

Title: 'Digital youth work: youth workers' balancing act between digital innovation and digital literacy insecurity'

Abstract

Purpose: *The aim of this paper is to present empirical research which examines the ways youth workers in the United Kingdom perceive their work in the context of digital literacy project facilitation. There is currently limited research focusing on digital youth workers' perspectives on opportunities and challenges affecting their interactions with and perceptions of young people's digital literacy. Thus, this study aims to: (1) contribute to the scholarly discussion on digital youth work and digital youth literacy (2) elicit and analyse youth workers' perceptions of the opportunities and challenges of youth digital literacy project facilitation (3) and propose recommendations for further research in this area.*

Method: *Twenty interviews with digital youth workers in the United Kingdom were conducted in 2017. The interviews were based on themes drawn from a literature review that explored the areas of digital literacy, youth information behaviours in the digital age, digital youth work, and digital youth participation.*

Analysis: *Research data analysis was guided by a 'grounded theory' (Charmaz, 2006) methodological approach and conducted using NVivo 10 software. Results show a clear alignment with the existing literature in the areas of youth digital literacy and digital youth work. The analysis presented here focuses on two emerging themes: (1) Digital technologies in youth work: youth workers' hopes and fears; (2) Digital literacy in youth work: youth worker's perspectives on the digital skills gap between young people and adult youth work facilitators.*

Conclusion: *The results of this study reveal that youth workers are both excited and sceptical about the digital development in the field. There is an existing anxiety associated with the lack of digital literacy skills in the youth work sector. Thus, it is argued here that further research and practical digital training initiatives should be undertaken to examine youth worker's digital literacy skills.*

Introduction

Outside school educational projects pioneered the use of digital technologies in youth work (Ito et al., 2013). Deployment of social media, digital storytelling, and digital making have become integral elements of youth work provisions across Europe (Harvey, 2016). Youth workers aim to nurture a participatory environment where young people can actively and independently implement social change (Jennings et al, 2006). Young digital citizens are described as important contributors and co-constructors of the online landscape (Subrahmanyam et al. 2011) and information-creators (Koh, 2013).

However, as young people continue to advance their digital expertise, there is limited understanding of how youth workers react and manage the technological disruptions in their field. Because the fast-paced environment of youth work requires youth practitioners to continuously analyse risk and benefits and make decisions (Batsleer & Davis, 2010), this paper aims to highlight youth workers' experiences of digital youth literacy projects facilitation and consider their attitudes towards their digital youth work practice.

There is currently limited research focusing on digital youth workers' perspectives on opportunities and challenges affecting their engagement with young people. Thus, this study aims to (1) contribute to the scholarly discussion on youth digital literacy and digital youth work; (2) elicit and analyse youth workers'

perceptions of the opportunities and challenges of facilitating digital literacy and digital youth work projects; and (3) propose recommendations for further research in this area.

Twenty interviews with digital youth workers in the United Kingdom were conducted in 2017, based on themes drawn from a literature review that explored the areas of digital literacy, digital youth work, and digital youth participation. Research data analysis was guided by a ‘grounded theory’ (Charmaz, 2006) methodological approach and conducted using NVivo 10 software. Results show a clear alignment with the existing literature, in the areas of youth participation and digital youth participation and digital literacy. The analysis presented here focuses on two emerging themes: (1) Digital technologies in youth work: youth workers’ hopes and fears; (2) Digital literacy in youth work: youth worker’s perspectives on the digital skills gap between young people and adult youth work facilitators.

The study builds on and contributes to a growing body of research into the role of digital media in youth work practice (including Harvey, 2016; Ito et al., 2013; Koh, 2013) and provides insights from digital youth work sector in the United Kingdom. The results of this study reveal youth workers’ polarised views on the impact of digital technologies of youth work. There is an existing conflict in the way youth workers positively *discuss* the notion of digital youth work, and how sceptical they *feel* about it. Secondly, the evidence from this study indicates that there is an existing digital divide between youth workers and young people participating in the projects. It is argued here, that further research in this area should be undertaken to provide a holistic view of the challenges and opportunities affecting digital youth work. Finally, it is proposed that additional digital literacy training should be provided in the youth work industry.

