

The Social Classroom: Integrating Social Network Use in Education

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A volume in the Advances in Educational
Technologies and Instructional Design
(AETID) Book Series

Information Science
REFERENCE

An Imprint of IGI Global

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Published in the United States of America by
Information Science Reference (an imprint of IGI Global)
701 E. Chocolate Avenue
Hershey PA 17033
Tel: 717-533-8845
Fax: 717-533-8661
E-mail: cust@igi-global.com
Web site: <http://www.igi-global.com>

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Library of Congress Cataloging-in-Publication Data

CIP Data Pending
ISBN 978-1-4666-4904-0 (hardcover)
ISBN 978-1-4666-4905-7 (ebook)
ISBN 978-1-4666-4906-4 (print & perpetual access)

This book is published in the IGI Global book series Advances in Educational Technologies and Instructional Design (AETID) (ISSN: 2326-8905; eISSN: 2326-8913)

British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material. The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: eresources@igi-global.com.

Chapter 22

Teachers' Use of Social Networking Sites for Continuing Professional Development

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ABSTRACT

On the basis of the results of a study conducted amongst secondary school teachers of English in Malta, this chapter explores the use of Social Networking Sites (SNS) for professional development purposes. In the digital era, SNS provide teachers with the opportunity of creating a Personal Learning Network (PLN), which is an increasingly significant way of acquiring new knowledge and enhancing pedagogical skills while also having the capacity of making teachers feel they belong to a Community of Practice (CoP). This chapter shows how despite their regular use of SNS for personal reasons, teachers do not always exploit these sites to achieve professional development. It is argued that training is a necessary means of not only enabling teachers to learn how to use such tools for such a purpose but also of redefining the way they think about the process of acquiring and sharing knowledge and skills in the 21st century.

INTRODUCTION

Social media is defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010, p. 61). As examples of social media, SNS are characterized by a high level of self-presentation/self-disclosure

and a medium level of social presence and media richness (Kaplan & Haenlein, 2010). Knowing how to exploit these features for professional development is one of the hallmarks of the connected teacher. As Buzzetto-More (2012) points out,

Today's change agents are individuals who are able to successfully amass large numbers of 'friends' or 'followers' in social networking systems and

DOI: 10.4018/978-1-4666-4904-0.ch022

who have a particular talent for launching and promoting new sub-networks by fostering introductions and connections between people. (p. 8)

Despite the criticism of those who see such networks as being “socially ineffective” and who claim that “the social media wave has crested” (Yiannopoulos as cited in McGuinness, 2012, p. 13), SNS play a pivotal role in education and are bound to continue shaping the practices of teachers for the foreseeable future.

This chapter aims to demonstrate that teachers' ability to harness the potential of SNS for professional development purposes is crucial. Knowing how to create a PLN is a twenty-first century skill that can be developed by means of appropriate training that targets not only teachers' competences but also their attitude towards the contribution that SNS can make to their Continuing Professional Development (CPD). By means of the results of a small-scale study involving a group of teachers who participated in a training workshop on the use of social media, this chapter seeks to show that teachers can be encouraged to understand that the tools they use routinely for personal reasons also have latent qualities that make them ideal for achieving professional growth.

BACKGROUND

The effects of social media on a number of domains seem to be quite prominent and education has perhaps been one of the most highly affected. In fact, Clark (2012) argues that changes in human communication have an immediate impact on educators. He identifies three phases of the impact of social media on education that while “running in parallel” (Clark, 2012) commenced sequentially. The first phase is when educators “started to use the potential of social media to support each other and for their personal and professional development” (Clark, 2012). Phase two is when educators started using social media to develop educational

material for students while phase three is when students began to develop similar material for themselves and their teachers. The target audience for the educational content developed in phase one is comprised of educators and SNS play a crucial role in allowing the originators of such content (fellow educators) to share it online. The teachers who engage in such sharing appear to be driven by a common goal and “Communication is... intended to be into and within the community of educators” (Clark, 2012). Given the advantages derived by educators who use social media for professional development purposes, Clark (2012) suggests that all teachers “should be provided with support and encouragement to use social media as part of their professional development, and to use social media tools to improve communication and sharing of knowledge.” Appropriate training in the use of SNS for professional development allows teachers to wield the connections forming part of their PLN for the purpose of sharing knowledge and developing a sense of community with other educators. This chapter deals primarily with the role of SNS in teachers' CPD, however, it is impossible to ignore the use of such sites for broader educational aims given the interdependent nature of teachers' and students' use of SNS in education.

The Educational Use of SNS

In order to understand the benefits that may be accrued through the use of SNS in education it is important to review the substantial amount of literature about the uses of SNS for educational purposes. The volume of research conducted about students' use of SNS seems to surpass that regarding teachers' use (Greenhow, 2009), however, it can be argued that similar benefits are enjoyed by both kinds of users. In addition, students' successful use of SNS in education is somewhat dependent on teachers' own ability to use such tools and most importantly their attitude in relation to them.

A variety of studies show that students are using SNS for educational purposes (Arnold & Paulus, 2010; Donmus, 2010; Kabilan, Ahmad, & Abidin, 2010; Grosseck, Bran, & Tiru, 2011; Hussain, 2012; Davis & Marsh, 2012), both formally and informally. Besides providing students with a space for informal learning (Madge, Meek, Wellens, & Hooley, 2009; Selwyn, 2009; Wodzicki, Schwämmlein, & Moskaliuk, 2012), research also shows that when SNS are integrated in a course of studies they possess huge educational potential (Drexler, Baralt, & Dawson, 2008; Bosch, 2009). Furthermore, a number of studies seem to show that SNS use heightens students' cognitive ability (Ellison & Matthews, 2010; Alloway & Alloway, 2012; Alloway, Horton, & Alloway, 2013).

