

New forms of Teacher Professional Development: Developing Epistemic Collaborative Communities via Social Networks

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Abstract

In this position paper, we explore the potential of social networks for teacher professional development. Networking is a crucial skill in professional careers, supporting the individual's personal and professional learning. Collective teacher interactions online can facilitate collaborative professional development and support collective epistemic engagement. Social networks can be considered as 'third spaces' between formal and informal learning to support professional development, also integrating international and intercultural aspects. Research questions addressed here include implications of online engagement on teachers' initial and in-service training and impact of social networks on innovations in professional practices and local communities.

Keywords

Teacher; Teacher educators; Digital Competencies; Social Networks.

Introduction

Increasingly, digital technologies and social media increase continuous exchanges and collaborative actions among peers (Manca and Ranieri, 2017b). The spread of social networking in the world is vast – there are 7.7 billion people in the world, with 3.5 billion of us online. One-in-three people in the world use social media platforms, and more than two-thirds of all are internet users (Internet World Stats, 2020). In the education field, a growing number of teachers have started to engage in pedagogical discussions in worldwide online professional communities (Potolia and Zourou, 2019; Soomro, Kale and Yousuf Zai, 2014). Considering networking as a critical skill in professional careers, the aim of this paper is to reflect on the potentialities of social networks (like Facebook, Instagram, Twitter – to cite the most common) on individual and collective teacher professional development.

This position paper aims at filling the gap in our understanding of how and why teachers utilise digital platforms with regards to initial and in-service formal and informal professional development. Student use of social networks is already widely analysed in educational research for its implication of learning. However, less is known about teacher use of social networks, specifically related to professional development (Fancera, 2019).

Two research questions guide the discussion, both arising from educational literature and daily social network self-exploration of teacher communities:

1. Why and how do teachers use social networks?
2. How does this engagement influence individual and collective professional development?

A theoretical reflection answers these two questions: a) first, the potentiality of social networks on collaborative professional development, and b) the benefits of sustaining teacher epistemic community development. Haas (1992) defines an epistemic community as a network of knowledge-

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based experts who represent together the problems they face, identify various solutions and assess the outcomes. In our case, teachers as experts in an epistemic community are engaged in sharing and building collective meaning about their own teaching experiences (Littlejohn, Milligan and Margaryan, (2012) to increase quality in education. In our conclusion we make some suggestions about a) the implications of teacher use of social networks for lifelong learning, and b) how teacher online engagement can be translated in pedagogical innovations.

Collaborative Professional Development in the Digital Landscape

Teacher professional development becomes more complicated as global society changes (Littlejohn and Hood, 2017). Indeed, as is also true in many other fields, professional development has become a critical dimension of supporting growing specialisation and agile transformation of services. Today, society deals with new challenges due to its so-called fluidity: the invasion of technology (Ludvigsen et al., 2019) or biological disease such as the Covid-19 pandemic. Consequently, future workers have to be equipped with new skills. According to Simons and Ruijters' (2004) three-stage model of professional learning, in this changing context teachers and teacher educators must: 1) elaborate work competencies theoretically and in practice, 2) expand theoretical knowledge and insights by learning explicitly from and through research, and 3) externalise practical and theoretical insights, which means contributing to the development of the profession, the team and organisational learning. Teacher quality has a direct impact on teacher training quality, because teachers model their roles on what they see and learn during training (Biesta, 2020).

Recent professional development literature stresses the role of collaboration whilst also noting the increasing interconnective but fragile nature of global society (Mora-Ruano et al., 2019). Partnership can structure mutual enrichment and trigger processes of negotiation, shared goals, resources and new modalities of action (van As, 2018). Collaboration (derived from the Latin word for "working together") implies a sharing of tasks, an explicit intention to "add value" to create something new or different through a deliberate and structured collaborative process, in contrast to a simple exchange of information or execution of instructions. Technology, used in online communications and social networks for example, strengthens the potential of collaboration (Vangrieken et al., 2017).

