. Provide encouragement, space (working hours) and resources for on-the-job development of digital youth work; encourage youth workers to experiment and even allow them to fail within given parameters.

6. Map co-operation partners within the city/locality and other providers of services, research or training, as well as companies and other organisations to establish collaborative relationships, networks or platforms.

7. Use digital youth work competences as recruitment criteria all through the process, in job advertisements, during interviews and in making recruitment decisions; and use the regular appraisal interviews to cover digital training needs.

8. Link objectives to budget heads. A long history of integrated municipal youth policy plans in Europe indicates that the main reason for their failure has not been lack of goodwill, but lack of proper allocation of budgets (Siurala 2005; Dumollard and Loncle 2017: 110).

9. Set evaluation criteria. In Finland the proportion of youth services that did not evaluate their digital services at all has dropped from 42% in 2017 to 14% in 2019 (Verke 2019: 37). Despite this progress, only 30% of their managers said there were specific evaluation criteria for digital work. One should evaluate both the processes and outcomes of digital youth work.

10. Nurture an agile mindset and critical thinking. An agile mindset emphasises the importance of the employees, the organisation and the managers becoming agile, flexible and quick to respond to changes. Another valuable mindset is a critical media attitude, which is linked with privacy questions, intellectual property rights, security and safety, manipulation of elections, distorting democratic processes, the appearance of drug markets on the internet, nurturing terrorism, adverse effects on health and social relations, bullying and harassment.

A corollary to an agile mindset – proactive use of media and technology and a critical attitude – is an overall developmental attitude, a focus on continuous development. Development requires innovation, which is not primarily an individual characteristic but an organisational character (Bessant et al. 2010). Innovation can and should be managed. Innovation in organisations typically proceeds in steps, which should take place under the supervision of the leadership of the organisation.

Overcoming resistance

> Traditional mindsets, practices, and resources can be difficult to adapt to the digital challenge. (Andersson et al. 2018)

Digital youth work is a relatively new way of doing youth work and it easily raises doubts. It can contradict the established mode of youth work – face-to-face encounters in a physical reality. The task of managers is twofold: to seriously listen to resistance and criticism, and to create opportunities for the staff to learn about the meaning and use of new media to young people.

There are many options to support and promote a curious, critical and positive orientation – an agile mindset – to the digital media and technology. These approaches include:

- using strategic management tools (making digital youth work a priority, integrating it into the Balanced Score Card, quality assessment tools, efficiency indicators and the like);
- having a proper dialogue on digital youth work with the staff, considering and reconciling contradictory views (led by the director);
- doing study visits;
- utilising peer learning (like digital fairs, where youth workers introduce their colleagues to their digital projects and experiences);
- providing a reading or watching list;
- always engaging the entire staff;
- acknowledging and working on problems and threats, but framing digital youth work as an opportunity.

Cultural change

Culture eats strategy for breakfast (*Harvard Business Review*, Nov/Dec 2017: 46)

Our perception of management is often linked with efficiency-motivated, top-down, authoritarian strategic management with strategic plans and priorities utilising private-sector-based methodologies like management by results, quality management (including the EFQM model), CAF (common assessment framework), quality assessment schemes, Balanced Score Cards, performance indicators, results or priority-based pay schemes. In many countries, youth workers find these measures are "administrative harassment", "hostile" or not applicable to youth work (Ord 2012). However, in some other countries the same methods have been used successfully to manage changes in youth work (Siurala 2018).

However, it is perhaps useful to make a distinction between strategic planning and the cultural capability of an organisation to implement changes. The former – strategic management – has its place and role, but the latter refers to a broader approach which puts more emphasis on how the employees work and on how the work is organised. We need both, and perhaps, more so, the latter: it's about the people, not the technology. Interestingly, a trend in management of networking and digitalisation has been increased interest in culture over strategic management. A vivid example is the quote above: "Culture eats strategy for breakfast".

That article then asks "How to create this cultural transformation without tearing the current fabric which makes our essential business so successful" (*Harvard Business Review* 2017: 47). Why "cultural transformation"? It is because digitalisation can have an effect on almost everything that an organisation does. It does not mean that the ethos, values and core of the organisation change, but digitalisation can have a deep effect on how things are done. In the business world the cultural changes can be far-reaching: "without actively fostering digital cultural characteristics, such as customer centricity, constant experimentation, continuous strategy adaption,

responsiveness or breaking down the silos (cross-collaborative teams) that traditionally exist between business and IT, digital transformation efforts flounder" (ibid.: 47). What cultural changes can we expect in digital youth work?

Digital youth work – does it change youth work as we know it?

Youth work seems to be divided into two (opposite, sometimes even opposing) cultures: the proponents and opponents of digital youth work. Culturally Finland is an example of the former, even if the cultural divide is visible. A Finnish survey study with 1 250 respondents (Verke 2019: 13) among municipal youth workers and their managers showed a broad interest in digital contexts and an unanimous understanding that youth work must operate in these settings.

Table 3: Interest among Finnish professionals in digital youth work (Verke 2019)

Statement	totally/partly agree	totally/partly disagree
"I want to be updated on the most recent digital and technological developments"	95%	2%
"Digital youth work must be used more in the youth work of my municipality"	80%	4%

However, there are other dimensions of digital youth work where opinions differ. More than one third of respondents (see Table 4) valued face-to-face work more highly than digital meeting, did not think there was shared understanding about digital youth work and said that it was difficult to understand the benefit of digital youth work (Verke 2019: 13 and 37), though a larger group (42-49%) had an opposite view.

Table 4: Scepticism among Finnish professionals about digital youth work (Verke 2019)

Statement	totally/partly agree	totally/partly disagree
"I consider it equally genuine to meet young people in digital contexts as it is in face-to-face contexts"	49%	37%
"In our work community there is a shared understanding of what digital youth work is"	42%	35%
"It is difficult to understand what is the benefit of digital youth work"	35%	45%

Even in Finland, with a long tradition of digital youth work and an overall positive attitude to it, there still is uncertainty about what digital youth work is. Work remains

to be done to align the thinking and attitudes of youth workers (and managers) in digital youth work and to continue to discuss its limits and risks. In countries, cities and youth services where scepticism of digital youth work is more widespread, the challenge for management is to create constructive communication on digital youth work. There are three key drivers of cultural change in digital youth work:

- emphasis on people – the digital competences of youth workers;
- emphasis on the culture of organisations – their digital capabilities; and
- less focus on long-term planning, more on continuous development.

Emphasis on people: the digital skills of youth workers

Doing digital youth work is not only about young people and youth workers having access to the most modern mobile phones, efficient computers, networks, computer games, 3D printers, robotics and so on. It's "the right strategy and creating the culture to execute: It's about the people, not the technology" (Verma 2017).

The Report of the EU Expert Group (2017: 15-18) provides an excellent outline of the digital competences or training needs of youth workers, which fall under seven headings:

1. Digitalisation of society;
2. Planning, designing and evaluating digital youth work;
3. Information and data literacy;
4. Communication;
5. Digital creativity;
6. Safety;
7. Reflection and evaluation.

Considering the amount of evidence on digital exclusion and the harm related to it, further headings could be "Negative effects of digitalisation" and "Critical mindset". The report further breaks the headings down into more specific, detailed training needs and links them to a large number of useful current documents and literature in the member countries. Many of the references are unfortunately only in the national mother languages. However, there is an extensive appendix of much of the training material in English and other official EU languages. The list is very extensive and has its focus on individual training needs, but we also need skills and competences for a collective engagement in the new organisational culture outlined below: the spirit of networking, teamwork, working with other professionals, collaborative learning and adapting to collaborative governance.