It seems almost indubitable that social networking has a positive impact on students' learning outcomes (Yu, Tian, Vogel, & Kwok, 2010). However, some studies have found that teachers' attitudes towards SNS might hinder rather than encourage students' use of such sites for educational purposes. For example, by focusing on a higher education context one particular study found that students were much more likely than their teachers to appreciate the potential of SNS as a form of support for classroom work (Roblyer, McDaniel, Webb, Herman, & Witty, 2010). The authors conclude that for the benefit of all stakeholders, educators' attitudes need to become further in tune with those of their students:

Unless this tendency changes and faculty perceive Facebook and its sister technologies, both current and those to come, as additional opportunities for educational communication and mentoring, SNSs may become yet another technology that had great potential for improving the higher education experience but failed to be adopted enough to have any real impact. (Roblyer et al., 2010, p. 138)

This view is in line with the results of a large-scale study by Junco (2011) that leads him to affirm that "Facebook use in and of itself is

not detrimental to academic outcomes, and can indeed be used in ways that are advantageous to students" (p. 169). For this reason he recommends that educators need to "to familiarize themselves with Facebook (and other such technologies) and to design and support interventions that meet students where they are in order to help them get to where they are going" (Junco, 2011, p. 169). As professional role models, teachers "should know how to make best use of the powerful tools that learners carry around with them at all times, and be able to demonstrate appropriate academic uses or talk knowledgeably about effective practices enabled by those tools" (Kukulka-Hulme, 2012, p. 253).

The idea that teachers need to support new forms of learning by positioning themselves as users of SNS leads Frost (2011) to see teachers and students as "co-constructors of productive spaces for learning critical inquiry based on students' statuses as digital natives" (p. 269). Joosten (2012) believes that a situation is emerging in which "Through their own use of social media educators are realizing that social media offers the functionality to enhance student outcomes in the classroom" (p. 6). According to renowned ELT digital technology trainer Nik Peachey (as cited in de Lotbinière, 2012), SNS like Facebook are most effective when teachers use them to extend classroom learning. He says that "A lot of teachers are using Facebook to supplement face-to-face teaching mainly because their learners are already on Facebook. It's easier to use than email and it's more interactive" (Peachey as cited in de Lotbinière, 2012). This chimes with the ideas of Buzzetto-More (2012), for whom "The bottom line is that social networking supported learning activities resonate with today's students, who as digital natives are comfortable with and motivated by the use of technology" (p. 11).

Teachers' understanding of how to exploit SNS for educational purposes will allow them to maximise their own students' learning through such sites. Donlan (2012) points out that sometimes there is a mismatch between how teachers

wish students to use social media and how they actually use it. She considers it “important to educate students about how social media can be used in a teaching and learning context; tutors must not assume that students’ understanding of its use in a social context transfers automatically to an academic setting” (Donlan, 2012, p. 14). However, for this to happen teachers need to be adequately trained in the use of SNS to achieve specific educational aims, their own and those of their students. Moreover, teacher trainers need to avoid making the same mistake made by those teachers who take it for granted that their students will know how to use SNS for educational purposes given that they already use them for social reasons. Seeking to encourage teachers to use SNS for educational purposes entails not only developing a set of specialist skills but also developing positive attitudes.

The benefits derived from students’ use of SNS for educational purposes seem to be heavily dependent on teachers’ own skills in using such sites and their attitudes towards them. For example, Callaghan and Bower (2012) show that “Positive teacher behaviors” are critical, especially when it comes to using SNS as a means of developing students’ “technological and media literacies” (p. 16). Cultivating such behaviors is very much dependent on teacher training and in fact Hutchinson and Wang (2012) argue that incorporating SNS into “teacher education courses can provide pre-service teachers with a model for how to meaningfully integrate technology into their instruction” (p. 273). This is particularly pertinent because one of the reasons for which the potential of SNS as educational tools is not yet being fully harnessed is that teachers’ needs are not being addressed by the right kind of training. In fact, this idea seems to be given weight by a study commissioned by Dell (2012) involving 375 interviews with teachers in the U.S.A., China and Germany. The sample consisted of a variety of educators teaching at different levels and in different kinds of institutions. Teachers reported that “core training focuses more

on teaching practices (77%) and technology (55%) than on integration of technology in curriculum (55%) where it can make a greater impact” (Dell, 2012, p. 5). The study found that the majority of teachers in the U.S. and Germany “never access social media in the classroom” (Dell, 2012, p. 5). This is in contrast to what was reported by the 600 students who also took part in the study, of whom one in four said that “they access social media in the classroom daily” (Dell, 2012, p. 31). The results of this study should serve as a reminder of Weller’s (2011) idea that “The emphasis on any staff development...should be on empowerment and liberation, rather than on training in specific software packages” (p. 83). In order for teachers to fully exploit SNS for the benefit of their students’ learning they themselves need to be able and willing to capitalize on these tools for their own ongoing professional education.

Continuing Professional Development

The value of CPD as a means of enhancing teachers’ and students’ performance is confirmed by a number of studies. Borko (2004), for example, maintains that there exists “evidence that professional development can lead to improvements in instructional practices and student learning” (p. 3). In fact, research on CPD programmes found that the longer teachers participate in professional development the higher the rate of change amongst them and the more they put into practice what they learnt on the programme (Lewis, Baker, Bueno Watts, Holding, & Lang, 2010). The prevalence of social media in contemporary society means that teachers have easy access to a range of tools that they may rely on for professional development and as a means to facilitate students’ learning. However, in order for teachers to take up the challenge of new media they need to embrace the idea that “Continued support and education seen over the continuum of a teacher’s career are essential” (Mompoin-Gaillard, 2012).

According to Vrasidas and Glass (2004) “Innovative professional development for teachers will involve opportunities for teachers to share their expertise, learn from peers, and collaborate on real-world projects” (p. 3). Two British Council (2012a; 2012b) handbooks on professional development for English language teachers highlight the different kinds of CPD that provide teachers with assistance at different stages of their career. The “main areas of activity” are deemed to be the following:

- Developing a reflective approach to your work.
- Expanding your skills and knowledge through working with resources.
- Sharing and learning with other teachers.
- Participating in training workshops and courses. (British Council, 2012a, p. 5)

Unfortunately, amongst the different examples of professional development provided in the two handbooks no mention is made of CPD via SNS and this probably shows that the concept has not yet become fully entrenched in the practices of teacher education organizations. In line with this idea, a study by Hanraets, Hulsebosch and de Laat (2011) found that “Teachers will be more inclined to invest time in networked learning activities when networked learning is a recognized strategy for professional development that is understood and supported by their supervisors and managers” (p. 97).

