

Could online PLNs be valuable for all teachers?

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Teacher professional development (PD) plays a large role in helping educators improve (Britt & Paulus, 2016). Districts, schools, and administrators employ a variety of PD methods to reach their staff (Maskit, 2011). Teachers also participate in self-selecting PD through workshops and conferences. However, PD is typically implemented by districts/administration as formal structured learning sessions (Bound, 2011). Many of the traditional forms of PD are reported to be mandated, administration/school driven workshops that occur in the school building (Kabilan, Adlina, & Embi, 2011). They also tend to be one-time events that lack follow-up (Jaquith, Mindich, Wei, & Darling-Hammond, 2011) and are unrelated to classroom practice (Schlager & Fusco, 2003). They often do not focus on improving instruction (Kabilan, Vethamani, & Fong, 2008) and do not lead to improvements in student learning (Visser, Evering, & Barrett, 2014). These traditional forms of PD are not useful for assisting in professional growth (Gilakjani, 2013). Therefore, it is often seen by many teachers as not valuable (Kelly & Cherkowski, 2015, Liao et al., in submission).

One reason teachers identify face-to-face PD sessions as not valuable is due to time (Beach, 2012). Teachers are busy and cannot afford to waste time on PD that is ineffective or not valuable (Maskit, 2011). While there have been some changes in more innovative PD in the United States (Hardin & Koppenhaver, 2016), there are still many stakeholders that have not recognized the power of involving teachers to direct their own PD (Darling-Hammond, et al., 2009). Studies have shown that when teachers are able to direct their own PD, they report it as more valuable and it shows a direct change

in teachers' practices (Visser, Evering, & Barrett, 2014). Furthermore, studies where PD has been content-focused and collaborative, teachers have reported it is more effective in leading to change in practice because they are more engaged in the process (Gilakjani, 2013). One PD format that facilitates teacher directed PD is through online Personal Learning Networks (PLN). Personal Learning Networks can be defined as informal learning networks used for interpersonal connections, collaborations, and the sharing of information and knowledge. Bickmore (2012) found that teachers reported that when they participated in online PLNs, they saw value and were able to incorporate these ideas directly into their classrooms (Bickmore, 2012).

Many stakeholders have recommended that teachers should be encouraged to collaborate with other teachers to make PD more effective at leading to change of practice (e.g., Hew & Brush, 2007). Some have suggested that PLNs can provide more opportunities for teacher collaboration and engagement in personalized PD. For example, in a study by Visser, Evering, and Barrett (2014), teachers were reporting using Twitter for professional collaborations and personal supplements to other PD (i.e. conferences). One teacher reported, "I've 'met' some great teachers in K-12 that I would have never otherwise met" (p. 408) using Twitter (Visser, Evering, & Barrett, 2014).

Trust described how teachers have begun to take control or direct their own learning by establishing their own PLNs (Trust, 2012). Considering the recent growth of social media and online communities, it is not surprising that more and more educators are turning to online spaces to support their own professional development (Lieberman

& Mace, 2010). With so many teachers investing time into building these online PLNs and the premise that more may follow, we should ask the question: Could online PLNs be valuable for all teachers?

Defining Online Personal Learning Networks

Trust (2012) defined an online PLN as a “teacher-driven, global support network” (p. 133). More specifically, an online PLN is a system of interpersonal connections and resources found online that support informal professional development (Flanigan, 2011). PLNs are basically online versions of Professional Learning Communities (PLC), or Communities of Practice (CoP). Teachers commonly build their online PLNs by Twitter, and other social media, blogs, podcasts, shared online video, and professional learning sites (Richardson & Mancabelli, 2012). Creating a PLC or CoP is an effective method of changing teacher practice (Lomos et al., 2011). In a study of 54 teachers, McConnell, Parker, Eberhardt, Koehler, and Lundeberg (2013) found teachers reported a sense of community that promoted collaboration and discussion from belonging to a PLC. (McConnell et al., 2013).

Most teachers use their online PLN for two main purposes: information aggregation and social connections (Trust, 2012). Many tools are available and more are appearing to facilitate these informal online PLNs (e.g., Twitter, Facebook, Edmodo).