Emphasis on the culture of youth work organisations: their digital capabilities

On the question of networking capability, some argue that digitalisation leads to organisations moving away from hierarchical, autocratic, top-down approaches and looking instead to create more open collaborative environments, with networking, teamwork and operating through platforms (where different partners can collaborate). We need digital collaborative tools to support communication, collaboration and rapid feedback within and between the organisation(s). The Helsinki City Youth

Services had a Game House for young people to play computer games under the supervision of youth workers for free. The Game House quickly developed into a versatile platform for various actors to meet, including the young gamers, youth workers, the game industry, university and researchers, employment projects, the Finnish E-sports Federation and the Centre of Expertise for Digital Youth Work.

Digitalising organisations are becoming more and more user-centric: the success of digital solutions depends on their ability to meet the individual needs of the consumers (Facebook, Tripadvisor, Uber). This is why organisations develop means of communicating and working directly with citizens. At the same time, user-centrism also increases complexity and the need for quick changes because increasingly varied interests should be met as they tend to change overnight. This has led organisations to become increasingly flexible and agile. Youth work, including public-sector youth work, has profiled itself as working directly with the young people, giving them a voice and being flexible. Thus, youth work should be particularly well equipped to face the challenge of digitalisation.

Less focus on long-term planning, more on continuous development

Long-term planning is necessary, but in an era of constant changes and new developments it is equally important to keep the process open. There is a need for continuous experimentation and innovation, which leads to the necessity of being flexible and being ready to modify the original strategy. This constant adaption to changes becomes an internal cultural challenge – a test for our organisational agility.

Digital exclusion – exclusion from critical digital literacy

Sora Park said that device literacy, the access and technical capacity to use digital media, is not enough (Park 2012). She emphasises the importance of content literacy: the ability to use, understand, create and communicate content. Park is talking about "digital literacy", a term originally coined by Paul Gilster in 1997. According to her, digital exclusion is exclusion from digital literacy. Since Gilster, scholars have tried to develop and define the term. There is general agreement that the term is ambiguous, changing and related to a variety of interests and ideologies (Belshaw 2011: 220).

Luciana Pangrazio tries to organise this ambiguity by describing types of literacy approach (Pangrazio 2016). The first type of digital literacy education is called the design turn. It refers to "the idea that unpacking and examining the processes of digital design in an educational setting lead the learner to a critical and practical knowledge of digital text production" (ibid.: 166). Creating your own digital products helps you understand how digital media messages are constructed and disseminated. However, the focus is on the credibility and reliability of content, not the difficult issue of power and ideology behind it. A variety of the design turn is the emphasis on learning to code and the maker movement. "The overarching focus of coding and maker movement is on the creation of 'new' things, while along the way learning skills of mastery and critique" (ibid.: 167). The limitation is that the underlying ideology of the digital contexts is left unquestioned.

A second literacy type, ethical analyses, "echos Freire's (1970) critical pedagogy, where the goal of literacy education is to overturn social and political inequalities. In this model, students are seen as 'victims of media manipulation', while the educator acts as gatekeeper over the knowledge and skills that will liberate them from the repressive ideologies expressed through popular media" (Pangrazio 2016: 164). Minna Saariketo talks about critical technology education, which is "an approach that challenges mainstream ideas of digital education as solely adapting to existing technology and equipping people with skills needed in order to use technology effectively (to enhance economic growth)" (Saariketo 2017: 42). She continues: "Instead of assuming digital and technology to be neutral concepts or something that can be harnessed to fulfill the needs of education or the economy, the focus should shift to how technology alters perception and thinking" (ibid.: 42). She wants critical media education to answer questions like: "What kind of power structures does technology construct and maintain? Who benefits from technology? What kind of values does technology create and how does it alter the existing ones? What is the logic of software solutions? How do search engines and algorithms work and organise information?" (ibid.: 42-3 and Saariketo 2018).

A further type of literacy is about power and identity in the digital media. Are media manipulating the users or are the users manipulating the media? There is the discussion about the media industry (like the gaming corporations) constantly creating new consumer needs. But there are also those who argue that it is not the media that manipulate the citizens, but that it is the citizens who make creative use of the media to explore and construct their personal identities. Paul Willis showed already in 1990 how young people used film, music and even micro computers to reflect their subcultural identity. Today a lot of research (like Wilska 2019) is about how FaceBook, YouTube, Instagram, WhatsApp and the like are used to present oneself on the internet. How to perform self in front of others, the invisible audience of "followers", "likers" and "fans"? Andra Siibak (2019) argues that every young person follows a YouTuber, and YouTubers have become opinion leaders and role models for present-day youth. More needs to be known about how the power of these micro-celebrities influences young people's lives.

The third type of literacy refers to the "presentational culture of the social media" and to the capacity of ordinary young people to act as a critical audience. Pangrazio thinks that we focus on understanding the media either through access and technical mastery of it or through ethical and theoretical analyses. Media education is divided into learning technical skills or developing theoretical competences of critique. The emphasis is on technical skills. For example, the widely used EU guide DigComp (Vuorikari et al. 2016) comprises five general technical competences to master digital means, its communication, content creation, safety and problem solving. It does not include the broader theoretical skills of critique. The third type of literacy of the "presentational culture of social media" raises the issue of active social media citizens: can young people act as a critical audience and guide their micro-celebrities and demand themes relevant to them?

Pangrazio is in favour of critical digital literacy which would link the different types of criticism: the technical competences, the theoretical skills of critique and the role of a critical audience. She suggests that we should place the individual, the young

person and their cultural context, as the subject, not the object of media education. How can we use digital media to create positive trajectories through working with disadvantaged youth, building on their strengths and interests, for example in gaming? Where and how do the ideology and interests of the global media corporations, the industry, those in power and social inequalities intersect with the individual and the cultural context of the young people and their ways of using digital media? How can we integrate critical, even ideological analysis, into development of digital media skills? Young people's own media products, coding and maker culture should not stay in a politico-ideological vacuum.

To broaden the understanding of digitalisation and technological change it is useful to learn to question and criticise, because technology is not necessarily natural, neutral or self-evident.

> Questioning what concepts like *free*, *friend, link, like, community, share, collaboration* and *open* actually represent in the digital context might result in a more conscious and knowing mode of engagement … they might be applied in alternative ways that seek to counter hegemonic discourse. (Pangrazio 2016: 172)

There are many indications that the increased critical awareness of the citizens and consumers of the hegemonic discourse leads to changes. Consumers have become worried at the way the big technology companies control their consumer choices, leisure and social relations and threaten privacy and democracy. Following this concern, public authorities in Europe (EU Commission) and the USA (US Department of Justice) have investigated and sanctioned the companies. As a result, in early June 2019 the stock market values of the FAANG (Facebook, Apple, Amazon, Netflix and Google) companies temporarily collapsed. However, researchers like Zuboff (2019) argue that "surveillance capitalism" – the technology companies – shape, control and direct every aspect of our everyday life, mostly without us even noticing it.

Conclusion

This chapter has noted the strong commitment of the EU to the promotion of digitalisation in youth work as a promise, while not forgetting its risks. Due to the ambiguity of the digitalisation process and the variety of interests and actors involved, it has become evident that youth work needs to reconcile the optimists (of the digital industry, young people, some youth workers), their opponents (who have a strong tendency towards child protection and traditional face-to-face youth work) and research on the risks of digital media, like health, social and political risks. This chapter presents a model of how to manage digitalisation as an opportunity for both young people and the youth services, how to meet resistance to change and also how to integrate action against digital exclusion within a comprehensive strategy to transform youth work in the digital era.