Supporting teachers in their efforts to exploit SNS for professional development will hopefully make the use of social media for educational purposes more widespread and consistent than it currently seems to be. For example, a study on the use of social media by 3,875 higher education teaching staff in the U.S.A. found that “Levels of adoption for professional and teaching purposes lag behind that for personal use” (Moran, Seaman, & Tinti-Kane, 2012, p. 3). Whereas nearly two-thirds of faculty access social media for personal

use, around 45% of them use these sites for professional purposes. The study reports that “Facebook is the most-visited social media site for personal use, with over one-half of faculty visiting at least monthly. Daily use of Facebook exceeds the daily, weekly, and monthly use of any other site by faculty for personal purposes” (Moran et al., 2012, p. 3). One third of faculty use social media for teaching purposes, with blogs and wikis being the most popular forms in this respect. LinkedIn is the most popular SNS for professional purposes while Twitter is the least accessed site for both professional and personal use.

Despite some of the above findings, the value of certain SNS as a means of supporting an educator’s career and development is becoming more widely recognized, especially in the case of Twitter (Mollett, Moran, Dunleavy, 2011). Chamberlin and Lehmann (2012) point out that “One growing use of Twitter falls under the category of personally driven professional development” and those who use it for such a purpose “would be hard-pressed to replace it” (pp. 386-387). This seems to be because one of the advantages of Twitter is that it “occupies an intersection between professional and personal, formal and informal, and resource and conversation” (Weller, 2011, p. 73). Another advantage is that Twitter provides the teacher with “geographical diversity” given that “it is a global community which brings together different perspectives” (Weller, 2011, p. 72).

The need for professional development programmes that enable teachers to capitalize on the advantages of such SNS as Twitter seems to be more crucial than ever. However, Macdonald and Poniatowska (2011) maintain that “context is ultimately the great decider when considering the potential success or failure of professional development initiatives” (p. 131). This means that professional development programmes focusing on the use of SNS need to be developed with an awareness of educators’ academic selves (Veletsianos & Kimmons, 2013). This is fundamental given that educators “may resist or reject the val-

ues embedded in such tools, which they feel may impact the ways that they perceive themselves, their teaching, and their research” (Veletsianos & Kimmons, 2013, p. 43). One way of ensuring that teachers come to value the potential of SNS for professional development is by encouraging them to see such sites as facilitating the creation of a PLN.

Personal Learning Networks

The concept of a PLN is not new, however, over the past few years the reach, size and look of a PLN have changed due to the proliferation of SNS. Thanks to SNS, teachers are finding it much easier to create networks whose main purpose is that of facilitating the process of CPD. SNS facilitate a form of professional development that is based on a bottom-up approach to CPD and this has the potential to be much more motivating for teachers than a top-down approach. Scott (2010) affirms that “mandated, top-down professional development initiatives designed to ensure implementation of policy may appear to have little relevance to teachers” (p. 34) while Pachler, Daly and Turvey (2010) maintain that partly due to “top-down frameworks for CPD...the potential of technology to enhance the learning experiences of students remains largely unfulfilled” (p. 78). A PLN constitutes a bottom-up approach to professional development and its benefits for teachers are substantial.

A social network is of fundamental importance to professional development (Levin & Cross, 2004) and by encouraging teachers to build an extended network they are enabled to implement innovative practices (Dresner & Worley, 2006). Knowing how to use SNS in order to build a PLN is a twenty-first century skill for teachers because it empowers them to feel in charge of their professional development and thus extend learning (Rosenthal Tolisano, n.d.). The benefits of SNS like Facebook and Twitter in allowing teachers to set up a PLN are widely recognized

(Rego, 2009; Ferriter, Ramsden, & Sheninger, 2011; Grayson, 2012; Joosten, 2012) and it seems that such “Cyber-enabled networks hold great promise for supporting teachers’ development of new knowledge and practices” (Schalger, Farooq, Fusco, Schank, & Dwyer, 2009, p. 87). A PLN is defined as “an adult’s own assemblage of resources and means of assimilating knowledge from those resources” (Neubauer, Hug, Hamon, & Stewart, 2011, p. 14). A PLN is based on the idea that

Learning is ongoing and seeks to provide tools to support that learning. It also recognizes the role of the individual in organising his or her own learning [which] will take place in different contexts and situations and will not be provided by a single learning provider. (Attwell, 2007, p. 1)

A PLN is constituted of a group of people who guide individual teachers in their learning, act as a source of advice and resources, and share best practice (Rosenthal Tolisano, n.d.).

According to Hanraets et al. (2011) “People use their networks as a social infrastructure to gain access to what it is they are looking for whether it is products/materials, knowledge and new colleagues” (p. 86). Downes (2007) identifies four main characteristics of learning networks: diversity, autonomy, connectedness, and openness. In order for individual entities within a learning network to maximize their learning they need to be exposed to as wide a range of influences as possible, be able to operate independently of other entities, produce knowledge through interaction with others, and openly contribute to and receive knowledge from the network (Downes, 2007). One proposed “sequence of use” for a PLN consists of the following steps: “catch, read, think, write, post, and serve” (Neubauer et al., 2011, p. 15). This sequence seems to highlight the significance of shared knowledge, which seems to be one of the main advantages of a PLN for teachers.

