

Saudi EFL Teachers' Perceptions of Personal Learning Networks as a Vehicle for Professional Development

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ABSTRACT

This study aimed to investigate Saudi EFL (English as a foreign language) teachers' perceptions of personal learning networks (PLNs) as a form of informal professional development. The study explored, from the perspective of communities of practice theory, whether Saudi EFL teachers were aware of this concept, particularly social media tools, and how they perceived and used them for their professional growth. The participants of this study were 66 EFL teachers who taught at English language institutes in different universities in Saudi Arabia. The study adopted an explanatory mixed-methods design. Quantitative data were collected from all 66 teachers using an online questionnaire to investigate their awareness, perceptions, and practice of using PLNs for their informal professional development. Qualitative data were collected through semi-structured interviews conducted with 10 teachers. The findings of the study showed that Saudi EFL teachers had high awareness of the concept of PLNs (although they were unaware of its professional term), held positive perceptions regarding the use of PLNs, and used them for their professional growth.

Keywords: EFL teachers, EFL context, professional development, communities of practice, personal learning networks.

1. Introduction

There has been a recent shift towards creating communities of teachers who collaboratively work to develop themselves professionally based on their institutions' vision of professional development (PD) (Vavasseur & MacRegor, 2008). Therefore, personal learning networks (PLNs) have grown in popularity as an alternative to traditional forms of teachers' professional development (Visser et al., 2014). Personal learning networks are defined as "a group of people with whom you connect to interact and exchange information and resources; share knowledge, experience and ideas, collecting and creating an informed guide to professional development opportunities and continual learning" (Rajagopal et al., 2012, p. 14).

The new demand for education has focused on teaching approaches that enhance learners' critical thinking ability and autonomy. Hence, professional development departments and teachers are often required to cope with these requirements to help fulfil their professional learning needs. Professional development is grounded in the assumption that quality professional development activities will transform into improved teacher knowledge and instructional practices. Joyce and Showers (2002) argue that more informed and prepared teachers lead to more successful learning outcomes. Since continuous and sustainable professional development is key to effective teaching and learning outcomes, teachers should not only participate in professional development activities that are introduced by the institution, but they should also be encouraged to seek different ways to improve their pedagogical repertoire. Thus, PLNs are considered to be an alternate form of PD for pre- and in-service teachers that can benefit classroom practitioners in their continuous urge for professional learning. This will enable teachers to learn, share their knowledge with other teachers from different parts of the world, and participate in a wide range of different PD activities outside those introduced by their own institutions.

This study aimed to contribute to the EFL (English as a foreign language) teachers' PD in Saudi Arabia, as there is an increasing need for more high-quality PD approaches and for teachers to address new shifts in educational paradigms. The results of this study will help raise teachers' awareness, develop their understanding, and improve the use of PLNs in practice. Thus, the research will enrich teachers' professional practice and enhance their performance, which ultimately, will result in improved student learning outcomes.

Through the lens of communities of practice (CoP) theory, this study investigated EFL teachers' awareness of PLNs as a vehicle for PD and it explored teachers' perceptions of the use of PLNs for PD. The research questions are as follows:

RQ1. To what extent do Saudi EFL teachers understand how PLNs can be used as a vehicle for their professional development in the Saudi EFL context?

RQ2. How do Saudi EFL teachers perceive PLNs and use them in practice as a vehicle for their professional development in the Saudi EFL context?

2. Literature Review

Traditional PD activities are often considered to be single-occasion face-to-face workshops, which are often determined by school leadership and may be discontinuous (Parsad et al., 2001; Butler et al., 2004; Stewart, 2015). Consequently, teachers do not significantly retain their newly learned practice over the long term and it does not contribute to achieving teaching and learning outcomes. In contrast, PLNs are seen as combining people, resources, and digital tools in a professional context (Trust et al., 2016). The sole aim of PLNs is to offer sustainable PD activities that meet teachers' immediate and context-specific professional learning needs. Wilson and Bernie (1999) suggest that effective PD activities should include sufficient follow-up time, support, easy access, and rich information. Additionally, Sywelem and Witte (2013) consider the modern view of PD as a learning process that requires PD activity to be effective, continuous, and long-term.

Trust et al. (2016) investigated teachers' understanding of PLNs and found that some teachers consider them in terms of tools, platforms, resources, sites and people, or a combination of these elements. In their study, the teachers also described their PLNs as engaging activities that ranged from a single component to a multi-layered network of professional practices. Furthermore, Trust (2012) identified two types of PLNs. In the first type, teachers receive a flow of information from multiple online sources, such as Pinterest, blogs, and other websites that help teachers with their lesson plans. The second type of PLN involves teachers making online social connections with other like-minded educators using social media tools, such as Twitter and Google Plus; Trust (2012) suggests that this facilitates the building of PLNs and provides teachers with continuous support that ensures the effectiveness of PD activities in the workplace. According to Alshaikiki (2018), examples of informal learning activities include chance meetings with colleagues, or planned contact with other, potentially more experienced teachers or former colleagues. Alshaikiki (2018) further explicates that teachers who are engaged in different kinds of professional learning activities, somehow use PLNs, but not exclusively through social media. Therefore, it has been suggested that teachers utilize technology and Web 2.0 tools such as social media platforms alongside face-to-face interactions (Dede et al., 2006; Owston et. al., 2008). Elliott (2009) considers PLNs as reflecting individual choices about a set of real and virtual resources that are readily available and can be used for developing the knowledge and skills required in a professional context.