We cannot keep digitalisation out of youth work. Instead, we should – with a critical mind – build a conscious, structured and balanced way to integrate digitalisation in our practices with its ambiguities, interests and approaches, in a way which is based on

1. the ethos, values, objectives and competences of youth work;
2. the objectives of our own youth work organisation;

3. the constantly changing challenges from young people; and
4. responsiveness to new digital opportunities and risks.

Youth work as an educational practice has to find ways of improving young peoples' critical media literacy to help them face the opportunities and threats of digitalisation. It is not easy and it is not a silver bullet, but – together with climate warming – it belongs to the big questions of today and the future.

References

Adiele I. and Olatokun W. (2014), "Prevalence and determinants of internet addiction among adolescents", *Computers in Human Behavior*, Vol. 31, pp. 100–110.

Andersson P., Movin S., Mähring M. et al. (eds) (2018), "Managing digital transformation", Stockholm School of Economics Institute for Research, Göteborg.

Belshaw D. (2011), "What is 'digital literacy'?", EdD thesis, Durham University, available at https://clalliance.org/wp-content/uploads/files/doug-belshaw-edd-thesis-final.pdf, accessed 10 June 2019.

Bengtsson R. (ed.) (2014), "Rapport: Strategiska trender i globalt perspektiv – 2025: En helt annan värld?", Kansliet för strategisk analys (SA), Regeringskansliet, Stockholm.

Bessant J., Hughes T. and Richards S. (2010), "Beyond light bulbs and pipelines: leading and nurturing innovation in the public sector", Sunningdale Institute, National School of Government, Sunningdale, Berkshire, UK.

Brunborg G. S., Mentzoni R. A., Melkevik O. R. et al. (2013), "Gaming addiction, gaming engagement, and psychological health complaints among Norwegian adolescents", *Media Psychology*, Vol. 16, No. 1, pp. 115-28.

Byman R., Korhonen T., Sintonen S. et al. (2018), "Young people's perception of the importance of digitalization", pp. 149-59 in *Youth Barometer 2017: Roads to learning*, Pekkarinen E. and Myllyniemi S. (eds), Finnish Youth Research Society, Helsinki, available (in Finnish) at https://researchportal.helsinki.fi/en/publications/nuorten-k%C3%A4sitykset-digitalisaation-t%C3%A4rkeydest%C3%A4, accessed 25 July 2020.

Carnegie Trust UK (2017), "The impact of a digital divide on children's educational performance", available at https://theknowledgeexchangeblog.com/2018/04/09/the-impact-of-a-digital-divide-on-childrens-educational-performance/, accessed 24 June 2019.

Colley H., Boetzelen P., Hoskins B. and Parveva T. (2007), *Social inclusion for young people: breaking down the barriers*, Council of Europe Publishing, Strasbourg.

Council of the European Union (2017), Council conclusions on smart youth work, Brussels, 3 November 2017 (OR. En) 13593/17.

Council of the European Union (2018) and the Representatives of the Governments of the Member States meeting within the Council on a framework for European cooperation in the youth field: The European Union Youth Strategy 2019-2027 (Resolution 2018/C 456/01).

Davis A. (2010), "New media and fat democracy: the paradox of online participation", *New Media and Society*, Vol. 12, No. 5, pp. 745-61.

Digitalist [magazine] (2016), "How young people view the impact of digitization on the world", available at https://blogs.sap.com/2016/11/10/sap-research-how-do-young-people-view-the-impact-of-digitization-on-the-world-today/, accessed 8 June 2019.

Dumollard M. and Loncle P. (2017), "Local integrated youth policies in France – what benefits at community level?" in Nico M. and Taru M. (eds), *Needles in haystacks: finding a way forward for cross-sectoral youth policies* , Youth Knowledge No. 21, Youth Partnership, Council of Europe, Strasbourg.

Douglas K., Farzin D. and Siang A. (2017), "Farewell to truth? Conspiracy theories and fake news on social media", *The Psychologist*, January 2017.

Estonian Youth Work Centre (n.d.), *The concept of smart youth work*, available at entk.ee.

EU-Council of Europe youth partnership (2007), *Social inclusion and young people: breaking down the barriers*, Colley H., Boetzelen P., Hoskins B. and Parveva T. (eds), Council of Europe Publishing, Strasbourg, available at https://go.coe.int/RIeVP, accessed 10 July 2020.

EU Expert Group (2018) for the European Commission, Directorate-General for Education, Youth, Sport and Culture, "Developing digital youth work: policy recommendations and training needs", Expert group set up under the EU Work Plan for Youth for 2016-2018, European Union, Luxembourg.

Eurofound (2015), "Social inclusion of young people: executive summary", available at www.eurofound.europa.eu/publications/report/2015/labour-market-social-policies/social-inclusion-of-young-people., accessed 10 June 2019.

European Commission (2018), "Engaging, connecting and empowering young people: a new EU youth strategy", COM(2018) 269 final, available at ec.europa.eu/youth/sites/youth/files/youth_com_269_1_en_act_part1_v9.pdf, accessed 12 August 2019.

Freedom House (2019), Reports on *Global democracy* and *Freedom on the Net* 2018 and 2019, available at https://freedomhouse.org, accessed 10 June 2019.

Freire P. (1970), *Pedagogy of the oppressed*, Herder & Herder, New York.

Galunic C. (2017), *Overcoming resistance to digital change*, INSEAD, Paris.

Gilster P. (1997), *Digital literacy*, John Wiley & Sons, New York.

Gupta S. (2018), "Understanding digital strategy", *Harvard Business Review*, August 2018.

Hampton K., Rainie L., Lu W. et al. (2015), "Social media and the cost of caring", *Pew Research Center*, www.pewinternet.org/2015/01/15/social-media-and-stress/, accessed 10 June 2019.

Hargittai E. and Hsieh Y-L. (2013), "Digital inequality", in Dutton W. (ed.), *The Oxford handbook of internet studies*, Oxford University Press, Oxford.

Hargittai E. and Walejko G. (2008), "The participation divide: content creation and sharing in the digital age", *Information, Communication and Society*, Vol. 11, No. 2, pp. 239-56.

Harvard Business Review (2017), "Culture eats strategy for breakfast", *Harvard Business Review*, November-December 2017, p. 46.

Hilty L. and Bieser J. (2017), "Opportunities and risks of digitalization for climate protection in Switzerland", University of Zurich, Zurich.

Hwang Y. and Jeong S. (2009), "Revisiting the knowledge gap hypothesis: a meta-analysis of thirty-five years of research", *Journalism and Mass Communication Quarterly*, Vol. 86, No. 3, pp. 513-32.

Kaarakainen M-T. and Muhonen M. (2016), "At the margins of education and digitalisation" (in Finnish only), *Yearbook of Student Research 2016* (in Finnish only).

Kiviniemi J. and Tuominen S. (eds) (2017), "Digital youth work – a Finnish perspective", Verke, National Centre of Expertise for Digital Youth, available at https://educationdocbox.com/Homework_and_Study_Tips/69326587-Digital-youth-work-a-finnish-perspective.html, accessed 10 June 2019.

Kuss D. J. and Griffiths M. D. (2012), "Internet gaming addiction: a systematic review of empirical research", *International Journal of Mental Health and Addiction*, Vol. 10, No. 2, pp. 278-96.

