

DIGITAL SOCIAL INNOVATION: A PRELIMINARY PORTFOLIO OF COMPETENCIES FOR SCHOOL SOCIAL WORKERS

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Abstract. *In this article, the authors argue that professional experts are necessary who should also be educators, since they should work inside the school. Accordingly, cyber safety competencies should be included in the curriculum of school social workers in the same way as are competencies to sustain children with behavioral disturbance, support students with cultural and economic difficulties, provide the school community with psycho-social counselling, implement educational policies, etc. From the experience of running a training course for social workers in Poland on cyber threats, and from an ongoing research concerning digital social innovation within two EU funded projects, a preliminary portfolio of competencies has been defined and presented.*

Keywords: *digital social innovation, school social workers, social educators, digital competencies, technology education.*

Introduction

In a relatively short space of time, information and communication technology (ICT) has spread throughout the world as well as within the European Union (Figure 1) and digital technologies have led to profound changes across all sectors of society, including education and the school system.

In this regard, research has underlined the potential and effectiveness of social media, mobile phones, and the internet in general, for improving social inclusion and social rehabilitation practices for vulnerable groups in society (children with behavioral disturbances, elderly people with cognitive disabilities, addicts, prisoners, migrants, etc.).

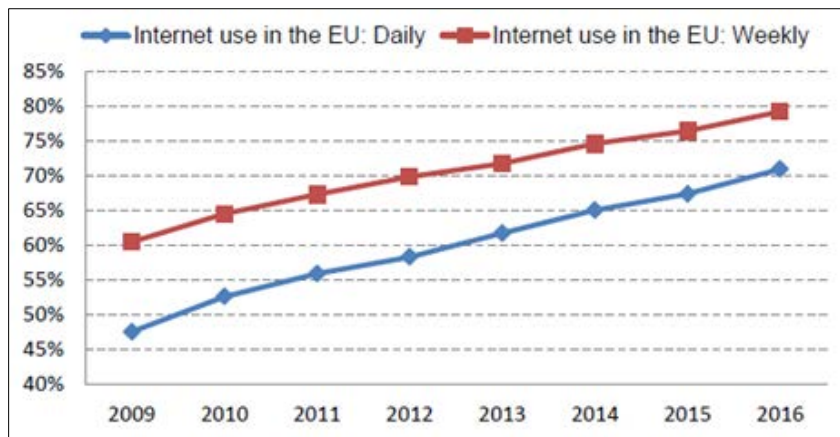


Figure 1 *Daily and weekly use of the internet in the EU - % of individuals aged 16-74*
 (Source: Eurostat - Community survey on ICT usage in households and by individuals)

Social innovation can be considered as a process generated by the application of innovation to social needs (Figure 2), and digital social innovation (DSI) addresses emerging social issues and challenges by taking advantage of digital technology.

