



Working Toward a Reconceptualization of Effective TESOL Teachers' Professional Development Through "Personal Learning Networks"

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Abstract: The report summarizes outcomes of a longitudinal qualitative study on Personal Learning Networks (PLNs). Specifically, the outcomes describe the types of engagement ESL/EFL teachers seek through online informal learning. Information was obtained from participants who were (1) TESOL teachers' Twitter followers; (2) TESOL listserv; (3) Educator's PLN; and (4) Ning's Classroom 2.0 members. The participants' opinions were surveyed, their engagement observed over two years and they were interviewed. The study's findings emphasized several engagements including that of just-in-time support, self-directed, reflective, peer-to-peer and heterarchical engagements. Finally, the outcomes add suggestions to reconceptualize existing models of effective language teacher professional development.

Keywords: online learning, informal learning, Personal Learning Networks, ESL/EFL teachers, professional development

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In this brief report, we share a summary of the outcomes of a longitudinal research that suggest emerging factors to consider in teachers' professional development (PD). To maintain and sustain their expertise, teachers continuously pursue PD as part of their professional growth, as teacher knowledge is dialectical knowledge. This is because the knowledge develops, evolves and is mediated by what teachers know about the subject matter; about themselves as people and as learners; about their students; about the learning that is taking place in their classroom; and about the micro school culture within which they work as well as within which the macro community in they, their students and their schools are situated (see Johnson, 2006). All these are factors that necessitate teachers to continuously "reconceptualize and recontextualize their understandings" (Johnson & Golombek, 2003, p. 735) of thinking and engaging in all aspects of teaching and learning. In the research reported here, we added into consideration, the online medium in which PD is delivered as a factor that contributes to teachers' continued growth in their profession, namely their use of online Personal Learning Networks (PLNS), involving a combination of social media applications.

The first author is a digital native and a millennial while the second author, a digital neophyte, born in the 1960s. What brought us together as a team in 2015 was the first author convincing the second, to follow astronaut's Scott Kelly's daily and year-long Twitter posts on "Life as a Starman." We were both looking for novel ways to bring in the authentic and the real to language instruction. Since then, we both became users of Twitter and other online social media applications which, when combined, formed a Personal Learning Network (PLN). In a recent survey of 732 teachers, 41% of online PLNs are composed of millennial teachers and 42%, like the second author, are "mature" teachers (Murphy, 2019). In other words, PLNs are a significant contributor to the knowledge base and working lives of teachers across the board.

In this brief report, we share a summary of the outcomes of a longitudinal research on Personal Learning Networks (PLNs) which we began in the "Kelly" year of 2015. At this point in time, we share data that are beginning to reshape our thinking about effective PD when we contextualized the data within two widely-recognized PD frameworks. The first of these was developed by Darling-Hammond, a renown scholar in the field who, with her colleagues, developed guidelines for effective professional development (PD) in a white paper for the U.S.-based Learning Policy Institute (Darling-Hammond et al., 2017). The second framework was developed by Richardson and Diaz (2018), serving as PD guidelines specifically for English Language Teachers (ELTs) worldwide.

The research questions are as follows: (1) What are the types of learning opportunities do online PLNs provide ESL/EFL teachers who have come to rely upon them as their source of professional development? (2) In what ways, if any, do these opportunities add layers of complexity and/or re-conceptualize effective language teacher professional development?

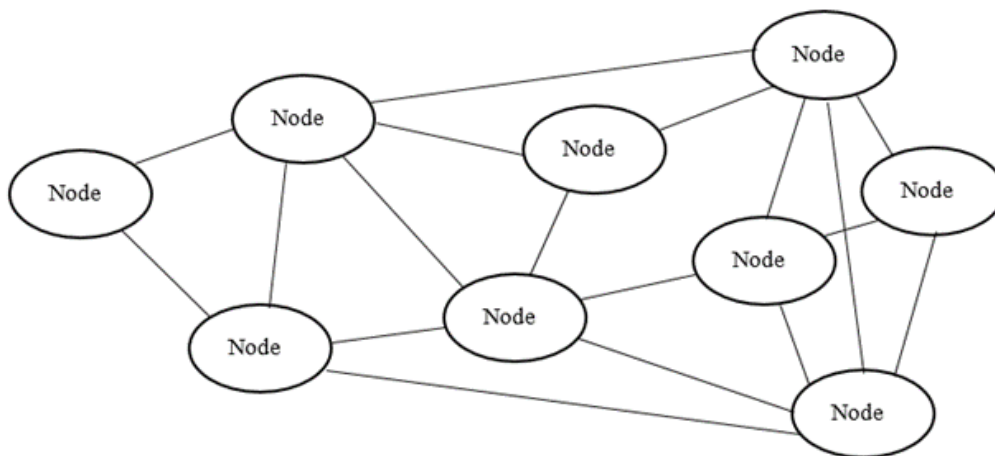
Literature Review and Theoretical Framing