Background: Examining the notion of youth work in digital times

To date, the literature on youth digital literacy and digital youth work has primarily examined the relationships and dynamics between young people and digital technologies (for example Anderson, 2013; Black et al., 2016; Ito et al., 2008; Koh, 2013). In the context of digital youth literacy, scholars emphasise the importance of informal digital learning and experimentation (for example Black et al. 2015; Ito et al., 2013). It is argued that digital youth work outside school or traditional teaching environments are liberated from ‘*the oppression of learning in the formal settings*’ (Black et al. 2015, p.4) and are able to provide interest-driven and peer-supported learning opportunities (Ito et al., 2013). However, there are contrary accounts which debate the possible negative impacts of digital technologies on young people’s development and urge against ‘*romanticising*’ the empowering potential of youth digital culture (Buckingham, 2008). Elsewhere, issues associated with digital technologies addiction and young people’s development are also examined (Aitken, 2016).

Despite the polarised scholarly views on the social impact of digital technologies on young people’s lives, it is agreed that catching-up with the latest technological developments has become increasingly challenging (Livingstone, 2012). While young people as *digital natives* (Prensky, 2010) are often (but not always - as examined by Reich & Ito, 2017; Wilson & Grant, 2017) able to independently manage their digital landscapes, youth workers (often described as *digital immigrants*) are expected to learn to be ‘*aware of the continually changing digital environment and the need to adapt content accordingly*’ (European Commission, 2018, p. 15).

Digital youth work is perceived as a vital part of youth engagement practices, and defined as “values-led practice working with young people that takes account of the digital dimensions of young people’s lives” (Taylor, 2012) as well as the area of youth work that implements digital technologies to enhance outcomes of youth centred initiatives (Screenagers, 2017). The concept of digital youth has grown in importance in light of the technological developments and digital skills demands of the 21st century. For example,

Europe's 2020 Strategy emphasised the importance of ensuring that scholars and practitioners have up-to-date knowledge on digital youth literacy:

Young people are increasingly engaging with new technologies and digital media. There is clearly a role for online youth work practice, in terms of exploiting a new space for youth work in a meaningful way, supporting digital literacy and enabling young people to deal with some of the associated risks (Declaration of the 2nd European Youth Work Convention, Brussels, April 2015).

Elsewhere, the expert group under the European Union Work Plan for Youth for 2016-2018, confirmed that identification of training needs of youth workers is vital. They argue that *'as digital cultures and media are an intrinsic part of young people's lives, every youth worker should understand the importance of digital youth work and be able to address digital issues in their work'* (European Commission, 2018).

Youth workers play a crucial role of moderators between young people, society, and digital technologies. It is claimed that youth work has the potential to address young peoples' digital literacy needs, which are often omitted at schools or at home (Harvey, 2016, p.13). In this paper, youth digital literacy is perceived as the ability to use information technology for both information sharing and information creation practices, and is concerned with how young people access and engage with content as well as the *'availability of content appropriate to the needs of users and opportunities to translate these activities into beneficial outcomes in everyday life'* (Helsper, 2015).

Methodology

In 2017, qualitative data was collected from interviews with digital youth workers based in the United Kingdom. The purpose of the interviews was to elicit and understand youth digital workers' perceptions of their practice, as well as consider the opportunities and challenges related to digital youth work. Two questions guided the structure of the interviews: 1) What is the perception of digital technologies usage in youth practice? 2) What are the hopes and fears associated to digital youth work?

Sampling characteristics: digital youth workers

Twenty digital youth workers practicing in the United Kingdom were selected as study participants. In line with Cohlmeier's (2014) definition of digital youth work - as traditional youth work practice including digital media, and technology - the following criteria for subject selection were applied:

- Practitioners working with young people (aged 16-25 years old) using digital technologies in participatory settings
- Practitioners based in the United Kingdom

The research participants were primarily recruited by advertising through the Scottish Digital Youth Work Network. The aim of the Scottish Digital Youth Work network is to connect youth workers who use digital tools and online spaces in their work, with young people, and to exchange and develop good practice, both in Scotland, and internationally (YouthLink Scotland, 2017). Whilst the majority of interviews took place face-to-face, two were facilitated via Skype.