A PLN allows teachers to sift through a vast wealth of information and focus only on what

appeals to them. It enables teachers to access this information whenever and wherever they are and to determine who and what should form part of their PLN. Hence a PLN is tailor-made for each teacher's use. One of the main benefits derived by teachers' use of SNS is that of having access to shared knowledge that is specific to their own needs and interests. The idea of sharing knowledge via a PLN seems to have evolved from Tim Berners-Lee's (1999) conception of the WWW:

The basic idea of the Web is that of an information space through which people can communicate, but communicate in a special way: communicate by sharing their knowledge in a pool. The idea was not just that it should be a big browsing medium. The idea was that everybody would be putting their ideas in, as well as taking them out.

The immediate effect of a PLN is that teachers are able to dynamically contribute and share innovative ideas with a network of people that extends beyond the physical confines of the school. In fact, Baird and Fisher (2005) affirm that "Social networking media engages the user in the content and allows them to be included as an active participant as they construct a learning landscape rooted in social interaction, knowledge exchange, and optimum cognitive development with their peers" (p. 24). In line with this idea, Luehmann and Tinelli (2008) found that teachers' use of blogging facilitated the creation of a knowledge sharing community and the development of reform-based practices. Amongst the different professional reasons for which educators use Twitter, Veletsianos (2011) found that information sharing is of primary importance. They tend to use Twitter to distribute material that is linked to their professional practice and to share information about their teaching context. Talking about his own professional development via social media, Peachey (2012) says that "Sharing is a really important part of the process. It's important

because if you create something of value that can help you develop it can probably help others develop too."

The concept of a PLN envisions cadres of connected teachers who are constantly in tune with the most recent developments in their field and who are always willing to share knowledge with their peers for the purpose of professional development. This necessitates a conception of the connected teacher as someone who is plugged into an ongoing act of learning. As Agostinelli, Campillo, Magnoler and Rossi (2011) point out, "To give and share on the social networks, it is also necessary to amalgamate time. Didactic time and personal time no longer constitute separate spheres" (p. 783). Connected teachers thus use SNS to network with a wide variety of educators, ask for assistance from fellow educators, and provide others with advice (Veletsianos, 2011). This is in line with Madhusudhan's (2012) research, which shows that for educators the main benefit of using SNS seems to be collaborative and peer-to-peer learning. It can be argued that the features of a PLN facilitate a teacher's membership of a CoP, a supervening entity that is impelled by communal aspirations.

A Community of Practice

Situated Learning Theory underscores the significance of learning as a social participatory process. Lave and Wenger (1991) propounded the idea that learning occurs when the individual engages in social interaction. Wenger (1998) postulated that "engagement in social practice is the fundamental principle by which we learn and so become who we are" (p. 45). For learning to take place a CoP is necessary and this constitutes a social participation framework. CoP are defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger,

McDermott, & Snyder, 2002, p. 4). According to Wenger et al. (2002) the three main defining elements of a CoP are its domain (the field it is communally understood to deal with), its community (how the members of the community build relationships by interacting and learning together), and its practice (the knowledge and resources created and shared by the community). The synergy amongst these three elements helps make a CoP a veritable “*knowledge structure* – a social structure that can assume responsibility for developing and sharing knowledge” (Wenger et al., 2002, p. 29). These three elements can be applied equally to face-to-face CoP as well as to SNS (Gunawardena, Hermans, Sanchez, Richmond, Bohley, & Tuttle, 2009).

Research indicates that social networking facilitates the creation of a CoP (Mason & Rennie, 2007; Tu, Blocher, & Ntoruru, 2008; Russo, Watkins, & Groundwater-Smith, 2009). For social capital theorists, the value of social networking lies in its potential to engender communities of committed people who assist each other in the realization of shared objectives (Smith, 2009). Social networking is defined “as the practice of expanding knowledge by making connections with individuals of similar interests” (Gunawardena et al., 2009, p. 4). In turn, SNS are “tools that facilitate collective intelligence through social negotiation when participants are engaged in a common goal or a shared practice” (Gunawardena et al., 2009, p. 6). For Gunawardena et al. (2009), SNS “provide the technological support for groups to move toward collective intelligence in a learning environment, a shared space in which a group of individuals can develop community, discuss an issue of interest, and reflect on practice” (p. 6). These ideas are corroborated by Cochrane and Narayan’s (2011) study, which shows that SNS allow teachers to form a CoP geared towards their professional development. Likewise, Barkley (2012) found that the creation of a virtual CoP through SNS allowed a group of school principals to achieve professional growth and engender

social capital within their field. Kukulska-Hulme (2012) suggests that the adoption of social media for professional purposes should be part of teachers’ lifelong learning and that they can effect this by participating in a CoP.

The benefits of a CoP apply equally to teachers and students. Research shows that when SNS are used to complement face-to-face courses, students manage to develop a CoP. For example, Hung and Yuen (2010) report that “the majority of participants developed strong feelings of social connectedness and expressed favorable feelings regarding their learning experiences in the classes where social networking sites were used as a supplementary tool” (p. 703). This idea is fundamental because it acts as a reminder that the use of SNS for educational purposes should be driven by a genuine need for collaboration. As Tay and Allen (2011) point out, “in establishing and exploiting the use of social media...the design of the social interactions through those tools is more important than the technologies themselves” (p.161). Vratulis and Dobson’s (2008) experiment in using a wiki with pre-service teachers highlights “the challenges and merits of negotiating knowledge and social relations within a learning community” (p. 293). Learning through social networking is sometimes “challenging and gained in the context of and as a result of difficult social negotiations,” however, Vratulis and Dobson (2008) point out that “it is what makes learning in collaborative social software environments...most valuable and likely to yield a transformative learning experience” (p. 293). Online learning communities provide teachers with the possibility “to conduct collaborative and reflective professional learning in an equal-footing environment while enabling them to surpass the constraints of scarce financial and human resources, as well as overcome the geographical remoteness limitations” (Sari, 2012, p. 71). Purposeful use of SNS enables teachers to join a CoP that will provide them with an effective means of professional development and the possibility of enhancing their practices.