Educational researchers have therefore started to explore the impact of teachers' active engagement and participation in social media and online professional communities for professional learning (Maciá and García, 2016). The authors assume that teacher discussion on social media could be favourable for discovering, discussing and suggesting methodologies, tools and solutions already experimented by peers, leading to innovation. In the following section, we explore the concept of networked communities of practice as a conceptual tool useful to our discussion.

Digital Networked Community of Practice

The concept of a networked community of practice (Wenger-Traynor et al., 2015) offers a relevant perspective to analyse social network potentiality for professionals. Groups build professional networks through digital tools - such as social media, websites, blogs, and other online collaborative spaces. The networked communities contribute to mixing formal and informal learning and enhancing professional growth.

The perspective is rooted in the social views of practices (Brown, Collins and Duguid, 1989). The term 'practice' represents the activity that connects individuals in their networks and that can also be sustained by technological environments (Wenger, McDermott and Snyder, 2002). A network of practices implies a set of individuals who are connected through social relationships, regardless of whether these relationships are strong or weak.

The concept of a networked community of practice stresses the centrality of the relationships, personal interactions, and connections among individuals who share information, helpful resources, and contribute to their own individual and collective personal and professional growth. If mediated by digital tools, the online community creates, supports and grows spaces where learning could show potential, both for people and institutions (for an example of a blended learning community of teacher educators between European and Asiatic countries, see Impedovo and Khatoun, 2016).

Potentially, this collaborative engagement could develop new knowledge and meaning, finding solutions to real problems. The participant becomes a member of a knowledge-sharing community (Impedovo, Ligorio and Law, 2012). Eaton and Pasquini (2020) detail a longitudinal study of seven years about how networked communities of practice scaffold professional learning and development of post-secondary educators. Findings centre on the organic, participatory nature of the community, the shared leadership structure, and the dual nature of online and offline relationships as impacted in the networked communities of practice.

In the next section, we explore the use of the social networks by teachers.

Teachers on Social Network Platforms

Generally, social media (like blogs, wikis, multimedia platforms) refers to a wide range of applications that enable users to create, share, comment and discuss digital content. Tess (2013) includes under the definition of social media landscape the social networking sites, blogs, wikis and multimedia platforms. The spread of social network in the world is vast – there are 7.7 billion people in the world, with 3.5 billion of us online. One-in-three people in the world and more than two-thirds of all internet users (Digital Report 2020) use social media platforms.

Manca and Ranieri (2017a) show how social media and social networking sites are emerging as places in which to cultivate different forms of social capital (Bourdieu, 1986). Social capital has both bridging and bonding dimension. The ‘bridging’ dimension is expressed between communities, and it is commonly composed of weak and occasional ties. The ‘bonding’ dimension is expressed inside a community, with more robust and consistent relations. Both bridging and bonding connections have a positive role within communities of individuals in so far as they facilitate coordination and cooperation for mutual benefit, including the exchange of resources and building personal and professional relationships, with also implications for psychological well-being (Ellison, Steinfield and Lampe, 2011). Professionals widely use social networks such as Twitter, Facebook, Instagram and Snapchat. For example, social networks like Facebook that were primarily conceived for socialisation have now become oriented towards professional use, a phenomenon called professional Facebooking (Manca and Ranieri, 2017a). Online professional communities are believed to have considerable potential for professional learning (Choo et al., 2015).

The literature suggests that the current generation of teachers is becoming engaged in social media (Macià and García, 2016; Manca and Ranieri, 2017a). It is possible to find different communities of teachers and learners on social networks, through the use of groups on Facebook or following hashtags on Twitter, from primary (5-11 year-old learners) to secondary school learners (11-16 year-old learners) and teachers alike. Their online engagement is expressed in various forms, from searching appropriate and tailored pedagogical resources to exploring technological innovations and receiving feedback and updates about shared stressful situations as revealed during the Covid-19 pandemic. Through social media communities, teachers are engaged in collegial discussions and share experiences related to their profession, with personal interpretations anchored to local perspectives. So, the main benefits of social media for teacher professional development are the sharing of resources and ideas (Fox and Bird, 2017) and the facilitating of knowledge exchange (Ranieri, 2019).

