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Digital Futures: A Signal-Based Approach to Inclusive Digital Youth Work for Socially Vulnerable Youth

Lotte Vermeire 🆔 and Wendy Van den Broeck 🆔

imec-SMIT, Vrije Universiteit Brussel, Belgium

Correspondence: Lotte Vermeire (lotte.vermeire@vub.be)

Abstract

This article examines inclusivity in digital youth work initiatives which use and discuss media and technology. The research focusses on initiatives aimed at socially vulnerable youth. Socially vulnerable and digitally excluded youth face educational inequalities due to limited resources, such as inadequate hardware or lack of academic support at home (Correa et al., 2020; Faure et al., 2022; Garmendia & Karrera, 2019). Youth work as non-formal learning plays a crucial role here, possessing certain advantages that formal education does not have—for instance, the freedom to set needs-specific learning goals that are more responsive to societal signals. Through a two-fold comparative case study analysis, we delve deeper into the successful approaches to organising digitally inclusive digital youth work. The case studies ($N = 14$), located in Flanders, Belgium, were conducted through an in-depth analysis consisting of a QuickScan of practices and in-depth interviews with practice representatives. Our findings identify four success factors for the setup of digitally inclusive practices: (a) providing young people with the means to actively participate during the activity, (b) informing youth workers about digital inclusion factors, (c) providing youth workers with the means to seek help from other actors working on digital inclusion, and (c) including the target group in the creation process of the activity. Based on these four success factors, this study emphasises the importance of a signal-based approach that starts from the needs and talents of youth.

Keywords

digital inclusion; digital media; digital skills; digital youth work; socially vulnerable youth; youth workers

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1. Introduction

With the digitalisation of public services, education, work, and other aspects of our everyday lives, digital skills and familiarity with digital media and technology have become increasingly important to fully participate in society (Donoso et al., 2021; Pihlainen et al., 2021). The EU develops policies and guidelines to support digitalisation across Europe and the digital skills development of young people as citizens of the future. In this context, the Council of the European Union developed guidelines on digital youth work in 2017, digital youth work being defined as the application and discussion of digital media and technology in various youth work contexts. This means that digital youth work pursues the same objectives as general youth work, namely youth development but with a digital component (Council of the European Union, 2017).

The core of digital youth work practice is the self-development and voluntary participation of youth. It can involve either offline and/or online engagement, and digital technologies can be used as a tool, activity, or to provide content (Council of the European Union, 2017). In addition to defining digital youth work, the Council puts forward guidelines for member states on how to integrate digital youth work in policy and practice. Member states were asked to include digital youth work in policies, encourage youth workers to engage in digital youth work, and commit to digital capacity-building in the youth work sector (Council of the European Union, 2017). Alongside the fact that many youth organisations had to move their practices online in 2020 due to Covid-19, this led to an increase in interest and attention toward digital youth work in Flanders, the Dutch-speaking part of Belgium.

Digital youth work can be further framed within the concept of non-formal learning and education. In *A Memorandum of Lifelong Learning*, the European Commission (2000) presents three types of learning, namely formal, informal, and non-formal. Formal learning is formal educational activities with a specific educational goal. Informal learning is defined as spontaneous daily activities that contribute to competence development, e.g., through news consumption. Non-formal learning is a type of learning embedded in activities not necessarily designated as learning, but which focus on development and growth, e.g., extracurricular activities, summer camps, and youth work (European Commission, 2000). Youth work itself aims to provide a safe environment and space for youth to learn and grow flexibly (Corney et al., 2023; de St Croix & Doherty, 2023; Vermeire et al., 2022), where youth "can converse, find support, learn, take part in activities, or simply pass time in an atmosphere of conviviality" (de St Croix & Doherty, 2023, p. 1039). As de St Croix and Doherty (2023) indicate, youth work is mainly relational, relaxed, and open, with a strong focus on soft skills. Soft skills are social and emotional skills such as communication, collaboration, creativity, critical thinking and problem-solving, leadership, adaptability, initiative, and curiosity (World Economic Forum, 2016) and they are essential skills for the future job market, which has a rapidly changing nature and a high dependence on technology.

The Council of the European Union (2017) emphasises that using digital media has much potential, however, there are also risks involved. The document mentions that limited access to media can widen the digital gap. To address this, youth work plays a vital role in enhancing young people's digital competences, particularly for vulnerable youth (Council of the European Union, 2017). Digital youth work offers a more value-based, flexible, and experiential approach compared to formal education, allowing youth to set their own goals and boundaries, explore interests, and express themselves in digital formats (Corney et al., 2023; Vermeire et al., 2022)—aspects of educational settings that are highly motivating. To address the potential digital exclusion of

youth (11–30 years), our research focusses on the following research question: What success factors play a key role in setting up digitally inclusive digital youth work?