Kuuluvainen S. and Mustonen T. (2019), "Digital recreational gaming and digital gaming addiction" (only in Finnish) 2nd printing, available at https://digipelirajaton.fi/wp-content/uploads/sites/7/2019/04/Digi_170x240_TjaS_25.3.19_M-1.pdf, accessed 4 June 2019.

Lauha H. and Nölvak K. (eds) (2019), "Digitalisation and youth work", National Centre of Expertise for Digital Youth and Estonian Youth Work Center, available at www.verke.org/wp-content/uploads/2019/02/Digitalisation-and-youth-work.pdf, accessed 10 June 2019.

Livingstone S. and Helsper E. (2007), "Gradations in digital inclusion: children, young people and the digital divide", *New Media and Society*, Vol. 9, No. 4, pp. 671-96.

Livingstone S., Bober M. and Helsper E. (2005), "Internet literacy among children and young people: findings from the UK Children Go Online project" (online), LSE Research Online, London, available at: http://eprints.lse.ac.uk/archive/00000397, accessed 12 January 2020.

Lockhart M. (2019), "The relationship between Instagram usage, content exposure, and reported self-esteem", George Mason University, available at www.researchgate.net/publication/332751267_The_relationship_between_Instagram_usage_content_exposure_and_reported_self-esteem, accessed 2 January 2020.

MacDonald R. and Marsh J. (2005), *Disconnected youth? Growing up in Britain's poor neighbourhoods*, Palgrave Macmillan, Basingstoke, Hants.

Melvin J. (2017), "Digital tools, spaces and places as mediators of youth work practice", University of Brighton, Brighton.

National Centre of Expertise for Digital Youth Work (2017), "Digital youth work guidelines", available at www.verke.org/material/digital-youth-work-guidelines/?lang=en, accessed 8 June 2019.

National Institute for Health and Welfare (NIHW) (2016), "Cross-generational transmission of disadvantage" (in Finnish only).

National Youth Centre of Ireland (2017), Digital youth work guidelines, www.youth.ie/sites/youth.ie/files/Screenagers-Guidance.pdf, accessed 8 June 2019.

Ord J. (ed.) (2012), *Critical issues in youth work management*, Routledge, Didcot, Oxon.

Pangrazio L. (2016), "Reconceptualising critical digital literacy", *Discourse: Studies in the Cultural Politics of Education*, Vol. 37, No. 2, pp. 163-74, available at http://dx.doi.org/10.1080/01596306.2014.942836, accessed 10 June 2019.

Park S. (2012), "Dimensions of digital media literacy and the relationship to social exclusion", *Media International Australia,* Vol. 142, No. 1, pp. 87-100.

Peter J. and Valkenburg P. M. (2006), "Adolescents' internet use: testing the 'disappearing digital divide' versus the 'emerging digital differentiation' approach", *Poetics*, Vol. 34, Nos. 4–5, pp. 293-305.

Primack B. A. and Escobar-Viera C. G. (2017), "Social media as it interfaces with psychosocial development and mental illness in transitional age youth", *Child and Adolescent Psychiatric Clinics of North America*, Vol. 26, No. 2, pp. 217-33.

Prot S., Anderson C. A., Gentile D. A. et al. (2014), "The positive and negative effects of video game play", pp. 109-28 in Jordan A. and Romer D. (eds), *Media and the Well-Being of Children and Adolescents*, Oxford University Press, New York.

Rigby D., Sutherland J. and Noble A. (2018), "Agile scale", *Harvard Business Review*, May–June 2018, pp. 88-96.

RSPH [Royal Society for Public Health] (2017), "Status of mind: social media and young people's mental health and well-being", available at www.rsph.org.uk/static/uploaded/d125b27c-0b62-41c5-a2c0155a8887cd01.pdf, accessed 2 January 2020.

Saariketo M. (2017), "Educating (critical) citizens in a digital society", in *Digital youth work – Finnish perspectives*, Verke, National Centre of Expertise for Digital Youth Work, Helsinki, available at https://educationdocbox.com/Homework_and_Study_Tips/69326587-Digital-youth-work-a-finnish-perspective.html, accessed 10 June 2019.

Saariketo M. (2018), "The unchallenged persuasions of mobile media technology: the pre-domestication of Google Glass in the Finnish press", available at https://research.aalto.fi/en/publications/the-unchallenged-persuasions-of-mobile-media-technology(3993c571-ecfa-4d9b-9a33-18a54812f5d6).html, accessed 10 June 2019.

Siibak A. (2019), "Social media micro-celebrities and their audiences", keynote speech at the seminar Young People in Social Media – Challenges and Opportunities?, Finnish Academy, 15 August 2019.

Siurala L. (2005), "A European framework for youth policy", Council of Europe, Strasbourg.

Siurala L. (2018), "Country context: Finland", in Ord J., Carletti M., Cooper S. et al. (eds), *The impact of youth work in Europe: a study of five European countries*, Publication No. 56, Humak University of Applied Sciences, Helsinki.

Soule D., Puram A., Westerman G. F. and Bonnet D. (2016), "Becoming a digital organization: the journey to digital dexterity", available at SSRN: https://ssrn.com/abstract=2697688, accessed 10 June 2019.

Statistics Finland (2019), statistics available at www.stat.fi/til/vpa/2017/02/vpa_2017_02_2019-01-31_tie_001_fi.html, accessed 10 June 2019.

Stiglitz J. (2012), *The price of inequality: how today's divided society endangers our future*, W.W. Norton & Co., New York.

Stiglitz J. (2018), article in *Helsingin Sanomat* (19 September 2018), p. 26 (in Finnish).

Vauhkonen T., Kallio J. and Erola J. (2017), "Intergenerational transmission of disadvantages in Finland" (in Finnish, with English summary), *Yhteiskuntapolitiikka*, Vol. 82, No. 5.

Verke [National Centre of Expertise for Digital Youth Work] (2019), "Digitalisation of youth work in 2019" (in Finnish), available at www.verke.org, accessed 10 June 2019.

Verma A. (2017), "Digital transformation: it's about strategy and culture", *CIO Review India*, available at https://digital-transformation.cioreviewindia.com/cxoinsight/digital-transformation-driving-modern-infrastructure-nid-3480-cid-1.html, accessed 20 June 2019.

Vuorikari R., Punie Y., Carretero S. and Van den Brande L. (2016), "DigComp 2.0: the digital competence framework for citizens", Update Phase 1: The Conceptual Reference Model, available at http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101254/jrc101254_digcomp%202.0%20the%20digital%20competence%20framework%20for%20citizens.%20update%20phase%201.pdf, accessed 10 June 2019.

Wang R. and Yang F. (2016), "Link found between selfie viewing and decreased self-esteem", *Penn State News*, available at https://news.psu.edu/story/432957/2016/10/19/research/link-found-between-selfie-viewing-and-decreased-self-esteem, accessed 10 June 2019.

Wang S., Corner A., Chapman D. and Markowitz E. (2018), "Public engagement with climate imagery in a changing digital landscape", *WIREs*, Vol. 9, No. 2, e509, available at https://doi.org/10.1002/wcc.509, accessed 10 June 2019.

Willis P. (1990), *Common culture: Symbolic work at play in the everyday cultures of the young,* Westview Press.

Wilska T-A. (2019), "Agents – young people's agency in social media", University of Jyväskylä, Jyväskylä, available at www.jyu.fi/hytk/fi/laitokset/yfi/en/research/projects/agents/, accessed 19 August 2019.