Twitter

Currently, Twitter might arguably be considered the most popular social media tool used for teachers' PLNs PD (Visser, Evering, & Barrett, 2014). In a survey of 755 teachers, Carpenter and Krutka (2014) found that teachers described Twitter as a valuable PD environment where they were able to combat isolation "because of its sustained relationships, collaboration, and positive community" (p. 428). In addition, the teachers described Twitter as an effective tool for instant access to information (Davis, 2015).

Britt and Paulus (2016) examined how 8 teachers used Twitter chats, specifically #edchat. A Twitter chat is a combination of a synchronous discussion (usually 1 hour) that is moderated and asynchronous tweeting around a specific topic delineated by a hashtag (Carpenter & Krutka, 2014). Britt and Paulus (2016) observed 2,040 tweets over 5 weekly #edchat sessions to identify 17 users that tweeted every week and had follow up interviews with 8 members. The teachers described being engaged in Twitter chats because they felt it allowed them to individualize their own personal development. The study showed that the Twitter chat #Edchat created a community of practice that included many participant roles, sustained mutual relationships, minimal barriers to engagement, and a rapid flow of information.

Many Participant Roles

#Edchat had an overlap in participants from moderator, frequent participant, occasional participant, and one-time participants. Those participants could find a role that fit their current need for professional development. One participant described

himself as evolving from a lurker to a frequent participant. A founding participant remarked, membership “varie[d] over the years, there have been people who have been on for a few weeks, a few months and then they drop off, but it takes drop offs and returns. #Edchat fits into people’s schedules sometimes, and sometimes it doesn’t.” (Britt & Paulus, 2016, p. 54).

Sustained Mutual Relationships

Participants in #edchat found that sustained mutual relationships allowed them to feel comfortable sharing personal information with the larger group. One participant requested prayers for an ailing family member while another reported that he looked forward to returning every week to have conversations with similar minded colleagues (Britt & Paulus, 2016).

Minimal Barriers to Engagement

Since the chat is both synchronous and asynchronous, it gives members the opportunity to jump in when convenient to their schedules. In addition, the ongoing nature of the conversation allowed participants to join without having to introduce or reintroduce themselves. Also, the moderator ensures the topic is well-communicated and relevant (Britt & Paulus, 2016).

Rapid Flow of Information

In the weekly synchronous #edchat, there are 3 to 4 tweets sent every second. However, the asynchronous portion of the chat, while not as frequent, has more tweets specific to resources. A majority of the tweets were to blog posts, webinars, resource pages, and publications. One teacher in the study noted, “I learned more in a year on

Twitter than my previous fourteen years in education. #edchat” (Britt & Paulus, 2016, p. 57).

The researchers concluded that Twitter was not only redefining what an online CoP could do, but also what constitutes good PD (Britt & Paulus, 2016).

Facebook

Facebook is also a popular social media site that more teachers are beginning to use for PLNs. In a study of 1,107 teachers in five Facebook communities, Rainieri, Manca, and Fini (2012), found that using Facebook groups led to the generation of new projects and practices by sharing with others. The results showed that teachers engaged in thematic specific groups (or content focused groups) shared more of their personal experiences and personal opinions with others. In addition, teachers reported that their online activity on Facebook enhanced their offline professional lives. The largest reason given for engaging in online PLNs was because the teachers felt camaraderie with fellow teachers (Rainieri et. al, 2012).

Sharing

The researchers reported that teachers in the generic groups (not thematic specific) shared as a means of social visibility and build what they called “social capital”. In the thematic groups, the participants reported a need to feel less lonely and therefore shared on an emotional level. Senior members tended to have more confidence to share more often than junior members. However, the trust in the resources shared was based often on the quality of the resources (Rainieri et. al, 2012).

Offline Life

Teachers in the study reported that their activity in the group often led to offline benefits like new projects or classroom practices. Many participants seemed to be motivated to engage by the opportunity to share their projects and ideas. The researchers found that the participants who shared online were able to generate new ideas to use offline. However, some participants reported their involvement online was primarily to maintain real-life offline relationships (Ranieri et. al, 2012).