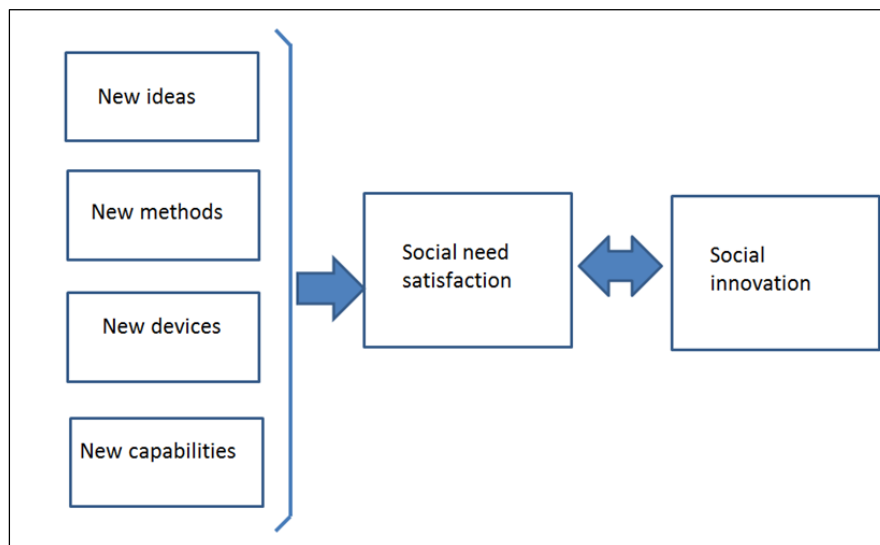


Figure 2 *The process of social innovation*

According to the DSI Final Report research project funded by the European Commission, DSI can be defined as:

“A type of social and collaborative innovation in which innovators, users, and communities collaborate using digital technologies to co-create knowledge and solutions for a wide range of social needs and at a scale and speed that was unimaginable before the rise of the Internet” (Bria et al., 2015, p. 9)

Over the last two years, DSI has grown significantly while DSI projects and initiatives have multiplied, catching the attention of policymakers, governments, and civil society organizations alike (Stokes, Baeck, & Baker, 2017).

The relationship between DSI and digital education is strategic, since digital education is essential to create DSI applications. Furthermore, digital education is also necessary to mitigate the disadvantages and negative effects that the development of technology can produce (Elhai, Levine, Dvorak, & Hall, 2016; Delpechitre, Black, & Farrish, 2018; Kim, 2017; Rotondi, Stanca, & Tomasuolo, 2017), including *technofence*, the everyday disturbances in interaction between partners caused by technology (McDaniel & Galovan, 2018).

This article focuses on digital education in relation to DSI. Specifically, it addresses the issue of the digital education of school social workers aimed at increasing their professionalization in school cyber safety processes.

There is a broad consensus that professional experts are necessary to combat the effect of the malicious use of technology, namely cyberbullying and cyber addiction, in schools (Chang, 2010; Cremin & Bevington, 2017; Meredith, 2010; Nelson, Palonsky, & McCarthy, 2017; Simmons & Bynum, 2014).

However, there are a few problematic questions that have arisen related to the involvement of professional experts in cyber safety. Who are these professional experts? How did they become “expert”? Who evaluated and validated their skills and competencies?

In this article, we suggest the need to professionalize school social workers in cyber safety, and we present a preliminary portfolio of the cyber competencies, which they would need.

Research methodology and objectives

Our article combines the outcomes of two ongoing projects funded by the EU, *Youth Digital Social Innovation* and *Digital Social Innovation: new educational competencies for social inclusion*, with the results of a study conducted on cyberbullying prevention. Indeed, from the research on cyberbullying prevention, begun in 2017 and concluded in December 2018 (Marzano & Lizut, 2019a), a few key findings led us to the idea of defining a new specialization for school social workers:

- Prevention of cyberbullying requires the use of specialized personnel with multidisciplinary skills.
- The aforementioned skills should be acquired through a theoretical-practical training and should be appropriately validated.
- It would not be easy to convert existing school social workers and motivate them to change their field of activity.

Our research on digital social innovation that started in April 2018 and which is still in progress stems from the idea of engaging school social workers in anti-cyberbullying practices. It is aimed at defining a preliminary portfolio of digital competencies for school social workers.

With this purpose in mind, we adopted a methodology based on the preliminary analysis of the literature concerning digital social innovation and digital social innovation initiatives/projects (Hart, 2018). Subsequently, we analyzed the current curricula for school social workers in order to identify which topics and practices related to digital social innovation should be included to professionalize school social workers in cyber safety.

In the following paragraphs, we synthesize some general reflections on digital education that have emerged during the research, and go on to present a preliminary proposal for the portfolio of digital competencies necessary for school social workers.