The mainstay of professional development is on providing teachers with instructional strategies and appropriate resources to incorporate into their teaching practices. In this study, we examine the nature of teachers' engagement in online professional development (PD) through Personal Learning Networks (PLNs) that involve their participation in three main PLN types identified by Warlick (2009): (1) personally maintained synchronous connections; (2) personally and socially maintained semi-synchronous connections; and (3) dynamically maintained asynchronous connections.

Personally maintained synchronous connections include individuals asking and answering questions while at the same time, solving problems through tools such as chats, texts, Skype, Zoom and Twitter to enhance professional development. The second and semi-synchronous PLN type differs from the first in that the connections and collaborations do not take place in real time but during a time when it is most convenient to the users, through, for example, commenting on a blog post or commenting on discussion boards. The third asynchronous PLN type, unlike the first two, connects users with content sources or tools that another PLN user has deemed essential or valid to be used and shared. These can be applications such as social bookmarking sites or a Really Simple Syndication (RSS) where information is delivered to the reader.

Our study on teachers' PLN engagement is framed by Connectivism Theory (Siemens, 2005). It provides a framework to describe learning and development as being embedded within a social process and occurring as a learner interacts with other people in collaborative environments. Connectivism Theory (CT) also describes how learning occurs through interaction with human and non-human sources such as computers and the Internet. CT utilizes the concept of nodes or connections in a network to define learning an individuals' ability to connect seemingly different sources or pieces of knowledge to arrive at an understanding of a subject, concept, or field.

Chart 1. *Connectivism Nodes*



(Note. See Siemens (2004))

Method

Respondents

The qualitative research design is a descriptive multiple case study. A study description and brief survey were sent out as means to invite participants to the study, including (1) TESOL teachers' Twitter followers; (2) members of the TESOL listserv; (3) members of the Educator's PLN; and (4) members of Classroom 2.0 which is a Ning site dedicated to the support of Personal Learning Networks of teachers. Following Creswell and Poth's (2018) guidance of no more than four cases in an in-depth multi-case study, four participants (three females and one male) out of 27 respondents who volunteered, were purposefully selected because, given their experience and background, they were able to inform us about professional development through PLNs, the central phenomenon in the study.





The following criteria were used to select the four, namely that they:

- utilized a PLN regularly (at least 3-4 hours on a weekly basis)
- utilized a PLN for more than two-three years
- utilized between seven or more online tools (e.g., Twitter, blogs, Ning, etc.)

The four met the above criteria and were using over 10 tools in their PLNs regularly over a long period of time. (The average overall usage reported by everyone who responded to our survey, was only 3 tools with 41% of the respondents using PLNs for less than a year, and 59% for less than one hour each week). The four selected respondents thus demonstrated commitment and reliance in using the tools. (See Table 1 below).

The first respondent, Anna, was an ESL teacher with 11 years of teaching experience in Australia. She taught English to adult migrants, refugees, and international students and visitors in a vocational education institute. Caroline, on the other hand, was an ESL teacher of 10 years currently residing in the U.S. Pacific Northwest, and teaching English at in an intensive English program. She also had experience teaching English in China for a semester. Lauren had 20 years of ESL teaching experience in a Canadian university where her students were from different parts of the world and were there to improve their English skills in their academic studies. Finally, the fourth respondent, John, had been heavily involved in online learning for about twenty years and was a robust member of the online community. John has a background in Computer Assisted Language Learning (CALL) and more than 30 years of English language teaching experience.