TEACHERS' USE OF SNS FOR CPD

It is clear that SNS can contribute to teachers' professional development by allowing them to create a PLN whose main advantage is that of empowering them to take responsibility for their CPD. The act of sharing knowledge with a network of professionals from all over the world makes teachers feel as if they belong to a CoP that is driven forward by the objective to enhance the practices of each one of its members. However, in order for teachers to take the leap and start using SNS for professional development purposes they might need to receive the right kind of encouragement by means of training that does not just address their knowledge and skills but also targets their attitudes towards the educational value of SNS. This is crucial given that the way teachers position themselves in relation to SNS has an impact on their classroom practices and on their engagement with the tools that their students might already be using for educational purposes. The above issues served as the basis for a small-scale study that was conducted in 2012 amongst teachers of English in Malta. Its aim was that of exploring teachers' use of social media for CPD purposes, with a specific focus on the use of SNS.

Methodology

The study made use of a mixed methods approach and it involved 60 teachers of English working in state secondary schools all over Malta. Around three quarters of them were female and the range of ages and experience levels varied widely. These teachers represent 30% of the total number of English teachers working in the state school sector. This sample of teachers consisted only of teachers teaching Form 4 and Form 5 classes, which represent the highest levels of the secondary school system in Malta. These teachers are responsible for students who are typically aged between 14 and 16. In 2012 there were 125 Form

4 and Form 5 teachers of English, some of whom were also teaching lower forms. In line with the idea that educators should act as professional role models when it comes to the educational use of social media (Kukulska-Hulme, 2012), this study focused on teachers of English due to the fact that in Malta they meet their students on a daily basis. This is not the case for most of the other subject teachers and hence their opportunities to influence students are probably much more limited.

As part of this study the teachers attended a four-hour in-service training workshop on the use of SNS for professional development purposes. The workshop was held twice, with half the total number of participants attending on each day. At the start of the workshop they were asked to complete an online survey on their use of social media for personal and CPD purposes. The workshop mainly focused on providing the participants with hands-on training in the use of Facebook and Twitter for professional development. During the workshop the trainer made a note of some of the comments made by the trainees whilst learning how to use these SNS for such a purpose. At the end of the workshop the participants were asked to complete a feedback form that encouraged them to evaluate the course content in terms of a number of criteria. The feedback form consisted of a list of statements that the respondents had to rate by means of a five-point Likert scale, ranging from 'Strongly agree' to 'Strongly disagree'.

Subsequently, semi-structured interviews were conducted with eight participants whose teaching experience ranged from two to twenty years. These interviews were aimed at better understanding teachers' current and future use of SNS as well as exploring the reasons for some of the received feedback. The teachers were asked to elaborate on their use of SNS for personal and professional development purposes, the benefits of using SNS as part of their CPD, and the challenges they face in attempting to undertake professional development through SNS. The interviews were conducted

in a one-to-one manner and lasted approximately 20 minutes each. Each interview was transcribed and a coding frame was developed to categorize the interviewees' responses.

Personal Use of SNS

The teachers were asked a number of questions about their use of social media and their responses provide an indication of which SNS they access for personal use. All the teachers access social media for personal use, with somewhat more than a quarter spending in excess of 10 hours per week.

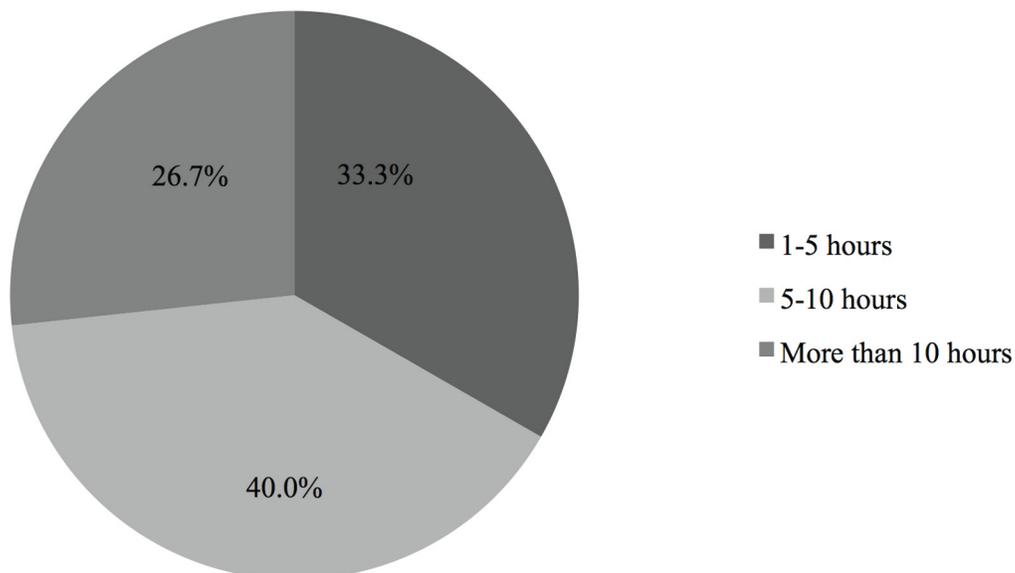
The most common SNS amongst teachers for personal use is Facebook (83.3%), with LinkedIn (16.7%) and Twitter (10.0%) trailing far behind. Other forms of social media like YouTube (91.6%), blogs (13.3%), and Google Reader (10.0%) have different levels of popularity. StumbleUpon (6.7%), Pinterest (5.0%) and Google+ (5.0%) registered very low percentages. A few teachers mentioned other forms of social media that they use, including Myspace (3.3%), Second Life (1.7%), and Diigo (1.7%). In line with the results of other studies (e.g., Moran et al., 2012), the

picture formed by the above data is that teachers spend a substantial amount of time accessing SNS for personal use, with Facebook being the preferred site.