Digital education

The integration of technology in the social work profession has been variously described through expressions such as *social work and new technologies*, *technological social work*, *connected social work*, and *digital social work* (García-Castilla, De-Juanas Oliva, Vírseda-Sanz, & Páez Gallego, 2018). The greatest focus has been placed on virtual social work practice aimed at the improvement of traditional processes to forge more creative, flexible, and effective social intervention processes and programs (Rafferty & Waldman, 2006).

However, the digital education of social workers is, at the moment, a challenging issue. According to Selwyn, digital education: “[...] involves repositioning all students, educators, and parents as the subject (rather than the objects) of digital education. This involves giving otherwise marginalized voices an agentic role in determining and discussing what digital is, and what it should be” (Selwyn, 2018, p. 156).

From this perspective, training social workers in ICT represents only a part of the problem. We are persuaded that efforts should be made to train social workers on how to integrate technology in their professional practice, as well as on how to tackle the social effects of technology.

Tempered and measured learning programs should be defined to present and discuss positive and negative aspects of digital technology.

Digital competencies for school social workers

The portfolio of digital competencies for school social workers should be related to three main basic scopes:

- Digital technology understanding - this encompasses knowledge about the multifarious dimensions of the digital revolution and the impact on school activities.
- Digital-based educational processes - these comprise both theoretical and practical knowledge of online educational models as well as teaching-learning practices that can support the implementation and running of e-learning and distance learning programs.
- Some sectorial knowledge - this includes knowledge in specific fields such as social learning, social telerehabilitation, and social networking tools.

A basic competence for school social workers concerns the use of social media and online technologies. Online tools can be useful for communicating and interacting with student families and teaching staff at distance. However, using digital tools to support and counsel the school community is not sufficient to master digital applications. New concepts and competencies are needed, for example, school social workers should be taught to use social media, and should know what the positive and negative social impacts of digital technology are. In this way, they can, for instance, lead students to experiment peer-learning initiatives aimed at helping their classmates in the use of digital devices and applications as well as at reducing the risk of cyberbullying. Indeed, a low level of skills in using digital technologies has been associated with an increased likelihood of being cyber-victimized (Slonje & Smith, 2008). In this regard, it has been underlined that one can interpret the holding of power in online relationships as a more advanced technical skill as well as having the ability to modify pictures, or that being able to perform other manipulations of data and user profiles can offer inviting opportunities to those who are more expert to cyberbully the less digitally skilled (Dooley, Pyżalski, & Cross, 2009).

According to the analysis of the anti-cyberbullying programs in place, the suggestions from experts, and our own in-field experience (Marzano & Lizut, 2019b), the basic competencies and skills of a school social worker involved in cyberbullying prevention initiatives should include:

- Basic theoretical knowledge and practical skills in pedagogy and social pedagogy, orientated to the design, implement, and manage cyberbullying prevention programs.

- Theoretical and practical skills to design, implement, manage, and evaluate educational projects in schools in order to respond to the growing demand for cyber safety.
- Thorough knowledge of learning models and their underlying psychological theories, in particular, of those models based on collaboration and leadership.
- Thorough knowledge of social networking applications, messenger applications, and interactive tools.
- Thorough knowledge of cyberbullying policies and legal aspects.
- Competence to deal with the impact and identification of cyberbullying.
- Capability to define and submit questionnaires as well as data analysis competence.
- Skills and capabilities to design, implement, manage, and evaluate interventions and processes of continuous training, also through multimedia technologies, distance learning, collaborative online learning, digital social learning, etc.
- Skills to use parental control applications, content filters, and other anti-cyberbullying tools.

Table 1 synthesizes the basic scopes and competencies required by a school social worker in order to perform anti-cyberbullying interventions.