Wineburg S., McGrew S., Breakstone J. and Ortega T. (2016), "Evaluating information: the cornerstone of civic online reasoning", *Stanford Digital Repository*, available at http://purl.stanford.edu/fv751yt5934, accessed 10 June 2019.

World Economic Forum (2018), "Understanding the impact of digitalization on society", available at http://reports.weforum.org/digital-transformation/understanding-the-impact-of-digitalization-on-society, accessed 12 April 2019.

Zuboff S. (2019), *The age of surveillance capitalism: the fight for a human future at the new frontier of power*, Public Affairs, New York.

Author biographies

Adina Marina Șerban PhD
President, Centre for Sustainable Community Development (Romania)

Member of the Pool of European Youth Researchers, co-ordinated by the partnership between the Council of Europe and the European Commission in the field of Youth.

Adina holds a PhD in Political Sciences (Comparative European Youth Policies in Romania and Turkey), with extended expertise in grass-roots youth work and youth work methodologies and practices, youth participation methodologies and inclusion policies. She is the leading figure of the Center for Sustainable Community Development, Giubega, Romania, and formerly Council of Europe Advisory Council Youth Member, 2012-13. Her interests include working with young people with fewer opportunities using participatory methodologies, community development techniques, non-formal education tools and instruments, social entrepreneurship approaches to youth work, human rights education, intercultural education and education for citizenship.

Dr Adrienne Katz
Director, Youthworks Consulting Ltd (UK)

Adrienne is the author of various books and reports on online safety and is a CPD accredited trainer on this topic. Director of the consultancy Youthworks, Adrienne runs the annual cybersurvey. This time-series dataset and research programme about young people's online lives has recently published research on vulnerable children and their online experiences. Adrienne led a team that drafted guidance for the Welsh Government and has evaluated a range of services for young people, including multi-agency services, youth justice services, and health and anti-bullying programmes. She received the award Inspirational Individual of the Year 2018 in the Ben Cohen Stand Up Foundation awards and is a member of the Association of Adult & Child Online Safety Specialists (AACOSS).

Dr Aiman El Asam
Lecturer in Forensic Psychology, Kingston University (UK)

Dr El Asam is a researcher and lecturer, specialising in forensic and legal psychology as well as young people's mental health and their online lives. He has a wealth of experience in international research management and teaching and, by collaborating with a number of colleagues, he has developed research interests that cover internalising and externalising mental health and conduct problems (e.g. depression, anxiety, trauma, online risks and problematic internet use) among children, adolescents and adults. Dr El Asam is interested in how current laws and policies facilitate online safety and positive online use, and how victims of online aggression are protected. Most importantly, his work with colleagues has opened an avenue to investigation of the role of practitioners (e.g. GPs, social workers and psychologists) in translating "online lives" in their assessments when working with young people.

Alberto Capote Lama
Lecturer in Geography, University of Granada (Spain)

Alberto is a Member of the Research Group on Socio-spatial Inequalities, Planning and Geographic Information Systems.

Anja Johnston

Anja is an assistant youth worker in the far North of Scotland who dedicates her time to improving the lives of young people through positive youth work and volunteering with Scouts Scotland. In her spare time, Anja can be found exploring the outdoors or playing rugby with her local club.

Antía Pérez-Caramés
Senior Lecturer in Sociology, University of A Coruna (Spain)

As a Member of the Research Group on the Sociology of International Migrations (ESOMI), University of A Coruna (Spain), Antía is currently co-ordinating the research project The New Emigratory Wave from Spain: Profiles, Mobility Strategies, and Transnational Political Activism (CSO2016-80158-R).

Belén Fernández-Suárez
Lecturer in Sociology, University of A Coruna (Spain)

Belén is a Member of the Research Group on the Sociology of International Migrations (ESOMI), University of A Coruna (Spain).

Prof. Dr Björn Bohnenkamp
Professor of Marketing, Media & Consumer Culture at
Karlshochschule International University (Germany)

Björn Bohnenkamp holds a PhD in media studies (Cologne) and a PhD in marketing/consumer culture (Münster). His expertise includes consulting and research in the fields of generational relations, media success, factors in the digital transformation of cultural institutions and local retailers and in digital ethics.

Dr Cathy Street
Independent mental health researcher and consultant (UK)

Dr Cathy Street has held senior research roles in the mental health field over the last 20 years, including Head of Research at Young Minds, Programme Lead at the London Development Centre for Mental Health, acting Head of Research at Rethink Mental Illness and Director of Research at the National Children's Bureau. Her career includes extensive national strategic work to support child and family participation in service improvement, the development of e-therapies and co-production in health research. This includes authoring training materials for the Royal College of Psychiatrists and leading national projects for NHS England and the Department for Education (UK). In 2016, Cathy was awarded the MQ and National Institute for Health Research (UK) Clinical Research Network: Mental Health Service User Involvement in Research Award for her work to develop pan-European user involvement in research about improving transition from

child and adolescent mental health services (funded by the EU's 7th Framework Programme for research on technological development and demonstration).

Dr Dan McQuillan
Lecturer in Creative and Social Computing at Goldsmiths, University of London

After his PhD in Experimental Particle Physics, Dan worked in the field of learning disabilities and mental health, and later led Amnesty International's delegation to the UN Internet Governance Forum. He co-founded Science for Change Kosovo, a youth-led air quality citizen science project. Dan is a respected academic researcher in the social impact of artifical intelligence. His recent papers include "People's councils for ethical machine learning", "Data science as machinic neoplatonism" and "Algorithmic states of exception". He also writes for the public on the Web platform *OpenDemocracy*, where his recent articles include "Manifesto on algorithmic humanitarianism", "Mental health and artificial intelligence: losing your voice" and "Towards an anti-fascist AI".

Dan Moxon
Director, People Dialogue and Change (UK)

Dan is a Member of the Pool of European Youth Researchers co-ordinated by the partnership between the Council of Europe and the European Commission in the field of Youth. He is a researcher and practitioner in the field of inclusive youth participation, with nearly 20 years' experience in the public voluntary and academic sectors. In his current role at People Dialogue and Change he specialises in providing consultancy and capacity-building services for organisations that wish to develop their approach to youth participation or involve young people in policy making. He has undertaken work for a variety of local, national and international bodies, and developed participatory youth programmes for young people from a range of backgrounds, including disabled young people, young people with chronic health conditions, young people in social care, homeless young people and young Muslims. In 2018, his research supported the Estonian–Bulgarian–Austrian Trio Presidencies of the EU to enable nearly 50 000 young people to develop the EU Youth Goals.

Dr Daniel Briggs
Lecturer in Criminology and Leader of the Research Group of Knowledge on Social Problems, Universidad Europea (Spain)

Daniel's interests broadly cover any social problem and he has published extensively, most recently receiving an international award for his book *Dead end lives* from the American Society of Criminology. He currently teaches and researches in Madrid, Spain, and is completing other ethnographic research projects.

Dr Dunja Potočnik
Senior Research Associate, Institute for Social Research in Zagreb

Dunja is a Member of the Pool of European Youth Researchers co-ordinated by the partnership between the Council of Europe and the European Commission in the field of Youth. As a sociologist, she has been active in youth research for almost 20 years.

Her fields of interest include youth employment, education, social stratification, youth and digital technologies, and educational and science policy. She has taken part in more than 30 research and expert projects. Dunja has also co-authored four books, edited four other books and published over 70 scientific and expert papers.

Hélène Mariaud
Executive Committee Member of the European Students Union

Hélène is a 25-year-old student activist who has been involved in youth organisations since 2014. She has been involved in students' unions at local, national and European levels, and her areas of expertise include social inclusion and accessibility to higher education, as well as the fight against discrimination and for more equality in education.