Nineteen of the interviewed youth workers were based in Scotland. Only one worked in England. In the data demographics, gender distribution was 60% males, and 40% females. While all the interviewees were aged 25 and older, nearly half (9) of the participants were aged between 35 and 44. Other age groups participating in the interview were as follows: six youth workers were aged 25-34, four aged 35-44, and one was in the 55 - 64 bracket.

At the time of the study, most of the youth workers claimed to have had more than five years of experience both working with young people and of using digital technologies in their practice. As many as sixteen had five or more years of experience in the field, with eight claiming over 10 years of experience of working with young people using digital technologies. Only four of the interviewed youth workers had deployed digital media into their youth engagement work within the last five years.

Findings: discussion on hopes, fears and digital skills gap in digital youth work.

Digital technologies in youth work: youth workers' hopes and fears.

The majority of youth workers admitted that digital media has had a positive impact on their work in the last ten years. In particular, youth workers primarily working in youth information-creating context - for example those using film and digital storytelling - appreciated the youth work developments in the digital era. Reflecting back on his past experiences, Blake stated that: *'[in the past] technology would be alien to people. People would not be used to it. It would have the mystery of the elite'*. According to the youth workers, the emergence of technology challenges the traditional top-down information exchange structure between adults and youth, and instead provides more collaborative and inclusive alternatives. The accessibility of new technologies in the context youth information-creating was also outlined as a key advantage by Alison, who asserted that *'before, the technology was a massive barrier, [now] if you don't have something that can make a film [as a young person], your friend will. It's much more accessible'*. The notions of accessibility and affordability were consistently mentioned in the study. According to the youth workers, digital media provide both young people and youth workers with a rich range of creative and communicative applications at low (or no) cost. Such cost effective digital tools, were further described as effective enablers of the creation of innovative types of youth work practice (Debbie).

The collected data further indicates that the use of digital technologies in youth work has become a norm in recent years. As young people no longer *'view their lives as online and offline'* embracing digital communication in youth work was described as necessary to engage young people (Jamie). In the view of most youth workers, digital technologies not only enhanced their interactions with young people but also improved overall project management. For instance, the use of information-sharing tools such as social media and online messaging was described by youth workers as an effective way to "keep in touch" with young people. Jo, for example, reminisced on the difficulties of youth work in the pre-digital era:

I just remember years back, and you just couldn't do that stuff. I mean it's hard work because you'd have to say as a team 'right, I'm going to spend the next three days phoning all of these people'. Sometimes knocking on doors (Jo).

However, whilst majority of youth workers recognised the importance of digital communication tools in their work, some argued that technology can also have a disrupting influence on the quality of information shared with and by young people. According to Debbie, while using certain technologies (for example such as Facebook, Twitter or email) body language and tone of voice can be lost, and messages can be misconstrued or misread. As Blake put it:

[digital media] is not live, it's not I speak to you, I see you falling asleep, that's the reaction, and therefore I modify what I'm saying. If I'm creating a short text or a short piece of audio I cannot know immediately what the impact of that is

Further, Blake highlighted the importance *'the transactions and relationships and the continuous immediacy of the action/reaction responses that come out of being in a live situation'*. Rowan

emphasised the importance of online-offline balance and argued that face-to-face contact remains to be a crucial element of youth work practice.

The findings also provide some evidence of scepticism in their perceptions of youth digital information behaviours. Nine out of twenty digital youth workers expressed their concerns with regards to the digital developments and their impact on youth development. Although, it was mostly believed that digital communication can increase information sharing among young people, some decided to also question the often overly positive vision of the digital world. For example, Gabriel talked about the ambivalence of digital technologies. He speculated: *'Does it [digital technology] make people more connected or less connected? Does it create communities or does it isolate people? I think the truth is it can do both'*.