2. Literature Review

2.1. Social Vulnerability and Digital Exclusion

There is not one widely distributed definition of vulnerability (Taylor, 2011) that captures which young people can be defined as being "socially vulnerable" or "disadvantaged," and authors refer to different groups. Walgrave and De Cauter (1996) define young people's vulnerability as their sensitivity to the effects of social structures on their position, which hinders societal participation. This implies that certain youth are more visibly and actively integrated and represented in society than others. Building on this defining element and looking at research into socially vulnerable youth in a digital context, we consider the following groups to be vulnerable: youth living in poverty and living in precarious conditions; youth with low education levels/limited educational opportunities; youth living with disabilities or the inability to leave their homes; youth residing in institutions (such as rehabilitation centres and other similar spaces, possibly due to behavioural and/or emotional difficulties or risk of parental neglect); youth from ethnic and/or cultural minority groups or with immigrant backgrounds; refugees; and youth experiencing mental health difficulties (Brites & Castro, 2022; Cino et al., 2022, 2023; De Coninck & d'Haenens, 2023; Faure et al., 2022; Livingstone & Helsper, 2010). For disadvantaged youth, "a position of limited autonomy in digital society" (Faure et al., 2020, p. 4) is not always straightforward. It might lead to digital exclusion or the "marginalisation of an individual—or of a group—deprived of full access and capacity to use information and communications technologies (ICT), which hinders their participation in the economic, social, and political life of society" (European Centre for the Development of Vocational Training, n.d.).

Even today, with youth seen as "digital natives," there is still a substantial group that is digitally excluded. As found by the Belgian Digital Inclusion Barometer, "a third of young people aged between 16 and 24 years (33%) have only weak general digital skills" (Faure et al., 2022, p. 51). This group mainly consists of vulnerable youth, as 45% of youth with a low level of education and 39% of youth with low income have weak digital skills. Faure et al. (2022) also note that users with weaker digital skills tend to rely solely on their smartphones for internet access, which "results in a compounding of disadvantages for people who have both weak digital skills and only have access to the internet through their smartphone" (p. 30).

Furthermore, socially vulnerable youth face educational inequalities due to limited resources, such as no or inadequate hardware or lack of academic support at home (Correa et al., 2020; Faure et al., 2022; Garmendia & Karrera, 2019). This leads to inequalities in the level of access, skills, motivation, and confidence. Correa et al. (2020, 2024) note that while smartphones contribute to digital inclusion by providing access to "underserved populations," there are notable disparities in skills and internet use based on the type of device. Those who access the internet through computers, tend to have higher digital skills. According to their study, computer access provides greater opportunities for skill development, potentially linking back to educational experiences. Also, Faure et al. (2022) note that computer users generally have higher digital skills (91%) and that people with lower digital skills tend to mainly use smartphones (72%). Similarly, Van Deursen and Van Dijk (2019) also touch upon this topic, noting that youth, due to primarily using smartphones for access, experience limitations in activities and outcomes. Smartphones are mainly used for communication

purposes, using online services, or seeking information. Certain technical applications may not be feasible due to a smartphone's characteristics, such as writing, saving files, etc. (Faure et al., 2022). Correa et al. (2020) found that whilst both computer and smartphone users use their devices for communication, mobile-only users engage less in information-seeking, e-service activities, and content creation compared to those who use both devices.

Helsper (2020) noted that youth from higher-educated and affluent backgrounds have better access and use more devices, while those from lower socioeconomic status (SES) often solely rely on smartphones. However, quite a few students do not have a computer at home or share devices (Faure et al., 2022; Garmendia & Karrera, 2019). Most young people possess a phone with internet access (Faure et al., 2022; Garmendia & Karrera, 2019). Despite having smartphones, students from lower SES backgrounds often lack internet at home, having to rely on shared data and/or having to access WiFi at other people's homes or in public spaces, which also has restrictions, e.g., opening hours. These issues hinder youth in several ways, such as in completing schoolwork or partaking in social interactions.