James Kenny MSc

James is a graduate of The National University of Ireland, Galway, where he read for a BA in Political Science and Sociology, and Trinity College Dublin, where he read for an MSc in Social Research Methodology. James has research experience in university, state and charity sectors. His research interests were framed at European level, focusing on comparative policy in the areas of human migration (all), political violence and health, the European Muslim experience, positive youth development and social inclusion among migrants, and quantitative and statistical methodology (all). He previously held research roles as a youth researcher at the UNESCO Child and Family Research Centre (NUI Galway), in Research and Policy development at Seanad Éireann (Irish Parliament Buildings) and as a researcher focusing on refugees and asylum seekers in Ireland (Mater Misericordiae University Hospital). James is a co-author of research published in the *Routledge handbook of global child welfare*, and his existing research using ESS data to observe the statistical association between discrimination and health in Europe's Muslims is currently in press.

John Delap
Access & Civic Engagement Project Officer at the Technological University, Dublin (Ireland)

John Delap is based in Ireland, where he works alongside young people from backgrounds of socio-economic disadvantage to build and sustain accessible routes to higher education. John serves as a non-formal human rights education trainer with Irish and European NGOs with a focus on ecumenical dialogue, reconciliation, peacebuilding and LGBTQ+ rights.

Judit Gombás PhD
Associate Professor, Eötvös Loránd University of Sciences, Bárczi Gusztáv Faculty of Special Needs Education (Hungary)

Judit Gombás earned her PhD at the University of Physical Education (Budapest, Hungary) in free time physical activity and visual impairment. She is a founder and former president of the Sport and Leisure Association for the Visually Impaired. She is also the Hungarian national representative of ICEVI (International Council for the

Education of People with Visual Impairment). Her primary fields of research are sport and leisure habits, diverse aspects of adult life, accessibility and the rehabilitation of individuals with visual impairment.

John Taylor
Area Youth Officer, High Life Highland

John lived on a council estate in south-west London and was a motorbike dispatch rider until 1999, a life-changing experience that gave him time to volunteer with young people, which he unexpectedly enjoyed. He went on to live on a narrow boat in Kent with his partner and worked in London and the south-east of England, gaining valuable experience in the voluntary and statutory youth sectors in a detached, outdoor education and at young offending institutes. He qualified in Youth Work through the Open University in 2010, and in 2015 he moved to the Scottish Highlands to take up a position as an Area Youth Officer. John has a particular interest in young people's participation.

Jutta Schneider
Project Manager for Code Your Life, Helliwood Media and Education (Germany)

Jutta Schneider is a pedagogue who has been involved in educational training and qualification projects for pedagogues for more than nine years. She is high experienced in providing coding activities for children with disabilities and also works with children and young people from disadvantaged areas. As a lecturer she provides further education and training for teachers and pedagogues in order to qualify them for coding activities with children.

Karoliina Leisti
Solution Sales Manager, Stereoscape

Karoliina Leisti's focus is on immersive learning and virtual training. She is a specialist in working with extended realities and she has developed new business models for 3D-drawing and VR content. While at Digitalents Helsinki she led a digital media team in the fields of social media, graphic design, XR Design, audiovisual production and 2D/3D animation. She has written learning materials for technology and about social robotics, based on an actual 3D printing project of a robot. She has designed media literacy workshops and educated thousands of children, youth and youth workers.

Katrin Schuberth

Katrin Schuberth has been working for 10 years in non-profit organisations which support the development of media literacy for different target groups. Since 2014 she has been co-ordinating different European projects and has represented NGOs as a partner. She has a variety of experience in project management and project co-ordination, as well as in developing training materials for adult learning in social work and campaigning for media education.

Kajetan Koperski
Board member of the Trans-Fuzja Foundation

Kaj is a 24-year-old trans guy from Poland. After begining his gender transition in 2015 he became involved in the Polish transgender community and began work on

raising awareness and delivering education on transgender issues. He did this by documenting and sharing his experience in YouTube videos and by creating comics series on social media. In 2018 he became a board member of the Trans-Fuzja Foundation (an organisation that fights for transgender rights in Poland), to which he contributes by creating illustrations for educational materials (for example, "A comic book about trans people by trans people") and attending events and Prides all over Poland.

Lana Pasic MPhil MA
Youth Research and Policy Officer, Partnership between the Council of Europe and the European Commission in the field of Youth

Lana holds an MPhil in Development Studies from the University of Oxford, UK (2013), a Joint European Master's Degree in Comparative Local Development from the University of Trento, Italy (2011) and a BAdmin (Hons) in International Relations from the University of Pretoria, South Africa. She has been working in the development sector since 2007, in the area of civic participation, activism and youth participation. Lana has worked with and been consulted by a number of local and international NGOs, research institutes and international organisations in Bosnia and Herzegovina and internationally, including UNICEF, UNDP, Oxfam and Save the Children. She was a contributor to Balkanalysis.com, Al Jazeera English, *OpenDemocracy* and *CaféBabel*, and she has also published in the journals *Forced Migration Review* and *Academia*. In 2015 she published a Kindle edition of her e-book *Twenty years after Dayton: where is Bosnia and Herzegovina today?* Lana was a member of the Pool of European Youth Researchers from 2017 to 2019. She currently works as Youth Research and Policy Officer at the partnership between the Council of Europe and the European Commission in the field of Youth.

Lasse Siurala
Adjunct Professor, Aalto University

Lasse Siurala's background is in youth research, youth policy and management of youth services on local and international levels. Formerly City of Helsinki Director of Youth Services and Director of Youth and Sports at the Council of Europe, he has been an Associate Professor at Aalto University, held the Howland Endowed Chair at the University of Minnesota (Extension Center for Youth Development) and currently works as a lecturer in youth work at Tallinn University. Siurala also works as an expert in InterCity Youth, a European network of local government youth work, and in "Projets innovants en faveur de la jeunesse", an investment foundation of the Ministry of Finance, France 2015–20 (scientific committee). He is the editor or author of *The history of youth work in Europe* (2016), *The impact of youth work in Europe: a study of five European countries* (2018) and *Politiques intégrée de jeunesse: difficultés et leviers d'action* (2019).

Lukas Findeisen MSc
Scientific researcher, Karlshochschule International University

Lukas Findeisen's research focus is on ethics in digitalisation in regard to leadership and management. He holds a Master's degree in medical engineering and microsystems engineering. Besides his technical career he is involved in various

youth organisations, as a trainer for leadership development and as a co-ordinator to support civic engagement as well as active participation. Being a practitioner in the field of technology and actively involved in civil society, he decided to focus his research on the gap between the two, acknowledging the need for an interdisciplinary approach. This volume's Chapter 14 is one of his first chapter-length contributions on this overall theme of ethical leadership in an uncertain digital world.

Lukas Reußner
Volunteer Youth Leader, diversity München e.V. and
Founder of Rainbow Refugees Munich

Lukas has been volunteering for the LGBTQ+ sector in Munich since 2013. He volunteered as a youth leader with queer youth at diversity München e.V, a Munich-based Lesbian Gay Bi Trans+ (LGBTQ+) youth centre. In 2016 Lukas co-founded Rainbow Refugees Munich, which connects Lesbian, Gay, Bi, Trans (LGBT) refugees seeking support with local LGBT organisations.