Edmodo

Trust (2015) examined one teacher community (math), which included over 600 discussion threads and 150 survey responses, on the education specific social media tool Edmodo to investigate how they used the tool for PD. With more than 6.5 million teachers and students using Edmodo, it is a major tool used in this space (Trust, 2012). Trust suggested that teachers seemed to be motivated to engage in an online PLN because they could solicit help and support from like-minded teachers. In addition, Trust implied that teachers found satisfaction in demonstrating their knowledge to help others. Even bigger, teachers were motivated by a responsibility to contribute to the collective knowledge of the field (Trust, 2015).

Solicit Help and Support

In the survey, 84% of the participants reported their main reason for joining Edmodo was to get ideas and resources. Many also reported their main action was to browse the community for knowledge and information. One teacher reported, "I try to

get on Edmodo every day and just go through the posts and see what might interest me” (Trust, 2015, p. 76).

Knowledge Sharing

The survey respondents were asked what type of knowledge and information they were sharing with the community. Eighty-eight percent of the participants were sharing Content or Curricular Knowledge. Many were also searching for and sharing Pedagogical Knowledge to improve their math lessons. Trust also observed the much of the Content Knowledge shared did not address a specific math topic and were more generally related to math teaching (Trust, 2015).

Community of Practice Roles

It should be noted, that while Britt and Paulus (2016) found that an online PLN can take on many roles of a CoP, Trust (2015) found that the Edmodo community did not support traditional roles of the CoP framework such as there were no defined group experts to assist other members, the group did not seem to be a space for relationship building, and many of the shared ideas were decontextualized. Trust concluded that this online community operated “significantly different” from face-to-face online communities. This may result in a need to reconceptualize online communities of practice (Trust, 2015).

Teachers Reasons for Choosing Online PLNs

While these studies focused on specific social media and online tools, there is also research attempting to define the reasons why so many teachers are choosing to engage in online PLNs. For example, after investigating how 23 teachers participated in

an online curriculum network, Hur and Brush (2009) reported that teachers participated in the online community for five reasons. They are: (a) sharing emotions, (b) benefiting from the advantages of safe sharing and the larger network consistent with an online environment, (c) combating teacher isolation, (d) exploring ideas, and (e) experiencing a sense of camaraderie. Trust (2012) found similar reasons in her review of three popular online communities for teachers (Edmodo, Classroom 2.0, and The Educator's PLN): sharing information, connecting with other members, finding resources, soliciting ideas, and obtaining feedback or help.

Sharing Emotions

Not only did the teacher report that sharing emotions was a primary reason for participation, but also posts that shared emotions tended to get the most attention. Teacher shared both positive and negative feeling associated with teaching. This led to a reported feeling of support and encouragement from the community (Hur & Brush, 2009).

Benefits of Online Environments

Participants reported they felt safer sharing issues in the online communities rather than in their local school environment. The respondents were concerned about being judged as incapable by other teachers in their local school. In addition, teachers reported being motivated by the larger audience with the potential for more diversity of ideas (Hur & Brush, 2009).

Combating teacher isolation

Teachers indicated that connecting with other teachers, regardless of geography, was a main reason they participated in online communities. Teachers felt their issues were understood by communities members, even when they had others in their local community to share. Respondents also indicated they did not have time in their local community to share when they did in the online community (Hur & Brush, 2009).

Exploring Ideas

Respondents reported they visited the online communities to find specific ideas for their teaching situation. Teachers often shared lessons that they had taught and the outcome. In addition, teachers often looked for other community members that taught similar subjects or grades (Hur & Brush, 2009).

Experiencing a Sense of Camaraderie

Camaraderie was listed by participants as the main reason they joined online communities. Teachers reported finding support and encouragement from the camaraderie they received from the community (Hur & Brush, 2009).

Perhaps one of the most important reasons is that increased sense of camaraderie. Tsai (2012) studied 66 teachers in an online community based around a Learning Management System. She found that teachers reported feeling less isolated due to their growing social interactions with other teachers in their PLNs. As Britt and Paulus (2016) pointed out, "Teachers no longer have to work (or suffer) in silence, but can reach out to find ways to change their practice" (p. 49).