Belgian, and more specifically Flemish, youth tend to have good operational skills (Faure et al., 2022; Vanwynsberghe et al., 2022) and are frequently self-taught, not relying on parents' or teachers' competences, when it comes to learning how to use devices (Vanwynsberghe et al., 2022). Research has shown that youth with good operational skills do not automatically have the same level in other digital skills, such as critical thinking. In a study in 10 European countries, including Belgium, Cino et al. (2022) found that a higher SES is associated with increased use of digital media for informational and social purposes and decreased use for entertainment. The study suggests that those from more affluent backgrounds engage in "more beneficial activities, which are seemingly conducive to more beneficial tangible outcomes—including better school performances, higher social or economic capital, and so on" (Cino et al., 2022, p. 49), leading to children and youth from lower SES backgrounds possibly missing out on growth opportunities.

There is a substantial discussion regarding beneficial media use. Tisdell (2008) highlights the engaging nature of media, whilst also recognising its educational value, suggesting that media can support critical engagement with various subjects in both formal and informal settings. However, this can be challenging without the right tools or support. Digital media use can positively influence youth civic engagement, but this depends on how digital media is used, e.g., by reading news online (Boulianne & Theocharis, 2020). Nevertheless, Helsper (2021) notes that individuals with a lower SES have not only less access and skills, but they are also less likely to engage in civic activities online, and if they do politically participate online, they are more likely "to be ignored or silenced" (p. 121) due to their disadvantaged background.

Cino et al.'s (2022) study shows that children with better access at home and school tend to have better digital skills. SES also influences digital skills, with higher SES households often having a higher proficiency level. Cino et al. (2022) note that parental facilitating mediation and increased availability of technology in schools contribute to improved digital skills and vice versa. Thus, exposure to technology plays a crucial role. However, the overall environment and support structures available to youth also strongly influence digital skills.

This relates to Asmar et al.'s (2020, 2022) discussion on social support, highlighting that digital inclusion goes beyond sociodemographic factors, and is influenced by soft skills and social support. Digital in- and exclusion is not only a matter of providing access. Being able to gain positive outcomes from using digital

media/technology depends strongly on other available resources and factors (Asmar et al., 2022; Helsper, 2021). The authors further stress that people's lives are connected to both social and economic aspects, and how well they adapt to the digital world depends on these settings. Individuals with strong social connections benefit the most from support. The type of support someone receives depends on the strength of their relationships with others (Asmar et al., 2020). Therefore, lower-educated individuals, despite facing challenges, can also be successful in a digital society because they are interested, motivated, actively improve their skills, and receive support from their network.

Ragnedda's (2018) digital capital theory explores this in greater depth, in terms of how the skills and resources individuals possess in everyday life affect how well they can use the technology made available. Therefore, if individuals are already doing well offline, they are more likely to do well online (Ragnedda, 2018), facilitating the transfer and accumulation of digital capital into different forms of capital, as per Bourdeusian theory (Ragnedda, 2018; Ragnedda & Ruiu, 2020). The abovementioned disparities in access then further perpetuate other disparities by hindering the equitable distribution of capital.

Being digitally included can be part of getting individuals better positioned and socially included, for instance, the ability to use e-services. However, this relationship is bidirectional (Helsper, 2021; Ragnedda, 2018; Ragnedda & Ruiu, 2020). For example, individuals may exhibit digital curiosity without concurrent social or economic strength, such as when an individual lacks access to someone who can help them or lacks the financial means to enrol in a course. This relates to the soft skills and social support provided by youth work. As seen in a report from the World Economic Forum (2016), there is limited awareness of the benefits of soft skills, as well as how digital media can improve these skills: "Parents and teachers overall believe that ed-tech is best used for developing foundational skills or for enhancing teacher productivity" (p. 19). However, digital media can be used to develop soft skills because of its potential to offer interactive and immersive learning experiences (World Economic Forum, 2016).

As Helsper (2021) notes, our digital society is ever-evolving, therefore, skills need to be transferrable and adaptable. However, teaching these types of skills (that relate more to soft skills), such as critical thinking (see Section 1), is not necessarily achieved through formal education, and is even less successful for vulnerable groups. Helsper (2021) refers to the need for individuals' socio-digital ecologies to stimulate learning. As also stated by Asmar et al. (2020, 2022), social and community support can have a strong influence on one's digital inclusion. Feraco et al. (2023) find that there is a direct link between soft skills and life satisfaction, as well as a link to self-regulated learning, emotional regulation, and motivation. They study the link between soft skills and extracurricular activities for youth. They found that taking part in extracurricular activities enhances soft skills by being given the opportunity to interact and explore, soft skills contributing to increased motivation and improved self-regulated learning (Feraco et al., 2023). This stresses the importance of digital youth work in youth skill development, particularly for socially vulnerable youth.