School social workers should also possess competencies to contrast the abusive use of the internet. According to Griffiths (2000), individuals who use the internet excessively are not addicted to the internet per se but, rather, use it as a medium to fuel other addictions. A gambling addict who chooses to engage in online gambling is merely using the internet as a place in which they can enact their (addictive) behavior (Widyanto & Griffiths, 2006). This said, the excessive use of the internet can lead to degenerated behaviors and produce serious consequences. Online gambling, for example, does currently represent a very real and established risk. Over the last decade, the increasing evidence that minors are engaging in gambling and developing, as a consequence, more gambling-related problems has been highlighted by numerous authors (Griffiths, 2009; Livingstone & Haddon, 2008; Monaghan, Derevensky, & Sklar, 2008). Nowadays, we can observe the ever-increasing growth of casino games on social media platforms (Gainsbury, Hing, Delfabbro, & King, 2014).

Over the last few years, alarm bells are increasingly being sounded that digital media are providing greater opportunities for the social transmission of behavioral addictions as a consequence of adolescent exposure to favorable presentations of addictive substances such as alcohol, tobacco, and marijuana, as well as behaviors such as gambling on social and other online media (Romer & Moreno, 2017).

Table 1 Anti-cyberbullying basic scopes and competencies of a school social worker

Basic scopes	Basic competencies and skills
Cyberbullying and cyber threats understanding	<ul style="list-style-type: none"> • Carrying out systematic review of the phenomenon at school and data analysis; • Deep knowledge of the different forms of cyberbullying • Expertise on social networking sites • Awareness of the roles of bystanders and parents • Familiarity with quality assessment processes • Knowledge of the school world and dynamics • Leadership and team work • Change management
Educational processes	<ul style="list-style-type: none"> • Educational models (in general) • Educational practices used in anti-cyberbullying programs • Peer learning model • Community learning • Collaborative learning • Digital social learning • Parent-training
Sectorial knowledge	<ul style="list-style-type: none"> • Legal implications • School anti-cyberbullying statutes • Use of parental control software • Use of filters and blocks • Use of online collaborative tools • Creation and use of wikis, blogs, forums, and apps • Use of messenger apps • How the internet works • Anti-cyberbullying coping strategies • Digital dependencies

To increase the competencies of school social workers, new curricula should be developed and new disciplinary scopes should be defined in various fields such as:

- Psychology of interactive processes on the internet
- Social media anthropology
- Online educational methodologies
- Use of information and communication technologies
- Computing techniques for school social workers

This is no easy task since many elements present in the current curricula for social educators will have to be rethought and integrated with new notions and knowledge regarding digital technology and other matters. Nevertheless, if contemporary problems such as cyberbullying are to be tackled, it is necessary to break the boundaries of disciplinary domains. For example, according to Spears and Kofoed, one should consider that childhood is a social construction and that

children should be looked upon as social actors, not only as outcomes of social processes (Spears & Kofoed, 2013).

From this perspective, adopting a social anthropological approach could be useful. We contend that it is essential to create collaborative processes among the specialists of the scientific domains involved in education science in order to provide social educators with the knowledge, competencies, and skills necessary to face the contemporary social challenges.

Conclusion

According to Slovak & Singer (2011), school social workers should give appropriate responses to crises and threats that can occur in schools, addressing conflicts and providing psychosocial interventions. They should participate in the formulation of school policies and, accordingly, they should also contribute to the development of cyber safety programs. Indeed, school social workers are often the first to know about a problem (McDonald, Fineran, Constable, & Moriarty, 2006).

Nowadays, they should also acquire competencies and skills to be able to face the ongoing and future impacts of technology on schools. These impacts can be positive, since technology can be widely used for improving peoples' livability and for creating innovative services for human communities. However, the impacts can also be negative, since technology can be used maliciously. In any event, it is necessary that those who work in social sectors improve their digital competencies.

In this article, we have presented a preliminary portfolio of digital competencies needed to professionalize school social workers in school cyber safety. This portfolio is only the first step of the ongoing research on DSI which we are carrying out. Our ultimate objective is to define a new curriculum for school social workers that includes digital education and digital social innovation as specific subjects.

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