Mária Magdolna Flamich PhD
Eötvös Loránd University of Sciences, Institute for Disability
and Social Participation and Member of board of trustees,
Összhang (Harmony) Foundation for Disabled Persons

Mária M. Flamich earned her PhD at Eötvös Loránd University of Sciences (ELTE), Faculty of Education and Psychology in 2018. Her research areas focus on education, cultural disability studies, music in disability studies, disability memoir in music and disability on stage. Dr Flamich is also an honorary associate professor at ELTE.

Mária Rita Hoffmann PhD
Eötvös Loránd University of Sciences, Institute for Disability
and Social Participation and Member of board of trustees,
Összhang (Harmony) Foundation for Disabled Persons

Mária Rita M. Hoffmann earned her PhD at Eötvös Loránd University of Sciences (ELTE), Faculty of Education and Psychology in 2018. Her research areas focus on education, cultural disability studies, disability memoir and life writing, and disability metaphors. Dr Hoffmann is an honorary associate professor at ELTE.

Millica

Millica is a young LGBTQIA+ person from Serbia and currently living in France. She has chosen to make her contribution on LGBTilisation, in Chapter 5 of this book, anonymously.

Nuala Connolly PhD
Research Specialist in the Department of Children
and Youth Affairs, Government of Ireland

Nuala is an experienced academic, lecturer and researcher in the fields of child, youth and family research. She obtained her PhD in 2011 from UCD Ireland, focusing on the sociology of the internet and technology. Nuala has a wide range of experience in multi-method and multi-themed child, youth and family research, including

longitudinal evaluation and field-based action research, informing policy and practice in the field of youth. This experience includes qualitative, quantitative and quasi-experimental methodologies, in addition to policy analysis, report-writing and peer-reviewed publication. Nuala was a member of the editing team preparing the Declaration of the 2nd European Youth Work Convention, and the drafting group preparing a Recommendation for the Committee of Ministers of the Council of Europe on youth work. Nuala has previously been responsible for the co-ordination of research nationally for Barnardos, Ireland's leading children's charity. Nuala has also been employed as a Postdoctoral Researcher at the UNESCO Child and Family Research Centre, National University of Ireland, Galway, and as a Lecturer in Social Research Methods and Researcher in the Centre for Youth Research and Development, Maynooth University.

Rachael Hatfield

Rachael is a young person who is now an assistant youth worker living just outside Inverness in the Scottish Highlands. Rachael can often be found representing the Highland region at events or sitting on a number of committees or groups in her roles as Vice Chair of the Highland Youth Parliament (2019-21) and Member of the Scottish Youth Parliament (2019-21) for Inverness and Nairn. As well as her work and volunteering, Rachael acts as a young carer at home and is always going for walks in her local area.

Roberta

Roberta is a young LGBTQIA+ person living in Italy. She has chosen to make her contribution on LGBTilisation, in Chapter 5 of this book, anonymously.

Ron Salaj

Ron is a transdisciplinary activist, working at the intersection of human rights, technology, semiotics of new media and critical theory. Currently he co-ordinates a Master's programme on ICT for Development and Social Good, launched in partnership between University of Turin and ONG 2.0, as well as being on the board of the European Alternative's School for Transnational Activism. Previously, Ron co-founded a youth-led citizens' science movement, Science for Change Kosovo, and UNICEF's first-ever Innovations Lab in Kosovo. Since 2011, he has been engaged in various roles with the Council of Europe's Youth Department. Ron has co-authored two books: *We CAN! Combating hate speech through counter and alternative narratives*, published by the Council of Europe (2017); and *Making sense: towards citizen science and participatory sensing*, published by the Making Sense Consortium (2018). He is also co-author of an upcoming handbook on *Youth participation in internet governance*, being published by the Council of Europe.

Roman Banari
General Secretary, National Youth Council of Moldova

For nearly eight years, Roman has been an activist for human rights and non-discrimination, gathering experience in the local as well as in the international context, working in central public authorities and civil society organisations. His areas of expertise include participation and decision-making processes, social inclusion,

human rights and non-discrimination. He is a member of the Moldovan Expert Council, monitoring the implementation of the UN Convention on the Rights of People with Disabilities, under the Ombudsman office. At the international level, he is a member of the Think Tank and an expert on youth participation for the SALTO-YOUTH Participation and Information Resource Centre.

Seán

Seán is from Dublin in Ireland, and currently living in Belfast, Northern Ireland. He is passionate about class issues, anti-sectarianism and LGBT issues, along with the intersectionality of where the three issues cross.

Subhashish Panigrahi
Founder of OpenSpeaks and co-founder of the O Foundation

Subhashish is an open culture advocate, documentary film-maker and community catalyst, with over a decade's experience in leadership positions, building open internet communities across Asia-Pacific through his work at Mozilla, Wikimedia Foundation and the Internet Society. He is a National Geographic Explorer, with National Geographic documentaries like *Gyani Maiya*, *Mage Porob* and *Remosam* to his credit, and author of "Rising voices: indigenous language digital activism" in *The digital activism in Asia reader* (Meson Press, Lüneburg, 2015) and several hundred online publications. He is also founder of OpenSpeaks, a project to build open resources (like media development, OER and Open Source tools) for native languages, founder of the online working group Marginalized Community Council and co-founder of the O Foundation (OFDN), a non-profit working towards amplifying the voices of under-represented communities on the internet.

Thomas Schmidt
CEO of Helliwood media & education

Thomas Schmidt has been developing educational initiatives and programmes in the field of digital media for more than 15 years. As Chief Executive Officer of Helliwood and a Board member of fjs e.V., he has been involved in the areas of digital culture and education, continuing education and community for many years. At the University of Erfurt he provides lectures in the field of media literacy in early childhood. He conveys in a simple message that we are all able to survive in a fully digitalised world with our very own strengths.

Ursula Curwen
Senior Lecturer in Social Sciences at Edge Hill University (UK)

Ursula Curwen is based in the north-west of England. She teaches digital sociology and social media and is a SOLSTICE (Technology Enhanced Learning) Fellow at Edge Hill University. She is currently researching augmented reality gaming in city spaces.

Veronica Ștefan
Founder of the Digital Citizens think tank

Veronica is a professional focused on policy, education, digital citizenship and innovation in both national and international contexts. She has been working with various stakeholders for more than 14 years, at all levels. Veronica has extensive

experience in advocacy campaigns, youth initiatives and public policies connected to education, participation, the labour market, technology literacy and the digital sector. Starting in 2015, Veronica has worked intensively at the intersection of new technologies, human rights and digital governance, as Member of the Media Literacy Task Force of the North-South Centre, General rapporteur for the first Council of Europe seminar on artificial intelligence and its impact on young people, and Trainer and expert in various Internet Governance Forum initiatives (including IGF Berlin 2019 and SEEDIG 2020), among other positions. Veronica is also the founder of the first Romanian digital think tank, Digital Citizens, with a genuine interest in shaping the digital society. In this framework, she combines her passion for digital education, research and policy analysis.

Vesa Jaakola
Head of Digitalents Helsinki

Vesa Jaakola has long and versatile experience in project management and the Scrum framework in both the private and public sectors. Since 2017 he has concentrated on using best practices of leadership in Digitalents Helsinki. Vesa Jaakola has also led project management, software project management, innovating new service and business models, acquisition of new B2B partnerships and recruiting. Digitalents Helsinki promotes the career paths of young graduates in ICT and digital media fields to open labour markets. During the project, Jaakola has negotiated ICT and media companies' co-operation and implemented business-to-business activities. He has also been involved in developing new digital services and products with partner companies.