In the view of most participants, the digital world is yet unexplored and under-researched area, without any clear indications of its impact on young people's lives. Unsurprisingly, the need for digital literacy and awareness of online-offline balance was highlighted during most interviews. One of the most experienced digital youth workers participating in the study, Jo, reflected on his recent shift in the perception of youth digital behaviours moving into the future:

I'm not optimistic about it unfortunately and that's really disappointing. Five years ago I was really excited about this stuff and it's kind of tainted by this other stuff which is just a combination of the way our culture is going generally but also just bad parenting and kids who aren't mature enough to manage that and understand what that could do for them [young people] in the future.

There is a fear that the essence of youth work will be negatively affected by digital technologies. Alison asked: *'And what happens is the technology takes over, it becomes an obsession and then you forget about the content, you forget about the subject matter (...).'*

Digital literacy in youth work: youth worker's perspectives on the digital skills gap between young people and adult youth work facilitators.

There was an overall agreement that digital developments have had a positive impact on social inclusion and participation among youth, despite some of the technology dangers (examined in the previous section of this paper). According to most study participants, the emergence of digital technologies provided young people with new tools to share, co-create, and influence youth projects. As Alex argued, *'digital let us change the way we work with young people, but also change the amount of influence ... young people have over us'*. The notion of power sharing was highlighted as a vital advantage of digital youth work. For example, Debbie appreciated the fact that digital literacy projects *'could be a lot more learned by doing on the part of young person [sic!] as opposed to being that kind of down approach 'this is what I want you to do, this is how you do it.'* According to most youth workers, digital youth projects enhance opportunities for self-directed and participatory learning for young people.

Nine participants disclosed feeling they do not have *'sufficient'* digital expertise. However, they also argued that advanced digital literacy skills are not essential to facilitate an effective digital youth project. Chris supported this view and argued that nowadays *'there is a wider acceptance that it's OK not know everything'* when working with young people using digital technologies. Contrary to the top down educational approach (mentioned in the previous section by Debbie), digital youth project provide opportunities for *collaborative discovery*. Thus, there is *'less of acting as a teacher'*, but *'discovering if things are possible together'* (Gabriel). The majority of study participants believed that youth workers ought not to be perceived as digital technology experts, but equal learning partners. The importance of knowledge exchange was highlighted by Chris, who stated, *'you can learn from them as much as they can learn from you, so you don't have to lead everything'*. Digital youth work *'is about sharing. I bring my expertise, you bring yours'* (Blake). Thus, digital technologies are primarily perceived as practical tools

which can aid, but will not substitute for youth work or knowledge exchange processes. Debbie stated that digital technology

It's not the be-all and end-all. It's just the tool. In order to get the outcome across. So if you were a youth worker that came in and you were not clear or fully understanding how digital technologies work or how certain digital technologies work, that's fine.

Whilst the majority of youth workers stated that it is 'OK not to know everything about the digital', some accounts also revealed an existing anxiety in the field related to 'insufficient' digital literacy skills. It is evident that all study participants are keen to test and implement creative digital tools into their practice but in some cases, the lack of digital literacy skills was described as a continuing challenge and barrier to exploring the full potential of digital tools in youth engagement. Carl, for example, compared this to a brick wall, and stated that: *'I'm banging my head off that brick wall, because I don't know how to get through it to the other side'*. When reflecting on his experience of implementing digital technologies into youth practice, Carl used the metaphor of "separate worlds", where young people cultivate their own digital culture away from the adults. Kyle argued that the inability to understand and filter through the digital youth habits, turned formerly inaccessible youth culture into even *'more mystified'*. Further, Kyle described digital technology as *'an additional barrier of a counter culture that exists within a field that youth workers can't even access then yeah there's an additional mystification around it.'*

The fear of not understanding the digital world and losing the opportunities to connect with youth, created a sense of anxiety and "insecurity" in the youth worker sector (Marty). Kyle argued that there are many youth practitioners who are "really worried about digital and don't have the confidence to use technology in a whole host of ways". He defined it as a form of "resistance" in the field:

...three or four years ago, when they were starting out, their work around digital skills for youth workers, and the frameworks, guidance and advice about how youth workers should deal with digital ... many youth workers not thinking this was appropriate, that this was part of their job, they were nervous about it. (Kyle)

Fifteen out of twenty participants agreed that there is a lack of digital literacy skills in the field. Carl stated that "there's a big lack of knowledge amongst the staff, particularly around the technology itself, because it's not necessarily from their generation. Marty admitted that there is *'a real diversity in the sector between people who are quite worried about it or just don't understand that it's a context for life for young people.'* There are some indications that youth workers fear that in the near future, their job might be replaced by computers, or more digitally savvy practitioners. Most importantly, the problem of not having sufficient and up-to-date digital literacy skills was outlined as a key issue. Marty, for example, stated *'there's a lot of fear about it replacing them as youth workers and replacing their skill set which you know, I personally don't think they should be worried about.'* Several participants claimed that they can sense anxiety in the sector concerning *'the fear about digital replacing face to face youth work and I think that is, that's definitely there in the sector'* (Marty).

Whilst it was agreed that it is a youth worker's responsibility to upskill, it was equally argued that there is a persistent lack of digital policies and information technology guidance in the sector. First, it was stated that youth participation policies are often outdated or simply *'imported over directly from the pre-digital time without necessarily thinking about how digital media is used and consumed'* (Jamie). Due to the dynamic nature of digital technologies, many organisations do not have relevant or up-to-date set of procedures on how to approach digital youth literacy projects facilitation

Discussion on youth workers' perceptions of digital youth work: balancing between digital innovation with digital literacy insecurities.

There is an existing conflict in the field in how youth workers *openly discuss* digital youth work and digital literacy projects, and how they *feel* about them. There is an existing excitement and hope in the youth work sector that digital technologies spark innovative solutions and have a positive impact on youth work. However, whilst most digital youth workers began the interviews as digital enthusiasts, many conversations unfolded stories of frustration, uncertainty, and fear. The findings of this study indicate that there are two distinctive narratives in youth workers' perception of digital youth work practice:

- 1) Youth workers' polarised views on the impact of digital technologies of youth work;
- 2) The digital divide in digital youth work: youth workers examining the *invisible wall*.

Youth workers' polarised views on the impact of digital technologies of youth work.

In alignment with the existing research (Ito et al., 2013; Livingstone & Sefton-Green, 2016) this study indicates that youth workers perceive the digital world as a collaborative experiential learning environment, and a '*space for self-making*' for young people (Livingstone & Sefton-Green, 2016, p.22). Digital youth projects are believed to reinvigorate teenager's learning experience (Ito et al., 2013) and provide spaces for creative expression and empowerment (Black et al., 2015). In line with scholars (Black et al., 2015; Buckingham, 2008; Erstad, 2012; Livingstone, 2012), study participants believed that digital technologies enhance their youth practice, and provide young project participants with opportunities to enhance their information creating and sharing processes. Youth workers agreed that digital technologies have a potential to encourage young people from '*non-institutionalised groups and cultures to have voice*' (Ito et al., 2013, p.12). Similar to their European colleagues (Harvey, 2016), youth workers in the United Kingdom implement social media, email, and texting to communicate or exchange information with young people. The study confirmed that accessible technologies enable creation of inclusive and participatory spaces for equal dialogue in youth work (Ito et al., 2013). Finally, youth workers' accounts confirmed that digital youth work aims to challenge the traditional social hierarchies, promote equality (Verke, 2017), and perceives young people as active digital '*participants, makers, doers*' (Ito et al. 2013, p.6).