CPD via SNS

The teachers were asked a number of questions about the significance of CPD for them. The fact that for these teachers CPD is either very important (65.0%) or important (35.0%) shows that they value the benefits accrued from engaging in professional development activities. Somewhat less than a third of the teachers mentioned that the most effective form of CPD that they undertake consists of face-to-face training such as an in-service course, with a few of them adding the proviso that this is true only as long as such courses "are practical and relevant." Around a quarter of the respondents consider further studies to be most effective, this being followed by purposeful reading of print media about their subject or profession (18.3%), and staff meetings (16.7%). Only 10% of the teachers specified that for them the most effective form of CPD is using social media with the

Figure 1. Teachers' personal use of social media



Teachers' Use of Social Networking Sites for Continuing Professional Development

express purpose of attaining professional growth. This might suggest that most of these teachers still have a penchant for traditional forms of training. Beyond any considerations of which kind of professional development is empirically the most effective, the data seems to indicate that these teachers have not yet shifted their mindset in order to embrace the idea that “The digital era opens unprecedented opportunities to expand [their] traditional learning experience by participating in networked spaces where sharing and reciprocity are expected” (Nussbaum-Beach & Ritter Hall, 2012, p. 13). Nonetheless, the teachers declared that social media is an important (53.3%) or very important (30.0%) part of their CPD, with the majority of them (63.3%) spending between one and five hours per week accessing social media for professional development.

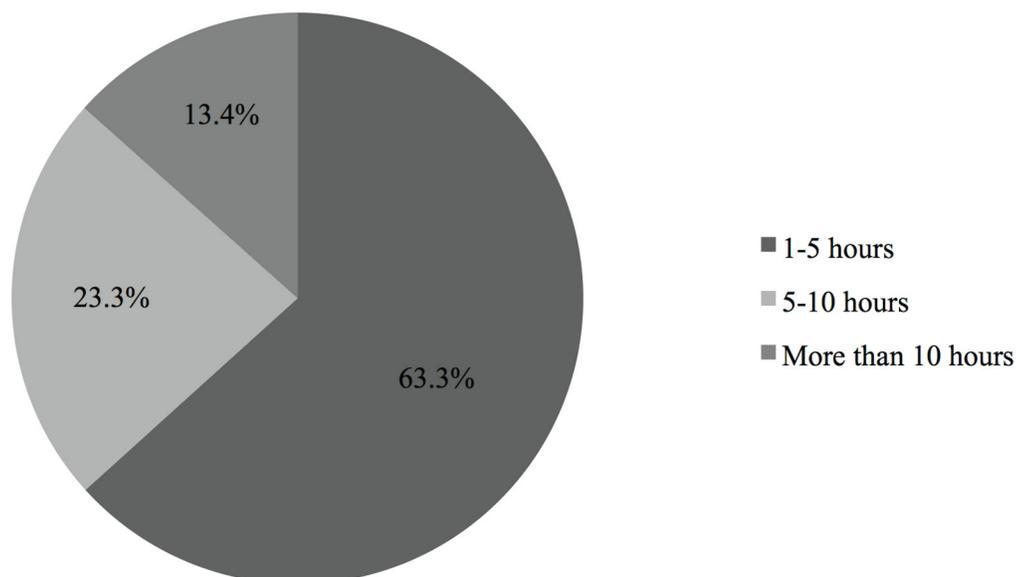
All the teachers intend to continue making use of social media for CPD purposes in the future. Three quarters of them indicated they will use it more often than now while the remainder said they will maintain the same frequency of use.

The three most common SNS for CPD purposes amongst teachers are the same ones as for personal

use. However, the registered percentages are much lower: Facebook (40.0%), LinkedIn (10.0%), and Twitter (3.3%). In contrast, other kinds of social media, like YouTube (81.6%), blogs (10.0%), and Google Reader (7.0%) registered very similar figures as for personal use. Pinterest, StumbleUpon, Myspace and other examples of social media were not indicated as being used for CPD purposes. The above data probably shows that the teachers in question are not fully aware of how they may exploit SNS for CPD purposes despite accessing them regularly for personal use. YouTube, on the other hand, seems to be a staple part of how some teachers acquire new knowledge and skills relevant to their subject and profession. In fact, in the words of one of the interviewed teachers, “YouTube clips are an integral part of how I learn new things about English teaching” (Teacher B, henceforth TB). Teachers do use social media for CPD purposes, but this seems to be largely restricted to YouTube. SNS, in specific, lag far behind.

The fact that the purposeful use of SNS for CPD registered low percentages might suggest that there is not yet sufficient awareness amongst

Figure 2. Teachers' use of social media for professional development



teachers about the potential of such tools. In fact, three interviewed teachers indicated that they never thought about using SNS for this purpose as they “usually have Facebook to stay in touch with friends and family” (TB). SNS are a means of “chatting with people about all sorts of things but not work honestly” (TE), especially because “not all my friends are teachers or interested in English” (TE). One teacher claimed that in-service courses and staff meetings “feel more than enough sometimes with all that we discuss in them” (TG). However, there seemed to be consensus on the fact that they “never considered that social networks can be used for this” (TE). They also indicated that “training is about e-twinning and such stuff but not Facebook for sure” (TB). This acts a reminder of the idea that “There are deep incompatibilities between the demands of the new technologies and the traditional school. Technology...requires new skills that teachers often have not learned in their professional development” (Collins & Halverson, 2009, p. 6).

Another five teachers claimed that they use SNS for CPD on a regular basis because “there is so much you can learn from others” (TD) and so much an individual “can share not only with Maltese teachers but also ones abroad” (TH). Corroborating the results of other studies (e.g., Veletsianos, 2011), it transpired that the “sharing of information is essential” (TF) for these teachers, as is “the possibility to network with so many teachers from all around the globe for free” (TC). They value “the network you create for your own particular needs” and which is used to “learn and grow as a teacher” (TA). The latter outcome is one of those associated with the creation of a CoP via SNS (Barkley, 2012). One interviewee suggested that “a teacher needs to take the reins and learn how to do it...it's not the kind of thing they show you in the in-service” (TH). It seems clear that besides a teacher's personal motivation to start using SNS for professional development there is also a need for training, not only in how

SNS may be used for such purposes but also with the aim of convincing teachers as to why these tools should be used.