The centrality of the information exchange in social networks leads us to introduce the concept of epistemic collaborative communities, which will be explained in the next section.

Toward Epistemic Collaborative Communities

As seen in the introduction, Haas (1992) defines an epistemic community as a network of knowledge-based experts who address problems together, identify various solutions, and assess the outcomes. Through active engagement in online professional communities, teachers can build epistemic communities with other teachers, activating connections and facilitating beneficial learning and knowledge sharing. Social network interactions show us that the sharing can be superficial and oriented only to the exchange of information and resources, or more engaged in reflexive practices, social presence and critical reading to generate new knowledge.

Teachers can experience a form of serendipitous meaning-making between learning and knowledge sharing (Saadatmand and Kumpulainen, 2013). This epistemic process (Elgin, 2013) can be experienced inside the community. The epistemic dimension is reached through a continuous, active and reflective exploration of an idea, digital resources and online exchanges in posts. So, online teacher engagement opens a 'charting of collective knowledge' (Littlejohn, Milligan and Margaryan, 2012), which helps individuals to connect with the collective and improve their professional development.

Discussion

This paper discusses how professional development via social networks and social media can be nourished by an intense exchange of information and the growing connections among people, knowledge, and communities (McIntyre, 2012). Understanding how to maximise the potential of connecting via social networks with other communities of teachers remains a significant challenge.

Three main reflections emerge from our discussion:

- a. Informal learning via social networks and social media can fill the gap in the increasing need for quality in initial and in-service teacher professional development. For this reason, an in-depth analysis of professional development facilitated by social network engagement could be considered interesting for the formal teacher training institutions. For example, a teacher training institution can assess the needs, topics, interests, and main issues raised by teachers in online communities and use this analysis to adjust their training offers. Indeed, formal teacher training is often not in line with the needs, expectations or practical temporal and spatial constraints in the field. For example, according to the TALIS 2018 results, participation in continuous formal teacher professional development is markedly low in France (83%). Among possible barriers that could explain this low formal training engagement, teachers in France report the lack of incentives (47%), conflicts with work schedule (45%) or lack of time due to family responsibilities (45%), but also the absence of relevant offers (40%). Developing a 'walkway' between formal and informal professional developing could be considered in future analysis.
- b. Professional development via social networks has to be scaffolded and supported to make possible a full appropriation of competences by the teachers. In the same way, there is a need to scaffold and sustain the introduction of innovations from the online to the local community, like the classroom, or the extended local educational institution.
- c. Analysing professional development via social networks can help us understand its evolution and the dynamics of co-creating collective knowledge.

These three points show how social networks play the role of 'third spaces'. Social networks can be an intermediary between formal teacher training (initial and in-service teacher training, often

characterised by high administrative costs and formalities) and daily ludic and free experiences. Social networks have the potential to combine reflections and resource creation with the ludic dimension, flexible time and a range of exchanges. However, teachers have to be aware of privacy issues which can arise quickly.

Finally, we can consider that teachers connected with others online have the opportunity to 'escape' from the local professional community, experiencing symmetric and less hierarchical experiences with colleagues. The borderless exchange via online social platforms has the potential to contribute to increased shared professionalism (Snoek et al., 2011). At the same time, the online communities can go beyond the national ones, in a possible international exchange with other cultures and traditions in teaching and learning. Online community engagement will allow teachers to accept external collaboration beyond local borders, incorporate new perspectives and competencies necessary to face new challenges (Nerantzi, 2018). So, teachers could feel part of an extended worldwide community with the same issues and challenges.

In conclusion, the reflections developed in this paper argue for an increased openness and cross-institutional collaboration between persons and institutions, linking formal and informal learning. Further reflections are necessary on how to take advantage of informal networking and engagement to further develop quality in teacher training.

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