2.2. Digital Youth Work and Digital Inclusion

Youth work, with its emphasis on developing soft skills, fostering youth connections, and interest-driven and active learning environments, becomes instrumental in navigating digital challenges and enhancing youth digital skills. Brites and Castro (2022) emphasise that practical, hands-on learning experiences are crucial for enhancing digital skills and expression among institutionalised youth, motivating active participation.

The hands-on tactic of learning-by-doing provides a relaxed yet safe environment for participants to open up and take part in activities (Brites & Castro, 2022), with participants "[appreciating] the opportunity to discuss and reflect on topics that interest them and that [are] directly relevant to their lives" (Supa et al., 2022, p. 395). Römer et al. (2023) suggest that educational media literacy activities aimed at vulnerable youth take a participant-centred approach, break school routines, involve hands-on activities, and make room for community collaboration.

As there are diverse interpretations of digital youth work, and even confusion among youth workers around the topic, we developed a digital youth work typology, providing a simple overview of the different types of digital youth work for youth workers (Vermeire et al., 2022). Within this model, we make a distinction between blended, on-site, and online activities. Within the category of online activities, online synchronous practices involve real-time interactions, such as a game played together online. Online asynchronous activities are non-live, engaging youth online separately at different points in time. Blended activities combine online and offline elements or integrate live and non-live elements. On-site practices involve discussing and understanding, using, and/or creating digital media, such as a makerspace (Vermeire et al., 2022).

The use of digital technologies in youth work is seen as "enhancing social skills and facilitating relationship-building" among participants (Pawluczuk, Webster, et al., 2019, p. 63). However, as mentioned in Section 2.1, there are discrepancies between access and skill even among so-called "digital natives" (Prensky, 2001)—a concept highly discussed and criticised. For instance, Helsper and Eynon (2010) argue that "the frequent uncritical use of these and similar terms, even if the term is used without accepting the underlying assumptions, could have a negative impact on the perceived possibilities of teacher-student interaction" (p. 518). As the authors mention, the concept could influence what learning aspects are focussed on. Young people use the internet more than older generations (Helsper & Eynon, 2010); however, this does not automatically translate to a more beneficial skillset for the future.

Youth workers perceive their roles as complementary to formal education, stating that they could bridge the gap between educational outcomes and job market demands (Skill IT for Youth Project & Fundatia Danis, 2018). However, the Skill IT study (Skill IT for Youth Project & Fundatia Danis, 2018) emphasises the need for clarity regarding youth workers' role in enhancing digital skills. Youth workers are confronted with a lack of clear policy, funding, and equipment as well as with limited skills, the presence of anxiety, and the danger of digitally excluding disadvantaged youth (Pawluczuk, Hall, et al., 2019; Skill IT for Youth Project & Fundatia Danis, 2018; Vermeire et al., 2022). The fact that youth workers can lack digital skills themselves might be a barrier to being fully inclusive, as socially vulnerable youth typically require additional support and training. A lack of digital skills could pose other challenges as well, as they may struggle to effectively implement digital media, potentially limiting the impact of their practices.

Șerban et al. (2020) note that digital media present opportunities for disadvantaged youth, but emphasises the importance of developing policies, strategies, platforms, and tools that address digital inclusion. Cino et al. (2023) found that digital non-formal education may risk not engaging a "diverse range of children" and that what is taught in certain programs is too distant from their real experiences. To foster inclusivity, workshops should allow flexibility, adapting projects to children's interests and backgrounds, with a crucial factor being the availability of external support and motivation (Asmar et al., 2022; Cino et al., 2023).

3. Methodology

This study specifically focussed on digital youth work initiatives in Flanders, Belgium, aimed at vulnerable youth. To select the practices, we applied a QuickScan analysis, an effective method for researching new or under-documented topics through a literature review (desk research) and mapping of (potential) case studies, enabling cross-case comparative analysis (Van Audenhove et al., 2023). Our analysis consists of several methods such as the snowball method, searching existing databases, and consulting umbrella organisations to identify a larger number of cases efficiently, providing a quick understanding of variance and identification of shared characteristics (Van Audenhove et al., 2023). Our QuickScan resulted in 70 relevant initiatives. We then selected 14 best practices for a more in-depth analysis based on purposeful sampling (Sandelowski, 1996). This selection was made based on the following selection criteria: recent practices in the past two years; a mixture of online, blended, and on-site digital youth work; activities with a focus on social inclusion/engagement and vulnerable youth between 11 and 30 years old; a mix of different themes; and cases not yet included in digital youth work studies in Flanders. This selection allows us to reflect on the current developments in the field. After the initial case study selection by the researchers, the final case study selection (see Table 1) was collaboratively determined with the project funder.