Table 1. Participant Profiles

 ANNA	Age: 54 Location: Australia Setting: Adult Education Length of Teaching Experience: 11 years Length of PLN Use: Over 5 years Time Spent Participating in a PLN: More than 4 hours per week	 CAROLINE	Age: 34 Location: USA Setting: Higher Education Length of Teaching Experience: 10 years Length of PLN Use: 4 years Time Spent Participating in a PLN: 3-4 hours per week
Synchronous Connection Tools	Twitter, Facebook, Google+, LinkedIn	Synchronous Connection Tools	Twitter, Facebook, Google+
Asynchronous Connection Tools	Blogs, Wikis, Diigo, Flickr	Asynchronous Connection Tools	Blogs, Wikis, Diigo, Flickr
Other Online Tools	Digital Resources, Podcasts, Video Conferencing, Popular Media	Other Online Tools	Digital Resources, Podcasts, Evernote
Offline Tools	Curriculum Documents, Print Resources, Conferences, Colleagues	Offline Tools	Curriculum Documents, Print Resources, Conferences, Colleagues
 LAUREN	Age: 45 Location: Canada Setting: Higher Education Length of Teaching Experience: 20 years Length of PLN Use: Over 5 years Time Spent Participating in a PLN: 3-4 hours per week	 JOHN	Age: 63 Location: England Setting: Adult Education Length of Teaching Experience: 31 years Length of PLN Use: Over 5 years Time Spent Participating in a PLN: More than 4 hours per week
Synchronous Connection Tools	Twitter, Facebook, Google+, LinkedIn	Synchronous Connection Tools	Twitter, Facebook, Google+, LinkedIn, Yahoo! Groups
Asynchronous Connection Tools	Blogs, Diigo, Flickr	Asynchronous Connection Tools	Blogs, Scoop.it!, Wikis, Flickr
Other Online Tools	Digital Resources, Podcasts, Video Conferencing	Other Online Tools	Digital Resources, Podcasts
Offline Tools	Curriculum Documents, Print Resources, Conferences, Colleagues	Offline Tools	Curriculum Documents, Print Resources, Conferences, Colleagues

Data collection and analysis

We followed these individuals as fellow PLN members over the years so as to develop an extended understanding of these individuals' engagement. During that time, we also conducted two semi-structured open-ended interviews with each participant using a video-conferencing tool. Two interview protocols were developed for this study. The protocol for the first interview (55-75 minutes) consisted of 12 questions asking the participants about their experience utilizing a PLN for TESOL professional development and lasted approximately 55-75 minutes. The second interview (60- 80 minutes in length) was meant to address the gaps and conflicts that emerged from the first interview.

In addition to the initial survey and interviews, a third source of data were digital artifacts. With permission obtained from the participants, over a period of eight weeks in the Fall of 2017 and Spring of 2018, the researchers observed and collected information from activities on each of their PLNs involving:

- 400 Twitter postings,
- 100 Facebook postings,
- 80 Google+ postings,
- 100 social bookmarking postings,
- 32 blog postings of about 800-1000 words in length,
- 15 LinkedIn postings
- and 5 Yahoo! Groups postings.

Interviews and the digital artifacts from each participant were analyzed, coded, and categorized into themes using Creswell and Poth's (2018) thematic analysis. Once a full account of each case was developed, the data was further analyzed by establishing themes or patterns across the four cases. The data and interpretations were returned to the participants in the study for their confirmation. As mentioned above, we then compared the findings we report below with the items in Darling-Hammond's et al (2017) and Richardson and Diaz's (2018) PD guidelines.

Findings and Discussions

Time is a professional development (PD) consideration in the study just as it is in Darling-Hammond's et al (2017) and in Richardson's et al (2018) set of effective PD principles. (See Chart 2). The findings in the study, however, emphasized the immediacy ("just-in-timeness") of PD. For example, this was a factor that led Anna to seek online professional development via her PLN when she was frustrated with not receiving immediate responses from colleagues in her workplace:

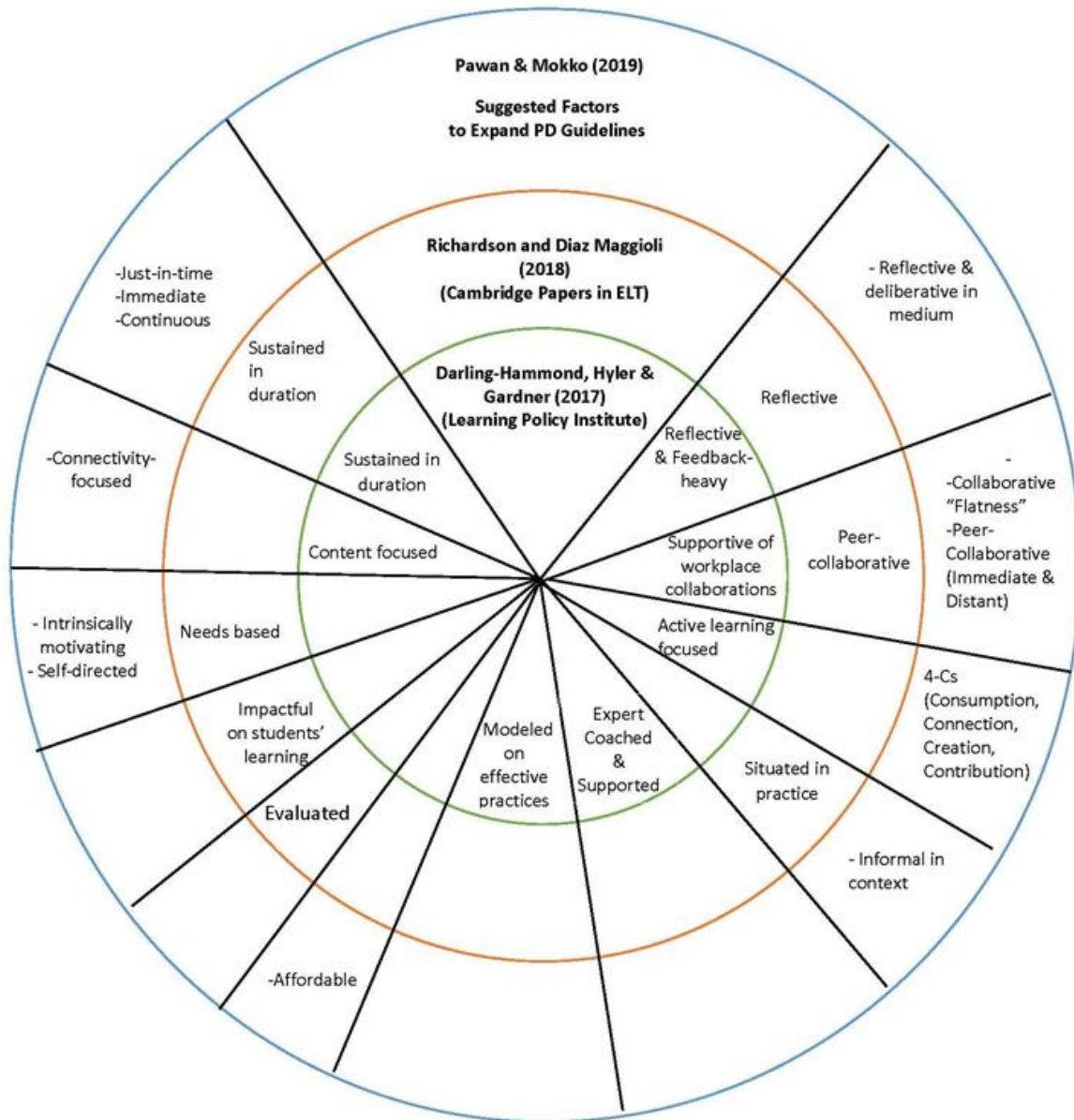
I sent [an email] out there to my colleagues and said, "has anyone got any ideas? What do you do? Any resources that you use?" I started off posting some ideas and resources that I'd found...and nothing, not one response over three weeks. (Anna, Initial Interview, November 28, 2015)

Anna then turned to Twitter, one of her PLN tools, and in just one hour, Anna received an abundance of ideas and links. In jubilation, Anna exclaimed, "Whoa, I could use that now!" when she saw an idea that instantaneously applied to what she was doing at the time in her classroom.