The Benefits of Using SNS for CPD

Out of the 60 respondents 24 of them use SNS for CPD purposes. These teachers were questioned about the reasons for which they do so. The most common reason they mentioned was that SNS allow them to network with local and international peers with the purpose of sharing ideas (79.2%). Other very popular reasons given were the relevant material made available thanks to one's network (66.7%), the learning potential of a network made up of teachers (62.5%), and the fact that SNS allow them to keep up-to-date with the latest trends in their field (45.8%). These reasons are some of the most significant features of a PLN and these respondents seem to be aware of the advantages of being connected teachers who not only consume knowledge but most importantly share knowledge with others. This seems to be in line with the idea that digital technology allows contemporary learners to be not just consumers but also creators (Wiley & Hilton, 2009). Moreover, these teachers seem to recognize the fact that this shared knowledge is for the benefit of a learning community consisting of people with similar objectives. Their use of SNS allows them to participate in a “*knowledge structure*” (Wenger et al., 2002, p. 29), this being one of the defining qualities of a CoP.

In fact, five of the interviewed teachers agreed that their use of SNS not only allowed them to network with others but also gave them “a sense of belonging” (TF) or “our common identity” (TC). They feel they “know the other teachers wherever they are based...we're all in this for the same goals” (TD). Talking about the teachers whom he interacts with by means of SNS, one particular interviewee explained that “they're there to help me learn and I do the same for them” (TH). Another teacher

showed she agreed with this idea by claiming, “I feel I’m contributing something. It’s a process of give and take and it’s amongst colleagues who also become friends” (TA). In describing their use of SNS for professional development these five teachers seemed to be suggesting how their PLN allows them to feel part of a CoP. In line with Gunawardena et al.’s ideas (2009), these teachers’ use of SNS acts a means of creating a communal space wherein they can collaborate in knowledge sharing and mutual gain. Moreover, their comments confirm the notion that this sense of community is as important as the outcomes that result from it (Vratulis & Dobson, 2008; Tay & Allen, 2011).

Facilitating SNS Use

When the 60 surveyed teachers were asked about the factors that would facilitate the process of using SNS for CPD, availability of time (76.7%) was the most common one mentioned. They also pointed out the importance of relevant training (71.7%), and Internet access at school (53.3%). Other factors mentioned by these teachers were availability of hardware technology (20.0%) and a teacher’s intrinsic motivation (13.3%). The interviewed teachers agreed that time is an issue but they also indicated that for them such professional development is “fun” (TH) and “can’t really be considered as work” (TC). One of the interviewees explained that “the dedicated teacher makes time for learning even though we’re always very busy” (TD) and a colleague of hers asked, “most teachers are on Facebook, so why aren’t they using it for something meaningful rather than just posting silly photos?” (TC). These views act as a reminder of the idea that unless teachers adopt a positive attitude towards the educational use of SNS then there is the risk that the potential of these tools will not be adequately exploited (Roblyer et al., 2010; Junco, 2011).

All the interviewees seem to believe that training in the use of SNS will allow many other

teachers to start using such sites for CPD. They seem to subscribe to Richardson and Mancabelli’s (2011) idea that “While participating in these on-line spaces may appear easy, creating a PLN is in fact a highly complex intellectual and emotional task” (p. 19). According to one teacher “training gives such innovation a sense of recognition... teachers would realize that Twitter and Facebook can allow them to do great things” (TG). A colleague of hers agreed by saying, “we need courses about the modern stuff our kids are using... Some teachers need help with these things and they don’t know where to get it” (TA). These teachers seem to feel that training would “show us what we can really do with the things we use everyday for catching up with friends” (TD). In line with Hanraets et al.’s (2011) idea, for these teachers adequate training in the use of SNS is a way by means of which educational authorities endorse their efforts to achieve professional development whenever they want to and not only on the days scheduled for formal in-service training. Being provided with the necessary facilities to use SNS at school would serve the same purpose. As one teacher pointed out, “having access to my network at all times of day is crucial and that’s why we need to be given at least a proper computer and Wi-Fi” (TF). This is necessary because “when you get into this kind of thing you almost become addicted to it...you’re constantly trying to cultivate a network that feels so rewarding” (TH).

Addressing Teachers’ Training Needs

At the end of the four-hour training workshop, the participants were asked to fill in a feedback form and assess its content and outcomes. The data collected by means of this workshop contributes to this study’s exploration of the role of SNS in teachers’ CPD by highlighting the importance of carefully designed training. The workshop helped the participants to reflect on the significance of highly focused training in allowing them not only

to learn how they might use SNS for professional development, but also to appreciate the benefits of actually doing so. To this effect, the teachers' feedback contains some fundamental lessons for trainers as to what such training should consist of. The data indicates that any attempt to address teachers' training needs in relation to SNS has to take into consideration more than just possible gaps in their knowledge and skills; the teachers' attitudes towards the educational potential of such tools should also be targeted.

While 88% of the teachers considered the topic of the workshop to be relevant, around 82% of them felt that they could apply the knowledge and skills developed on the workshop to their day-to-day duties. All the teachers agreed that it allowed for interactive participation and three-quarters of them affirmed being satisfied with their increased knowledge on the subject. This underscores the idea that "professional development has to be active and collaborative... New ideas need to be put into practice, observed, discussed, and re-evaluated. Teachers need to work in groups to share ideas, breakthroughs and problems" (Weston, 2012). In line with Clark's (2012) recommendations, the above results seem to highlight the importance of providing teachers with the opportunity of attending hands-on training sessions in which they can learn how to use SNS for professional development purposes. As one of the interviewed teachers claimed, "This course has allowed me to realize that what I use everyday...can be taken advantage of for my professional learning" (TE). Another interviewee agreed with this opinion and affirmed that the workshop "has confirmed my belief that Twitter and Facebook can allow me to develop as a teacher" (TH). These views substantiate the notion that besides providing technical knowledge, professional development events should also be empowering (Weller, 2011).