These 14 cases were then analysed in-depth, applying a mixed methods approach consisting of desk research of relevant documents related to the case study and in-depth interviews (N = 14) of at least 60 minutes with representatives from each case. The research took place between June 2022 and January 2023. The desk research included the websites and social media of the youth organisations, newspaper articles, and other documents, such as published statements or funding applications. Through a comparative case study analysis, we delved deeper into digital youth work, and what challenges or opportunities arose when developing digitally inclusive initiatives for socially vulnerable youth. In the semi-structured in-depth interviews with representatives from the practices, we used open questions to further discuss important

Table 1. Case study selection.

Case	Type of digital youth work	Role of digital media	Theme
1	Blended	Content	Media literacy
2	Blended	Activity	Wellbeing and mental health
3	Blended	Activity	Wellbeing and mental health
4	Blended	Activity; content	Wellbeing and (online) safety
5	Online blended	Tool	Creating digital space
6	Online blended	Tool; content	Media literacy, online safety, and creating digital space
7	Online asynchronous	Tool; content	Development and creating digital space
8	Online blended	Tool	Development and creating digital space
9	Online asynchronous	Tool	E-participation
10	Online synchronous	Tool	Creating digital space
11	Online asynchronous	Tool	E-participation
12	On-site	Activity; content	STEM literacy
13	On-site	Activity	STEM literacy and maker education
14	On-site	Activity; content	Digital citizenship

aspects that arose during the QuickScan. An inductive analysis following Glaser and Strauss' (1967) grounded theory approach was applied (open, axial, and selective coding), using MAXQDA software for qualitative coding. This led to an in-depth understanding of the cases. In Section 4, we organise the findings based on the themes discovered in our analysis.

4. Results

4.1. Digital Media as a Facilitative Tool in Youth Work

In examining various digital youth work initiatives, it became evident that digital media are predominantly used as a facilitative tool rather than being the central focus. While digital media commonly enable specific activities, the broader landscape of digital youth work presents diverse opportunities, such as overcoming geographical barriers, expanding audience reach, providing anonymous support, and more (Vermeire et al., 2022). Through digital media, youth can further develop their identity, voice, and confidence, for instance through e-participation. Despite the evident advantages, concerns emerged among youth workers about the potential replacement of regular youth work by online initiatives. Issues such as moderator responsibilities, the availability of online trainers, and joining anonymously also require clarification and guidelines:

> We used to get messages through all possible channels, but now they only contact us through the app. [But] we have to use the app constantly…you're never done working and you do have to put a lot of time into moderating. You can't let it run on its own, because then it will go wrong. (Case 6)

Despite the challenges, respondents agree that digital youth work positively engages youth, aiding their digital development. It offers youth and youth workers much-needed space to experiment with digital media (Brites & Castro, 2022), and to figure out its possibilities and most effective, creative uses (e.g., testing what tools work for what target group). However, a crucial consideration here is digital inclusion.

4.2. Participants' Digital Inequalities

Contrary to common assumptions about youth being "digital natives," not all youth possess the necessary digital skills to participate actively and effectively. Several respondents addressed this issue. They indicate that specific target groups have different strengths and encounter different obstacles, such as a lack of critical thinking skills: "We had a lot of participants who didn't know how to install the app.…Some [participants] are very technically savvy, but a lot are not" (Case 6). Simultaneously, digital inequalities contribute to existing social exclusion (Helsper, 2021; Ragnedda, 2018). A respondent highlighted challenges encountered by their target group—young people with cognitive disabilities—in establishing online relationships and engaging in social media, often getting frustrated, upset, and ultimately being excluded. Consequently, they developed a dedicated platform for their demographic, fostering participation in online social activities. This initiative also facilitated the development of online social skills, with youth workers providing guidance on potential challenges through a chat, FAQ sheets, and one-on-one sessions.