Just-in-time responses offer continuous access to current information without the fear of losing track of the information. It is an invaluable affordance that PLN-facilitated professional development provides, as illustrated by John:

The ideas are consistently flowing. Interesting ideas, questions or resources will get re-shared. So even if you miss it the first time, it is very likely that it will come back up to the top of your feed. (John, Initial Interview, December 13, 2015).

John's quote above also reiterated Garrison's (2007) position that asynchronous facilities in the online medium enable users to "arrest" and "freeze" their thoughts. In that regard, in addition to activities that promote reflective engagement in effective PD sessions advocated by Darling-Hammond et al.'s (2017) and Richardson and Maggioli's (2018)

Chart 2. Suggested Factors to expand PD Guidelines

(Note. The concentric circle chart showcases in the central circle, Darling-Hammond et al.'s (2017) effective PD principles of all teacher; in the second circle Richardson and Maggioli's (2018) principles specific for English Language Teachers (ELTs); and in the outermost circle, Pawan and Mokko's (2019) contributions that expand and reconceptualize effective teacher PD when the online medium is taken into consideration.)

frameworks (See Chart 2), Garrison points out that PD by means of the online medium by nature demand reflection. Anna saw this virtue in her PLN engagement:

My PLN allows me to keep a log of everything I do on Twitter. It allows me to reflect...I can look up what I was thinking last year, or three years ago... (Anna, Second Interview, January 9, 2016)

John's PLN included fellow teachers from 89 countries in the world (See Chart 3).

Chart 3. John's PLN



According to John, he is “smarter” as a consequence, a surprising sentiment since he has had 30 years of teaching experience:

‘Ah!’ that PLN connection just made me smarter. Everyone, every node in the network is as smart as all the other nodes, as any node. (John, Second Interview, March 25, 2016)

In Darling-Hammond et al.’s (2017) report, content-focused sources and opportunities are important in PD. (See Chart 2, Content-Focused). However, John’s emphasis was on the connective capacity that enabled him to pull together information, and to be updated by understandings that emerged from the process as he engaged through and within various connections across the globe.

Collaboration is clearly a critical feature of teacher PD in the two PD frameworks cited. (See Chart 2). The “Connectivist” idea of the “flatness” of collaboration, however, where everyone is considered equally informative, was highlighted in what Caroline in the study had to say below:

I feel like what's really amazing is that even big names join in... For example, when I took an iTDi course, I was reading one of Krashen's articles, and I posted something, and he replied directly (Caroline, Initial Interview, December 11, 2015).

It is also noteworthy that the "flatness" characteristic of collaboration facilitates access to a multitude of people beyond teachers' immediate colleagues, that is an ability that can sometimes alleviate tensions which may exist as evidenced in Anna's quote:

Sometimes it's easier to discuss something with someone on the other side of the world about something that's happened in my class, than from a person sitting next to me. [This is] [b]ecause I do work with some people, who think that they know everything...No...there's so much more out there. (Anna, Second Interview, January 9, 2016)

From Caroline's perspective, her online PLN engagements also alleviated her sense of loneliness as an EFL teacher working overseas in China. She described the people who she connected with online as virtual work buddies and her readily available "Dream Team" from home (Caroline, Initial Interview, December 11, 2015).

Online PLN engagement, because of its ability to enable teachers to connect as well as to share, can provide invitations and opportunities that may be otherwise less available offline:

It's important for me to discover new ideas that are given to me by my online network. But it's also important for me to also seek out new ideas for myself. Or even create new ideas that I can share easily... Not just be a consumer but also a producer [of ideas]. (Lauren, Initial Interview, November 30, 2015).

It is clear that PD sessions that were worthwhile to Lauren also enabled her to contribute novel ideas. This feature adds a new dimension to Darling-Hammond et al.'s principle of Active Learning, where the focus is on hands-on activities (See Chart 2).

The informal nature of the PLN online environment is perhaps a key factor for it to be an inviting place to create and share freely. Lauren who read other people's blogs on her PLN and created that of her own as well as, had the following to say as she continued with the interview:

I like my blog because it's an easy place for me to write down and share my thoughts... I like it because it is informal. It doesn't have to be professionally written like a conference paper. I mean, it can be if you choose to do it that way, but my blog is very raw. (Initial Interview, November 30, 2015)

Lauren was referring to the nature of the context of her online PLN-facilitated engagement. It is perhaps a given that the PD she obtained that way took place and was situated wherever she was, including where she practiced her craft as a teacher.