However, whilst most interviews in this study began with an optimistic outlook on the future of digital youth work, many accounts revealed more critical attitudes towards young people's usage of digital technologies. These findings link to prior studies examining the negative impacts of digital technologies on youth. For example, the problems of miscommunication and technological addiction were commonly cited by the youth workers (Aikien, 2016; Bentley et al., 2016). The results of this study further question the empowering effect of digital media on young people (Bucciari & Molleson, 2015; Herring, 2008) and debate the prospect of young people's '*illusory freedom and autonomy*' online (Herring, 2008, p.73). Thus, the data collected here, support scholarly evidence of the negative influence of digital technologies on young people (for example Aiken, 2016, Herring, 2007). First, youth workers debated on the socialising aspects of digital technologies, claiming that digital technologies can cause youth socially exclusion and isolation. This study proves that some youth workers are still sceptical about the empowering potential of young people's information behaviour in the digital era. The sense of '*hyper-celebration of self*', where young people obsessively maintain their online identities, (Aiken, 2016, p.176) were highlighted as problematic aspects of digital youth culture. It is evident that some youth workers are sceptical about the liberating potential of digital technologies (Buckingham, 2008).

The digital divide in digital youth work: examining the invisible wall.

The relationship between perception of their own group (digital youth workers) and the perception of the young people is complex. Whilst mainly optimistic about young people's digital lives, some youth workers decided to question the role of digital technologies and teenager's information behaviours.

Emphasising terminology such as '*digital natives*' further highlighted the distance between how the two groups communicate and perceive one another. Likewise some scholars (Aiken, 2016) youth workers also argued that digital means of communication might negatively affect their information exchange with young people, as it removes the 'human aspects' of the conversation.

Numerous accounts complained about the difficulty of keeping with the latest technological developments (Livingstone, 2012) Youth work as a fast-changing practice of '*continuous analysis, choice, judgment decision making*' (Bestleer and Popple, 2010, p.5), has become even more complex due to expansion of the digital age. Youth workers' fears of not being '*the digital expert*' (Wilson & Grant, 2017), was a common thread in most conversations. There is a sense of anxiety and frustration in the digital youth work field, where limited training and guidance is available. Digital technologies have been described as '*an additional barrier*' or '*a brick wall*' causing digital divide between the youth workers and young people. Finally, there is currently also limited information available to the youth workers in terms of digital youth policies and online safety (Wilson & Grant, 2017).

The digital divide between young people and youth workers, was also highlighted in the context of information sharing behaviours (Savolainen, 2017) of the two groups. Here, youth workers would sometimes refer to themselves as *digital migrants* and young people as *digital natives* (Pensky, 2010). There is also a sense of scepticism towards digital information sharing in youth work. First, it is argued that online information exchange cannot substitute face-to-face conversation between young people and youth workers. Digital content can be misread or misconstrued, leading on to confusion and misunderstanding in the information exchange. In the recent debates on '*fake news*' (De Keersmaecker et al., 2017) and social media '*echo-chambers*' (Garret, 2009), youth workers question '*the real value*' of online information. Several study participants also complained about the impersonal nature of digital technologies and sceptically described it as information overload (Benselin & Ragsdell, 2016) in the era of "hyperstimulation" (Aiken, 2016, p.111).

Conclusion: further research and digital literacy training is needed in the digital youth work sector.

This study set out to examine youth workers' perceptions of digital youth work, as well as their hopes and fear associated with the practice. The analysis of twenty interviewed digital youth workers revealed two emerging narratives in the way youth workers perceive the use of digital technologies in their practice.

Firstly, the results of this study reveal youth workers' polarised views on the impact of digital technologies of youth work. Whilst study participants were mostly passionate about digital technologies in the context of youth work, they were noticeably reluctant to express their sceptical views on the impact of digital technologies on youth work. In general, therefore, it seems that the optimistic views on technological changes in youth work are acceptable and encouraged in the youth work industry. Thus, there is an existing conflict in how youth workers *discuss* the notion of digital youth work, and how they really *feel* about it.