Despite the positive attitude of the majority of the participants towards the workshop's content and outcomes, almost a fifth of them indicated

that the training was rather technical and difficult to understand. Moreover, around one-tenth of the teachers felt that their expectations of the workshop were not met. These results seem to highlight the significance of conducting a careful needs analysis exercise before the commencement of such training. This would enable teacher trainers to avoid the pitfall of assuming that all course participants already know how to use highly popular SNS like Twitter and Facebook. Even if teachers might already be accessing these SNS for personal use they might not be familiar with how they can be exploited for professional development purposes and hence some of the course content might be interpreted as being too challenging. As one teacher explained, "Sometimes I felt a bit lost because I had never used Facebook in this way. With Twitter it was even worse because I don't use it that much" (TB). Despite its huge educational potential, Twitter is still not as popular as Facebook and hence, in its case, trainers might need to start from the very basics, in some cases helping teachers to set up an account. Moreover, they might also need to think about what kind of follow-up support to offer trainees given that teachers seem to value this quite highly when it comes to technology training (Zhao & Bryant, 2006). Trainers also need to remember that they might not be preaching to the converted and hence as part of any such course or workshop some time should be devoted to convincing participants of the benefits of SNS for CPD. This would avoid the possibility of having teachers expressing sentiments similar to this participant's comment on the feedback form: "I don't think we should have spent half a session on Twitter as it is of lesser importance than other sources. The time wasted is greater than the benefits reaped." Perhaps the best way of persuading such teachers is by showing them how their peers in other contexts use SNS to enhance their practices. As Harmer (2012) points out, "Some of the most effective teacher development takes place when we work and share with colleagues and other professionals" (p. 173).

When it comes to professional development, teachers seem to learn best from fellow teachers (Hansen-Thomas, Casey, & Grosso, 2012).

FUTURE RESEARCH DIRECTIONS

The results of this small-scale study indicate the levels of SNS usage amongst teachers for CPD purposes. However, further research is required in order to fully understand how exactly teachers use such sites to achieve professional development. Building on the results of studies that have already investigated teachers' use of SNS features (Steinbrecher & Hart, 2012), an analysis of the content that teachers typically post and access would help illustrate what kind of knowledge tends to be shared most frequently by means of a PLN. Moreover, such an analysis would also indicate whether there exist any common characteristics amongst teachers who are heavy users of SNS for CPD. The use of SNS for such a purpose has led to the emergence of Networked Teacher Professional Development as a new model for how teachers achieve professional growth (Ostashewski & Reid, 2012), a model that will require further attention as SNS become an intrinsic part of education.

Additional research is also needed in order to understand whether teachers' adoption of SNS for professional development is having an impact on their teaching practices (Rogers, 2012). As argued above, teachers' attitudes in relation to the role of SNS in CPD and education are crucial in determining levels of implementation in educational contexts, thus underscoring the need for more studies that attempt to gauge such attitudes (Li, Hou, & Chang, 2012). The issue of whether suitable training can shape teachers' attitudes and beliefs (Rienties, Brouwer, & Lygo-Baker, 2013) and pedagogical knowledge (Goldschmidt & Phelps, 2010) needs to be explored further in order to assess how teachers go on to profit from training. For that purpose teachers' use of SNS

for professional development purposes in the post-training period would need to be evaluated and compared with their use of such tools prior to the training activity. Moreover, an analysis of the facilitation practices employed by trainers (Molle, 2013) would generate an understanding of what kind of training programmes need to be developed in order to trigger self-directed CPD on the part of teachers. This is fundamental because, as discussed above, professional development has an impact not only on teachers' skills, knowledge and attitudes but also on student achievement. Further research to examine this impact more closely (Antoniou & Kyriakides, 2013) needs to be conducted.

CONCLUSION

The ubiquity of SNS in most social domains means that the educational sphere is most likely to continue being influenced for many years to come. SNS are having an impact on how students and teachers engage in the learning process and this means that the way individuals acquire knowledge and skills is changing in order to capitalize on the potential of these new tools. Teachers are realising that they have to expand their view of what counts as a valid means of CPD in order for them to be able to harness the power of the resources they use on an everyday basis. SNS allow teachers to extend the reach of their previously restricted PLN and to have constant access to relevant knowledge that they are encouraged to disseminate as widely as possible. A PLN provides teachers with a highly effective means of professional development that despite being conducted in a digital manner is still promoting the value of collaboration for the attainment of a common goal. For these reasons the use of SNS for CPD helps foster a sense of community amongst teachers that makes the professional development trajectory across the span of one's career even more rewarding.

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KEY TERMS AND DEFINITIONS

Community of Practice: A group of educators committed to the common purpose of sharing knowledge related to their field. The act of sharing knowledge facilitates professional development. Despite not being necessarily virtual, a CoP is enabled to grow and extend by means of Internet technologies (Koch & Fusco, 2008). SNS seem perfectly suited for this purpose.

Connected Teacher: An educator who knows how to exploit social media for a variety of educational and professional purposes. These include using SNS for teaching and professional development.

Continuing Professional Development: The different means by which educators ensure that their professional knowledge and skills are updated and enhanced over the course of their career. Craft (2000) points out that “Traditionally, professional development was dominated by a course-led model of how teachers learn,” however, at present CPD entails “taking responsibility for identifying and attempting to meet the professional development

needs of oneself and one’s institution” (p. 11). SNS aid teachers to take on such responsibility.

In-Service Training: Training that teachers and other professionals receive on a periodic basis whilst on the job. This is meant to update their knowledge of issues relevant to their profession and enhance their skills. It sometimes also targets their attitudes so as to improve their performance.

Personal Learning Network: A network of educators and other knowledge providers that allows the individual teacher to gain professional growth. According to Koper (2009) a learning network not only “stimulates professional development” but also leads to “a better understanding of concepts and events, career development and employability” (p. 6). A PLN is usually created by means of SNS and other social media.

Social Media: Internet-based platforms that facilitate the creation and sharing of information. These include SNS and other technologies like bookmarking sites, blogs and wikis.

Social Networking Sites: Websites that are commonly used for interaction purposes and the sharing of information. These include Facebook and Twitter.