The affordability of pursuing professional development through online Personal Learning Networks is unrivalled. Because Anna (Second Interview, January 9, 2016) found it financially challenging to travel for professional development, she sought access to many free teacher training resources online either live or asynchronous. In this regard, Anna reminded us of the prohibitive cost of professional development conferences. After totaling up registration fees, cost of flights, lodgings and miscellaneous items such as in-transit Wi-Fi, Kircherr and Biswas (2017) point to the fact that attendance at one large scale conference can be almost roughly equal to the "the monthly net salary of a post-doc in the UK" (2017, para 5).

The study's findings and discussions thus far perhaps help to contextualize the absence of external and outside evaluation of PDs and its impact on students' learning (See Richardson et al.'s framework in Chart 2). As Anna stressed below, impactful PD opportunities are those that allow the teachers to have full control to direct their own learning. Anna's quote states these positions most clearly:

I choose what tools I want to use, what I want to learn, when I want to learn it... I know what I need and what my students need...I can't really think of any form of professional development that would really allow for me to do that. (Anna, Second Interview, January 9th, 2016).

Clearly, Anna's position underscores the appeal of online PLNs to teachers like her. Anna felt that she was well-grounded in the knowledge of her students and thus could self-assess her own professional needs for information and materials that would be of most benefit to them.

Implications

There are conceptual and practical implications for teacher professional development. Conceptually, the findings enabled us to see that Connectivism as a concept plays a key role in the learning that the teachers in our study sought in their PLN PD experiences. We see heterarchical learning in which learning growth happens through

multiple connections between ideas and people within an overall goal or vision rather than on a hierarchical ranking of these ideas and the people who generate them. We also see that self-efficacy in learning is a premium in PLNs in that individuals seek to take charge of their learning, to obtain information when they need it, and to engage in creative and personally-relevant ways. The teachers' investment in the PLNs reminds us that our present attempt to expand the concept of PD should also involve ways to sustain continued conversations and interest in professional engagement amongst self-managed and self-directed learners, such as the ESL and EFL teachers in this study. These learners function in a context whereby 80% of learning is now informal and takes place outside of structured environments, with the learners themselves at the helm (Cross, 2007).

In this regard, we also see in our findings the importance of the four stages of online engagement to collaboration and participation. These include (1) consumption, (2) connection, (3) creation, and (4) contribution stages (Milligan et al., 2014). Professional development that is meaningful and worthwhile allows teachers not only to obtain information and to collaborate, but also to engage in "paying it forward," (LaGarde & Whitehead, 2012, p. 11), that is, to create and give back to fellow PLN members.

The findings also demonstrate that effective professional development must be designed so teachers can establish community based on connections within and outside of their workplace. Due to the intricacies and diversity of teacher's needs, there is a need for such a community. The participants desire to work with other people makes sense under the communities of practice framework because it meets the assertions why people create, connect, and sustain networks. A community of practice is a set of interacting people engaged in common practice. Practice refers to the work people do, but also the ideas behind it, the shared understandings and the activities. Wenger (1998) posits three dimensions of communities of practice: (1) mutual engagement; (2) joint enterprise; and (3) shared repertoire. People who want to participate in communities of practice get ready to share their knowledge, improve their expertise, build interpersonal networks and pursue their interest. These interactions cannot be completed just by the individual. They need other people to offer responses to continue the engagement. In the data, there was evidence of the four participants engaging in all three dimensions.

The PD features and learning opportunities uncovered in this study were in the context of teachers learning informally online. The findings, most particularly where peer-to-peer and self-directed learning are concerned, however, also have a place in formal online professional development (PD) settings. Formal PD programs, be they online or face-to-face, are defined by structure and resources to support teacher learning. Thus, when a formal PD is undertaken online, several steps can be undertaken so that the two findings identified in this study, which are already valued and undertaken organically by teachers online, can be capitalized using the structure and resources made available to them, namely:

- Well-designed online peer-support system. According to Lohman (2020) this system can constitute many elements including creating a cohort system led by experienced mentors or like-minded colleagues. Vaill and Testori (2012) assert that the online peer-support system should focus on existing approaches and materials generated by its members as foundation for learning, for the system to be meaningful and for members to feel invested in the engaging in it. Within a well-designed peer cohort, a regular and sustained infrastructure has to be built in to enable peers to check in with each other, provide constructive feedback, assistance or share ideas on pedagogy and technology. Lohman (2020) would include in this system, opportunities for teachers to reflect informally together through synchronous discussions as well as individually through asynchronous participation. In such a way, can learn from each other's best practices while at the same time, build a purposeful learning community.
- Curated/Personalized support and resources. Self-directed learning is highlighted in the study as significant to the teachers involved. To support this learning in a formal online setting, teachers need to be provided with curated pedagogical as well as technological assistance and resources (Martin et al., 2019). Teaching strategies and principles are to be accompanied with suggested technologies, workflows and criteria for selecting technological applications to use online (Lohman, 2020). In such a way, teachers are not only scaffolded but they also have the autonomy and choice as to how to proceed in their learning to teach. Individuals who thrive on self-directed learning such as the teachers in the study, feel rewarded by their ability to find specific support to develop competency in the skill they are trying to learn and to have opportunities to build on the competency on their own. (They are less enamored with traditional PD rules such as external evaluations or meeting attendance requirements for example). In that regard, our study also suggests that self-paced, formal online PDs will continue to develop exponentially.
- Public Engagement as PD. Adults are using social media extensively. In 2019, 90% online American adults use social media with 73% using YouTube, 69% Facebook, 37% Instagram, 28% Pinterest, 27% LinkedIn, 24% Snapchat, 22% Twitter, 20% WhatsApp, and 11% Reddit (Pew Internet Center, 2020). Administrators should support the incorporation of these media into formal teacher professional development programs. For example, formal PD organizers can lead public discussions online so that they and their teachers could engage with the real world beyond their classrooms and so that teachers' discussions about their disciplines became part of a larger shared discourse. They can foster this by hosting Twitter chats, creating and engaging on blogs, hosting Q & A Instagram live events, or having discussions in a Facebook group. Examples of online tools

for such purposes include for example, Kialo a public discussion platform designed to facilitate debates about complex topics online or NowComment is a versatile document annotation and discussion platform that helps groups of people mark up and discuss texts. Examples of PLNs that have discipline specific public forums and discussions that formal PD organizers in the fields of English, Writing and Applied Linguistics, are below table:

Table 1. PLNs with Discipline Specific Public Forums and Discussions

English/Writing Programs	Applied Linguistics
#education - everything from classroom management to learning from homeschoolers is covered.	#appliedlinguistics – encompasses conversations in the field.
#engchat - English teachers share they teach students to read and write.	#academicchatter - academics with a range of personal and professional experience, from graduate students to Professors share ideas.
#classroom - educators share their resources for improving classroom learning, along with news, debates.	#languagelearning - a community for anybody interested in learning about linguistics and its structures.
#writechat - allows writers to make the most of the wonderful ability to make connections with other writers on twitter.	#edchat - offers a great platform for discussion among teachers and other professionals related to education.
#amwriting - a shortened version of 'I am writing'. This tag is used by people who are writing.	#teaching - a roundup of everything that's relevant to instruction and teachers.

Finally and in conclusion, these findings suggest that the features and opportunities that make PLN PD sessions appealing should have a place in formal face-to-face conferences such as that of TESOL, American Association of Applied Linguistics (AAAL) and the Symposium on Second Language Writing (SSLW). PLNs should not be seen as merely peripheral, pre- and post-conference extensions but rather should become a more integral part of the face-to-face conference. There is perhaps some urgency and timeliness in this consideration. As early as a decade ago, face-to-face conference organizers began to observe an annual drop of approximately 12% in overall face-to-face conference attendance nationwide (VS Communications, 2008). Over the past 5 years, face-to-face and onsite attendance at the TESOL conference has steadily declined. In 2014, there were 7145 attendees and in 2018, the number dropped to 6038 (Dyson, TESOL Director of Conference Services, personal communication, 2018). It is not the assertion here that online and PLN-facilitated PD sessions are directly causing

the decline in face-to-face conference attendance. However, the fact that the online sessions are available and thriving, suggests that they could be a contributing factor.

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