Secondly, the evidence from this study indicates that, in youth worker's view, there is an existing digital divide between youth works and young people participating in their projects. Youth workers strive to achieve the right balance between managing their digital excitement and their fears related to digital technologies and how best to use them to connect with youth. Whilst the overall results indicate that youth workers in the United Kingdom are both enthusiastic and keen to experiment with digital media in their practice, there is clear anxiety related to '*not being the digital literacy experts*'. Despite existing literature on youth digital work and youth information behaviours in the digital age, it is proved here that it is increasingly frustrating to keep up with the latest technologies in youth work:

Every time I go to a different conference, it seems to be that they're using a different [digital] participatory engagement tool every time. And you've got to use it, or some kind of badge system or something like that, every time I go to one of these things. I'm going I wish they could just stick to the one thing (Jamie).

Lack of sufficient digital training and confidence, digital technologies can disempower both youth workers and youth workshops participants (Mackrill & Ebsen, 2017, p.7). It is therefore recommended that further research (emphasising youth workers perspectives) be undertaken, to examine both the challenges and opportunities associated with digital youth work practice. Additionally, the development of practical digital training and digital youth policies in the youth work sector in the United Kingdom is required (likewise European Commission, 2018; Wilson & Grant, 2017). Finally, additional digital literacy support should be provided to youth organisations. It is important to note that if youth work fails to embrace the use of technology and social media there is a risk of becoming outdated and irrelevant to young people who use youth work services (Harvey, 2016, p.13).

References

- Aiken, M. (2017). *The Cyber Effect: A Pioneering Cyberpsychologist Explains how Human Behavior Changes Online*. Spiegel & Grau.
- Anderson, T. K. (2013). Tweens and their in-betweens: giving voice to young people when exploring emerging information practices associated with smart devices. *Information Research: an international electronic journal*.
- Batsleer, J. R., & Davies, B. (Eds.). (2010). *What is youth work?*. SAGE.
- Boyd, D. (2014). *It's complicated: The social lives of networked teens*. Yale University Press.
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Bennett, A., & Robards, B. (2014). Introduction: Youth, Cultural Practice and Media Technologies. *Mediated Youth Cultures*, 1-7. doi:10.1057/9781137287021_1
- Black, J., Castro, J., & Lin, C. (2015). *Youth practices in digital arts and new media: Learning in formal and informal settings*. Springer.
- Bruns, A. (2008). *Blogs, Wikipedia, Second Life, and beyond: From production to produsage (Vol. 45)*. Peter Lang.
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Buccieri, K., & Molleson, G. (2015). Empowering Homeless Youth: Building Capacity through the Development of Mobile Technology. *Journal of Community Practice*, 23(2), 238-254.
- Buckingham, D. (2008). *Youth, Identity, and Digital Media*. London: MIT press.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative research*. Sage Publications Ltd, London.
- Cohlmeyer, D. (2013, August 29). Digital Youth Work – Beginning to Define It [Web log post]. Available at: <https://youthlinkscotlandblog.wordpress.com/2013/08/29/digital-youth-work-beginning-to-define-it/>
- Cohlmeyer, D. (2014). Developing a Technology Philosophy for Digital Youth Work. *Concept*, 5(1), 7.
- Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*.
- Directorate-General for Education and Culture (European Commission). (2018). Policy recommendations, training needs and good practice examples for youth workers and decision-makers : expert group set up under the European Union Work Plan for Youth for 2016-2018. Available at: <https://publications.europa.eu/en/publication-detail/-/publication/fbc18822-07cb-11e8-b8f5-01aa75ed71a1>
- Egbo, R. (2012). Technologies of governance: an examination of youth participation in development discourses. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 33(1), 77-89.
- Erstad, O. (2012). The learning lives of digital youth □"beyond the formal and informal. *Oxford Review of Education*, 38(1), 25-43. doi:10.1080/03054985.2011.577940