The organisations recognise these differences and try to set up "engaging" and "empowering" practices through an accessible, motivating approach (e.g., employing platforms familiar to the target group, such as Discord or PlayStation) or working on a specific issue in the community to make the project meaningful for

participants (Vermeire & Van den Broeck, 2023). While digital youth work has a lot of potential, many youth workers did not consider the importance of digital inclusion before organising a digital practice. They were often unaware of the obstacles their participants might face, drawing on the idea that youth have the necessary skills and access to participate fully. This realisation, influenced by the pandemic, had youth workers adapt their practices to be more digitally accessible. Despite efforts to target vulnerable groups, skills and access remain crucial, emphasising the need for ongoing collaboration and consideration of various solutions.

4.3. The Accessibility of Practices

One respondent noted that their organisation chose to opt for blended activities, as these offer a wider range than on-site activities but do not exclude vulnerable youth by moving entirely online. Almost all practices see a future for blended youth work activities to reach their target group. Nevertheless, they also note that blended or online practices cannot and should not replace face-to-face interactions, but depending on the goal of the practice, online or blended can be more successful (e.g., removing certain barriers or addressing challenges more swiftly):

> Working online is great because it offers many opportunities, but it also has its limitations. If you can't reach young people online, the story ends. The combination of being able to work online and offline is important. Yesterday someone came by, and an hour ago she called me [online] because she had something that couldn't wait. Working online means you can switch gears very quickly, whereas with purely offline you have to wait until you see them again. (Case 5)

To have successful online practices, the youth sector calls for clarity and guidelines (e.g., advice for setting up ethical and practical standards for online practices, such as guidelines related to anonymous participation or how reachable youth workers should be online). These guidelines should also provide support regarding digital inclusion. It needs to be noted that online practices still have their limitations, such as creating an interactive space for youth—an important part of youth work's goals (de St Croix & Doherty, 2023; Vermeire & Van den Broeck, 2023). In-person interactions foster better interpersonal connections and provide opportunities for shared experiences, which can be integral to building a supportive community, whereas online spaces may inadvertently favour those with better access and skills.

Respondents chose to set up blended practices to still be able to provide on-site support for their target group (e.g., by helping them get online or discuss what they learned in an online module). Due to the respondents' experience with vulnerable groups and the importance of inclusion, most of the cases analysed had solutions to certain barriers or had adapted the initiative to be digitally inclusive: "Laptops we didn't do, because we saw…that [laptops] are used much less by young people. And they almost all have smartphones, so that's why we chose to [make the game] in an app" (Case 3).

As noted in Cino et al. (2023), practices that are not adapted to a certain group could lead to perpetuating inequalities instead of overcoming them. Several respondents noted how important it is to keep your target group in mind and to be aware of their needs (Cino et al., 2023; Donoso et al., 2021; Supa et al., 2022). For instance, enhancing accessibility for youth with low literacy through voice-over features, the possibility to chat with youth workers anonymously, providing train-the-trainer sessions to address topics possibly

unfamiliar to youth workers (such as online privacy), creating a smartphone-friendly website, providing all essential hard-/software, and organising initiatives based on the target groups' skills and interests.

4.4. Disposition of Youth Workers

Several youth workers also express doubt, exhibit uncertainty, and even insecurity regarding their own digital competences. During the pandemic, almost all face-to-face activities had to move online. Therefore, youth workers were challenged to use digital media, noting that they did not feel confident in supporting youth with, for instance, technical issues and feared having to be a digital "expert": "Youth workers feel that they have to be able to do something well themselves before they can transfer it, so they don't do it" (Case 13). This is also noted by Pawluczuk, Hall, et al. (2019), who observe that youth workers experience anxiety due to their personal perceived lack of expertise/skill.

We found that youth workers who exhibit (more) confidence already have prior experience with setting up media-related activities, are familiar with the tools and platforms they use, and/or can rely on the support of a partner organisation. Almost all good practices are a collaborative effort. The respondents indicate that learning the necessary skills only happens when youth workers are sufficiently motivated to do so. They also emphasise the significance of collaboration among youth organisations to complement each other's strengths and weaknesses. As mentioned in the paragraph above, an open disposition is crucial, however, the support provided by the youth organisation is also important. Organisations with a positive disposition toward digital media provide more working room and help for setting up inclusive practices. Less technology-oriented organisations, but whose youth workers were tech-savvy or convinced of its value and took the lead to organise activities with digital media, also resulted in good practices.

Solely providing access to infrastructure, tools, and platforms will not necessarily improve use or translate into more quality implementation. Adov et al. (2020), who researched teacher attitudes toward using mobile devices for teaching, mention that creating user-friendly technology is not sufficient—"We must also work with teachers to support their self-efficacy and relieve the anxiety that comes with using technological tools" (p. 12). The study suggests that social context plays a significant role in addressing self-efficacy and anxiety. Similarly, we found that it is important to foster an open disposition and supportive environment to enhance youth workers' confidence and capacity when using and discussing digital media.