Sales agents for publications of the Council of Europe
Agents de vente des publications du Conseil de l'Europe

BELGIUM/BELGIQUE
La Librairie Européenne -
The European Bookshop
Rue de l'Orme, 1
BE-1040 BRUXELLES
Tel.: + 32 (0)2 231 04 35
Fax: + 32 (0)2 735 08 60
E-mail: info@libeurop.eu
http://www.libeurop.be

Jean De Lannoy/DL Services
c/o Michot Warehouses
Bergense steenweg 77
Chaussée de Mons
BE-1600 SINT PIETERS LEEUW
Fax: + 32 (0)2 706 52 27
E-mail: jean.de.lannoy@dl-servi.com
http://www.jean-de-lannoy.be

CANADA
Renouf Publishing Co. Ltd.
22-1010 Polytek Street
CDN-OTTAWA, ONT K1J 9J1
Tel.: + 1 613 745 2665
Fax: + 1 613 745 7660
Toll-Free Tel.: (866) 767-6766
E-mail: order.dept@renoufbooks.com
http://www.renoufbooks.com

CROATIA/CROATIE
Robert's Plus d.o.o.
Marasoviçeva 67
HR-21000 SPLIT
Tel.: + 385 21 315 800, 801, 802, 803
Fax: + 385 21 315 804
E-mail: robertsplus@robertsplus.hr

CZECH REPUBLIC/
RÉPUBLIQUE TCHÈQUE
Suweco CZ, s.r.o.
Klecakova 347
CZ-180 21 PRAHA 9
Tel.: + 420 2 424 59 204
Fax: + 420 2 848 21 646
E-mail: import@suweco.cz
http://www.suweco.cz

DENMARK/DANEMARK
GAD
Vimmelskaftet 32
DK-1161 KØBENHAVN K
Tel.: + 45 77 66 60 00
Fax: + 45 77 66 60 01
E-mail: reception@gad.dk
http://www.gad.dk

FINLAND/FINLANDE
Akateeminen Kirjakauppa
PO Box 128
Keskuskatu 1
FI-00100 HELSINKI
Tel.: + 358 (0)9 121 4430
Fax: + 358 (0)9 121 4242
E-mail: akatilaus@akateeminen.com
http://www.akateeminen.com

FRANCE
Please contact directly /
Merci de contacter directement
Council of Europe Publishing
Éditions du Conseil de l'Europe
F-67075 STRASBOURG Cedex
Tel.: + 33 (0)3 88 41 25 81
Fax: + 33 (0)3 88 41 39 10
E-mail: publishing@coe.int
http://book.coe.int

Librairie Kléber
1, rue des Francs-Bourgeois
F-67000 STRASBOURG
Tel.: + 33 (0)3 88 15 78 88
Fax: + 33 (0)3 88 15 78 80
E-mail: librairie-kleber@coe.int
http://www.librairie-kleber.com

NORWAY/NORVÈGE
Akademika
Postboks 84 Blindern
NO-0314 OSLO
Tel.: + 47 2 218 8100
Fax: + 47 2 218 8103
E-mail: support@akademika.no
http://www.akademika.no

POLAND/POLOGNE
Ars Polona JSC
25 Obroncow Street
PL-03-933 WARSZAWA
Tel.: + 48 (0)22 509 86 00
Fax: + 48 (0)22 509 86 10
E-mail: arspolona@arspolona.com.pl
http://www.arspolona.com.pl

PORTUGAL
Marka Lda
Rua dos Correeiros 61-3
PT-1100-162 LISBOA
Tel: 351 21 3224040
Fax: 351 21 3224044
E mail: apoio.clientes@marka.pt
www.marka.pt

RUSSIAN FEDERATION/
FÉDÉRATION DE RUSSIE
Ves Mir
17b, Butlerova ul. - Office 338
RU-117342 MOSCOW
Tel.: + 7 495 739 0971
Fax: + 7 495 739 0971
E-mail: orders@vesmirbooks.ru
http://www.vesmirbooks.ru

SWITZERLAND/SUISSE
Planetis Sàrl
16, chemin des Pins
CH-1273 ARZIER
Tel.: + 41 22 366 51 77
Fax: + 41 22 366 51 78
E-mail: info@planetis.ch

TAIWAN
Tycoon Information Inc.
5th Floor, No. 500, Chang-Chun Road
Taipei, Taiwan
Tel.: 886-2-8712 8886
Fax: 886-2-8712 4747, 8712 4777
E-mail: info@tycoon-info.com.tw
orders@tycoon-info.com.tw

UNITED KINGDOM/ROYAUME-UNI
The Stationery Office Ltd
PO Box 29
GB-NORWICH NR3 1GN
Tel.: + 44 (0)870 600 5522
Fax: + 44 (0)870 600 5533
E-mail: book.enquiries@tso.co.uk
http://www.tsoshop.co.uk

UNITED STATES and CANADA/
ÉTATS-UNIS et CANADA
Manhattan Publishing Co
670 White Plains Road
USA-10583 SCARSDALE, NY
Tel: + 1 914 472 4650
Fax: + 1 914 472 4316
E-mail: coe@manhattanpublishing.com
http://www.manhattanpublishing.com

Council of Europe Publishing/Éditions du Conseil de l'Europe
F-67075 STRASBOURG Cedex
Tel.: + 33 (0)3 88 41 25 81 – Fax: + 33 (0)3 88 41 39 10 – E-mail: publishing@coe.int – Website: http://book.coe.int

Digital methods, tools and platforms, and their unexplored potential in the youth sector, have created much enthusiasm within the youth field. This Youth Knowledge publication explores the intersection between digitalisation and social inclusion of young people, reflecting especially on how digitalisation affects young people's lives, and what the role of youth policy, youth work and youth research can be in this respect.

Can the digital revolution help us to tackle existing inequalities, or does it leave some young people even further behind? Is the digital world equally accessible to all young people? What are some of the inherent inequalities within the digital sphere? Do digital tools enable youth organisations, youth workers or state bodies to "reach out" to marginalised young people?

In these 16 chapters, the authors critically examine if and how digitalisation can support the quest for social inclusion, ranging from the exploration of policies, tools and platforms available to young people and youth workers in Europe, supporting young people's access to education and employment opportunities, opening up avenues for digital youth work, providing opportunities for participation for young people with disabilities, channels of integration for migrant communities and young refugees across Europe and support networks for young LGBTI persons.

While there is an acknowledgement of the potential for the youth sector to use the possibilities of digitalisation to address social inequality, the authors also emphasise that this does not happen automatically, and more reflection is needed regarding the accessibility of technology and how our digital approaches can be made inclusive for young people from all backgrounds.

PREMS 005821

ENG

http://youth-partnership-eu.coe.int
youth-partnership@partnership-eu.coe.int

The **Council of Europe** is the continent's leading human rights organisation. It comprises 47 member states, including all members of the European Union. All Council of Europe member states have signed up to the European Convention on Human Rights, a treaty designed to protect human rights, democracy and the rule of law. The European Court of Human Rights oversees the implementation of the Convention in the member states..

www.coe.int

The member states of the **European Union** have decided to link together their know-how, resources and destinies. Together, they have built a zone of stability, democracy and sustainable development whilst maintaining cultural diversity, tolerance and individual freedoms. The European Union is committed to sharing its achievements and its values with countries and peoples beyond its borders.

http://europa.eu

http://book.coe.int
ISBN 978-92-871-8650-8
€37/US$74

EUROPEAN UNION

COUNCIL OF EUROPE
CONSEIL DE L'EUROPE