Other studies have shown that teachers report the improved ease of access to engage with the online community where they can participate “anytime and anywhere” (Tsai, 2012). Due to this participation, teachers reported feeling a greater sense of ownership over their own professional development. In another study, 755 teachers were surveyed about their use of Twitter for PD, teachers described that building an online PLN help them shape and direct their learning (Carpenter & Krutka, 2014).

One major benefit of engaging in online PLNs was that many of these participating teachers were sharing publicly their own practice for the first time in their careers (Lieberman & Mace, 2010). Visser, Evering, and Barrett (2014) reported in a survey of 542 teachers using Twitter, 55% of respondents shared frequently and that sharing led to improved classroom practice (Visser, Evering, & Barrett, 2014).

Challenges and Drawbacks

While there appears to be many benefits to teachers developing an online PLN, there can also be some disadvantages: lack of institutional control, no formal agenda, passivity in participants, and limited research. In a literature review by Manca and Ranieri (2015) studies found that when administrators attempted to create an online PLN for members, they were often met with resistance. Participants reported a discomfort with mixing personal and professional lives. Others expressed concern about an invasion of their privacy by administrators. In addition, teachers found that learning a new tool or technology skill in order to participate in an online PLN was more work beyond their traditional duties (Manca & Ranieri, 2015).

The same study found that many times online PLNs had no formal agenda

(Manca & Ranieri, 2015). Some PLNs have an agenda created by a moderator, but not always (Visser, Evering, & Barrett, 2014). While the benefits of informal learning are attractive, PD organizers and funders are struggling to justify supporting PLNs (Manca & Ranieri, 2015, Schwen & Hara, 2003). Because of this, online PLNs are still not legitimized by many districts and administrators as valued PD (Flanigan, 2011) and some districts still have policies prohibiting their use (Carpenter and Krutka, 2014).

Britt and Paulus (2016) found another concern of passivity. In their study of 7,487 tweets during #edchat, they discovered teachers were more likely to be passive observers. In their observation, a small number of participants led the conversations and provided materials or resources for the larger group (Britt & Paulus, 2016). While these online PLNs appear to have a diversity of information and dialogue, if they are only being led by a few voices, the information may become homogenized (Macià & Garcià, 2016).

Further concerns were identified by Macià and Garcià (2016) in their report on online communities and networks. In their review of the research, it was not clear if participation in online PLNs actually led to the development of new skills in most teachers. In addition, it was also not clear what elements were necessary for an online PLN to change teacher behavior. For instance, what role an online moderator serves, if there even is a moderator, needs additional attention and research. They also call for future research on distributed leadership and the responsibilities of participants (Macià & Garcià, 2016). In addition, Carpenter and Krutka (2014) acknowledged that the research on specifically Twitter for PD is thin.

We have seen the emotional benefits and sense of belonging that teachers report from their online PLN. We have also seen that online PLNs may have a lack of institutional control, no formal agenda, passivity in participants, and limited research. Therefore, using an online PLN for teacher PD should be considered valuable, but with a small consideration of concern.

Discussion and Conclusion

Current users of online PLNs are mostly innovators and early adopters . This may deter administrators from encouraging staff to engage in an online PLN (Carpenter & Krutka, 2014). Combining an online PLN with other established face-to-face PD may be used as an entry point (Macià & Garcià, 2016). Carpenter and Krutka (2014) suggested counting time engaged in an online PLN toward credit given for formalized PD. Encouraging teachers to collaborate on projects through online communities may help grow their use of online PLNs (Visser, Evering, & Barrett, 2014). For example, a humanities teacher was encouraged to collaborate through Twitter and remarked, “I have met my close collaborators on Twitter, and they have now become my closest friends” (Carpenter & Krutka, 2014, p. 426). Finally, asking current online PLN participants to share their experiences with others and act as peer mentors can be beneficial (Macià & Garcià, 2016).

Carpenter and Krutka (2014) stated, “Our data thus suggest that the full educational potential of Twitter may currently remain untapped” (p. 428). In summary, the studies indicate that an online PLN will help teachers feel a sense of camaraderie,

feel less lonely in their educational practice, and provide opportunities to collaborate and share. Because of these reasons, I conclude that an online PLN is valuable for all teachers.

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