Therefore, encouraging factors include informing youth organisations about digital youth work opportunities, enhancing youth organisations' and youth workers' capacity through accessible training, and fostering knowledge-sharing and partnerships (Vermeire & Van den Broeck, 2023). As Todorović et al. (2023) found, without understanding young people's online world and its difficulties, youth workers will run into difficulties on whether and how to provide appropriate support for youth. Donoso et al. (2021), through roundtable discussions with young people, mention that it is crucial to check if their perspectives are sufficiently integrated and listened to. Therefore, some respondents propose integrating digital youth work into social work training to reach a broader audience. However, respondents primarily emphasise the need for clear guidelines and communication on digital youth work, as confusion about what digital youth work is (not) also creates misconceptions, resulting in demotivation.

4.5. Organisational Capacity and Collaborations

Organisations require certain expertise and understanding of their target group but also need to have clear goals and targets before setting up a practice. As mentioned, youth workers are not digital experts, nor do they need to be. However, to set up a digitally inclusive practice they need to first be aware of the digital resources that their target group possesses. To set up a digitally inclusive practice, it is most often necessary to collaborate and bring together different stakeholders to combine expertise, as a lot of youth work organisations do not yet have the resources to set up a digitally inclusive practice. It requires funding for materials, but also the necessary skills and knowledge to support their target group. As found by Asmar et al. (2022) and Helsper (2021), digital inclusion is not only influenced by socio-demographic factors—which is also noted by our respondents. Youth organisations aim to go beyond merely providing access and offer ongoing support, such as providing parental assistance or updating the platform based on youth feedback. However, this is not always easy, with respondents noting that it is important to gather input throughout the project from the participants.

Most of the good practices analysed were collaborations that made the practice more relevant and successful. Involved stakeholders are not only technical partners and youth organisations but can also include the participants. Respondents note how crucial it is to get young people's input, listening to their needs and interests (Supa et al., 2022; Vermeire & Van den Broeck, 2023) before organising something. Sometimes youth practitioners get caught up in the novelty factor of certain digital technologies, however, it is not always needed or wanted to create a successful practice. For instance, integrating virtual reality can be a worthwhile endeavour to cross distances and include youth who cannot leave their homes, but it might not be the right choice when trying to create a safe space to share or learn as a group:

> You can be very convinced of your own idea and see a lot of benefits in it, but if your target group doesn't like it, [it's over]. I think input and participation is something you need with everything you [develop]. Often, as the developer, because you're working on it so hard, you don't see all the nuances and obstacles of what you're developing. (Case 1)

4.6. Setting up Signal-Based Practices

Youth work possesses certain advantages that formal education does not have, such as the freedom to set their own learning goals, thus also being more responsive to societal signals. Youth workers establish close relationships with their target demographic, becoming mentors, trusted adults, and friends—something Sonneveld et al. (2021) referred to as "proximity." These aspects make youth work and youth workers more attuned to the emerging needs and challenges that young people face and more responsive to these needs (de St Croix & Doherty, 2023; Sonneveld et al., 2021): "How many laptops are missing, how many internet vouchers do we have to give out, what signals are we getting from young people?" (Case 5).

Being sufficiently aware of the strengths and weaknesses of your target group is indispensable. Additionally, a practice may be more gratifying for the target group, not only because of its fun nature, but also because it touches upon a relevant topic for them and connects them to their environment, is centred around the participant, and allows them to make autonomous choices, which stimulates the motivation of the participants (Cino et al., 2022; Römer et al., 2023; Sonneveld et al., 2021; Supa et al., 2022).

It is therefore important that activities are tailored to their participants, youth workers listen to the participants, and they take a signal-oriented approach: "It should be more bottom-up than top-down....[We need] more awareness of what happens on the ground" (Case 14). Based on our inductive analysis, tailored and signal-based work emerged as crucial concepts for setting up digital youth work for vulnerable groups. Having a good understanding of their experiences seems to be a requirement to develop something tailored to the target group's needs, which is why working signal-based is a necessity. This term is used to emphasise that these signals originate from the target group and young people themselves, encompassing more than merely the observed needs.