- Goldman, S., Booker, A., & McDermott, M. (2008). Mixing the digital, social, and cultural: Learning, identity, and agency in youth participation. *Youth, identity, and digital media*, 185-206.
- Harvey, C. (2016). Using ICT, digital and social media in youth work A review of research findings from Austria, Denmark, Finland, Northern Ireland and the Republic of Ireland *Screenagers International Research Project. National Youth Council of Ireland*.
- Helsper, E. (2016). Inequalities in digital literacy: definitions, measurements, explanations and policy implications.
- Herring, S. C. (2008). Questioning the generational divide: Technological exoticism and adult constructions of online youth identity. *Youth, identity, and digital media*, 71-94.
- Holloway, I. (1997). *Basic concepts for qualitative research*. Wiley-Blackwell.
- Ho, E., Clarke, A., & Dougherty, I. (2015). Youth-led social change: Topics, engagement types, organizational types, strategies, and impacts. *Futures*, 67, 52-62.
- Ito, M., Horst, H. A., Bittanti, M., Stephenson, B. H., Lange, P. G., Pascoe, C. J., ... & Martínez, K. Z. (2009). Living and learning with new media: *Summary of findings from the Digital Youth Project*. MIT Press.
- Ito, M., Soep, E., Kligler-Vilenchik, N., Shresthova, S., Gamber-Thompson, L., & Zimmerman, A. (2015). Learning connected civics: Narratives, practices, infrastructures. *Curriculum Inquiry*, 45(1), 10-29.
- Koh, K. (2013). Adolescents' information-creating behavior embedded in digital Media practice using scratch. *Journal of the Association for Information Science and Technology*, 64(9), 1826-1841.
- Livingstone, S. (2010). Digital learning and participation among youth: Critical reflections on future research priorities.
- Livingstone, S. M., Haddon, L., & Gołrzig, A. (2012). *Children, risk and safety on the internet: Research and policy challenges in comparative perspective*. Bristol, UK: Policy Press.
- Livingstone, S., Mascheroni, G., & Staksrud, E. (2015). Developing a framework for researching children's online risks and opportunities in Europe.
- Loader, B. D. (Ed.). (2007). *Young citizens in the digital age: Political engagement, young people and new media*. Routledge.
- #NotWithoutMe. *Supporting Digital Inclusion for All Young People*. Dunfermline: Carnegie Trust, Mar. 2017. Word document.
- Mackrill, T., & Ebsen, F. (2017). Key misconceptions when assessing digital technology for municipal youth social work. *European Journal of Social Work*, 1-12.
- Messaris, P., & Humphreys, L. (2006). *Digital media: Transformations in human communication*. Peter Lang.
- Murphie, A., & Potts, J. (2003). Culture and Technology. doi:10.1007/978-1-137-08938-0
- Patton, M. Q. (1994). Developmental evaluation. *Evaluation practice*, 15(3), 311-319.
- Prensky, M. R. (2010). *Teaching digital natives: Partnering for real learning*. Corwin Press.
- Riech, J., & Ito, M. (2017) From Good Intentions to Real Outcomes: Equity by Design in Learning Technologies. *The Digital Media + Learning Research Hub Report Series on Connected Learning*
- Quinlan, O. (2015). *Young Digital Makers*. London: Nesta.
- Erstad, O., & Sefton-Green, J. (Eds.). (2013). *Identity, community, and learning lives in the digital age*. Cambridge University Press.
- Savolainen, R. (2017). Information sharing and knowledge sharing as communicative activities. *Information Research*, 22(3).
- Stevens, R., Gilliard-Matthews, S., Dunaev, J., Woods, M. K., & Brawner, B. M. (2016). The digital hood: Social media use among youth in disadvantaged neighborhoods. *New Media & Society*, 1461444815625941.
- Subrahmanyam, K., & Smahel, D. (2010). Digital youth: *The role of media in development*. Springer Science & Business Media.
- Wilson, G. Digital Inclusion for All Young People? *Holyrood Magazine*. Dods Group Plc, 15 Mar. 2017. Web.
- Wilson, G. & Grant, A. (2017) A Digital World for all? Findings from a programme of digital inclusion for vulnerable young people across the UK. Carnegie Trust. Available at: <https://www.carnegieuktrust.org.uk/publications/digitalworld/>
- Young Scot Digital Academy. (2015). Retrieved March 30, 2017, from <http://www.youngscot.net/what-we-do/digital-academy/>