Adopting this approach and considering youth perspectives emerge as crucial elements in creating truly meaningful and effective initiatives. Furthermore, clearly defining the target audience is essential, as an activity tailored for one group may not resonate with another. For instance, girls in assisted living facilities will require a different type of program and level of support, such as the involvement of their social workers and focus on the dangers they face, like their vulnerability to grooming. Recognising that some vulnerable youth may excel in using social media but lack basic computer skills or knowledge about digital media is crucial. Practices should be proactively designed with digital inclusion in mind rather than adapting subsequently. This underlines the importance of motivating youth workers and equipping them with resources for organising and facilitating co-creation and participation discussions with youth.

5. Conclusion

Due to youth work's proximity to and familiarity with the target audience, knowing their needs, interests, and strengths is crucial. Youth workers' contextual understanding enables them to tailor practices to be more relevant and engaging for their target group and makes them a key stakeholder. Youth workers can provide guidance in navigating the digital world responsibly and effectively, creating a supportive environment for youth to develop their skills.

Youth organisations can create digitally inclusive practices by being proactive, collaborative, and responsive to the specific needs and competences of their target group whilst providing ongoing support for their youth workers and fostering a signal-based, empowering approach. However, without clear guidelines, organisations will have difficulty promoting digital youth work and capacity-building among their youth workers.

Based on our analysis of 14 practices and in response to our research question concerning the success factors for setting up digitally inclusive digital youth work, we identified four key elements to implement digitally inclusive initiatives: (a) work tailored to the participants' needs, (b) inform and train youth workers about digital exclusion, (c) collaboration is key, and (d) apply a signal-based approach.

Regarding the first success factor, due to the importance of tailored practices, it is essential to provide youth with the means to actively participate during the activity. This entails ensuring that an activity is sufficiently tailored to the participant's needs, providing support and flexible, interactive spaces. This goes hand in hand with the need to understand youth experiences and perspectives (Donoso et al., 2021; Todorović et al., 2023).

Secondly, youth workers need to be informed about digital exclusion factors as well as the main challenges and indicators faced by young people. We see that youth workers are self-sufficient; however, they require

the necessary information, training, and support to set up sufficiently useful and adapted digitally inclusive practices. Otherwise, digital inequalities might be exacerbated (Cino et al., 2023)—e.g., by assuming skill levels. In the identified cases, it became clear that youth workers felt more empowered and confident when they received training.

Thirdly, next to informing youth workers about digital inclusion, it is equally important to provide youth workers with the means to seek help from other actors working on digital inclusion. Our research shows that collaboration and partnerships make practices more successful. The latter two factors can also improve youth workers' confidence and self-efficacy (Adov et al., 2020; Pawluczuk, Hall, et al., 2019).

Lastly, the target group should be included in the creation process of the activity. By listening to and including youth's perspectives, input, interests, and feedback, youth workers can use a signal-based approach and centre the practice around the target group. This will help youth workers provide the required resources and support for their target groups to gain positive outcomes from participating in the practices (Asmar et al., 2020, 2022). The importance of these factors lies in their ability to not only address digital exclusion but also empower youth to actively participate, engage, and have agency within the practices. This could contribute to their active participation in a digitalised society.

The study's limitations include the absence of direct input from youth participating in digital youth work, as interviews were conducted solely with youth workers. Understanding participants' experiences is crucial. Future research could broaden its scope by including perspectives from different stakeholders like policymakers and parents for a holistic view of the digital youth work field. Additionally, exploring the long-term impact of digital youth work initiatives could be considered, as this was not in the scope of this study. To improve further understanding, future research could also explore case studies on less successful practices, shedding light on youth workers' specific needs and challenges.

Conflict of Interests
The authors declare no conflict of interests.

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About the Authors

Lotte Vermeire is a PhD researcher in communication sciences at imec-SMIT, Vrije Universiteit Brussel in Belgium. She is part of the Digital Inclusion and Citizen Engagement and Media, Marketing, and User Experience units. Her research looks into digital and data literacy, digital youth work, and digital inclusion. Her PhD project focusses on digitally inclusive initiatives aimed at improving data literacy in both formal and non-formal educational settings.

Wendy Van den Broeck (PhD) is a senior lecturer at the Department of Communication Sciences (VUB) and heads the Media, Marketing, and User Experience Unit (MUX). She is also program director of the bachelor Social Sciences and teaches several courses within the communication and social sciences programs at VUB. Her expertise relates to user research on new media, personalised media, and digital practices. She co-founded DataBuzz, for which she also received the Royal Flemish Academy of Belgium for Science and the Arts' (KVAB) annual prize for science communication.