As PLNs are mainly online and serve as virtual platforms for teacher learning, the literature also discusses several benefits of online PD, such as convenience, immediate application, and ongoing professional growth (Tinker, as cited in Vavasseur & MacGregor, 2008). That is, it is important for effective PD to be ongoing, relevant to teachers' needs, collaborative, and interactive (Darling-Hammond et al., 2009; Elliott, 2017).

The use of different social media or social learning networks, such as Twitter, Pinterest, WhatsApp, Google Plus or Telegram, might contribute to the successful implementation of PLN platforms in educational settings. According to Sie et al. (2013), when a learning network is tailored to the individual's needs and desires, it is called a personal learning network. This idea is supported by Maloney (2016), who found that educators who continually used their own PLNs employed a variety of tools that were in line with their learning preferences. Similarly, Holmes (2013) states that online networks can provide customized, authentic learning that can support teachers' continuous PD. This long-term support can lead to more confident teachers as online PD courses provide teachers with long-term connections that can help increase their confidence (Watson, 2006).

However, teachers who desire to benefit from using PLNs need a positive attitude toward technology; this is because the effectiveness of PLNs depends on individual attitudes toward such networks and the connections that teachers make with other experts (Rajagopal et al., 2012). These attitudes might be positive or negative depending on the teachers' level of digital literacy. Perryman et al. (2022) note that teachers largely embrace the opportunities that online teaching and learning platforms offer, through being able to access an enormous and unlimited range of resources and inspirations, but that this offering can at times feel overwhelming. Several factors can affect teachers' perception of PLNs; Ozbligin and Erkmen (2016) suggest that the teaching context, teachers' experience, government support, and the personal 'self' are factors that influence teachers' perceptions about their PD.

As seen above, several studies have examined EFL teachers' PD in the Saudi context (e.g. Shukri, 2014; Alzahrani & Rajab, 2017; Alshumaimeri & Almhaisen, 2017); however, to the best of our knowledge, studies investigating the concept of PLNs as a means of informal PD among Saudi EFL teachers are scarce. Hence, the findings of this research will contribute to the body of knowledge in this field and enlighten practitioners about the use of PLNs in EFL as well as mainstream education.

3. Theoretical Framework

The use of PLNs allows teachers to create different communities to learn from, which results in them developing their pedagogical repertoire. Therefore, this study was conducted under the umbrella of the communities of practice (CoP) framework, which is a social learning theory that focuses on learning as social participation and holds that engagement in social practice is a fundamental process of learning (Wenger, 1998). Hoadley and Kilner (2005) state that "knowledge and learning exist as byproducts of social processes such as those that take place in communities of practice" (p. 31). Additionally, Moore (2008) claims that the groups of professionals represented in a PLN belong to CoP, and use common practices, tools, language, beliefs, and values to achieve common goals and interests, which thus, leads to teachers learning and developing professionally.

Moreover, CoP can be of great value in today's digital world. Given the openness of the Internet, the use of social media tools, and the need for people to share knowledge, virtual CoP will become more common. The use of technology is inevitable when a community of practice has more than a few members and a great deal of information to exchange (Droschl, 2004).

4. Methodology

This study followed an explanatory mixed-methods approach. It was conducted in two phases, where quantitative data were collected and analyzed first, and this was followed by the collection and analysis of qualitative data. Using a mixed-methods design maximizes the benefits of both quantitative data (e.g. generalizability) and qualitative data (e.g. in-depth analysis of smaller amounts of data), which ultimately strengthens the research findings (DeCuir-Gunby & Schutz, 2017), as well as adding to the overall validity of the research. Such a design can also present a fuller, more comprehensive understanding of the target phenomenon from different angles using different methods, which ensures the validity of the study (Dörnyei, 2007) and enhances the reliability of the findings.

4.1. Context and Sampling

This study took place at two Saudi Arabian universities located in Jeddah city, where the English language is taught as a compulsory course. The target population for this study was male and female Saudi EFL teachers, with an educational level ranging from Bachelor of Arts to PhD (see Table 1).

Table 1: Demographics of Participants – Number (Percentage in Parentheses; n=66)

Age	20 to 30 13 (19.7%)	31 to 40 28 (42.5%)	41 to 50 20 (29.13%)	51 to 60 5 (7.6%)
Qualification	Bachelor's degree 8 (12.1%)	Master's degree 38 (57.6%)	PhD 20 (30.3%)	
Years of experience	1 to 5 20 (30.3%)	6 to 10 16 (24.2%)	11 to 15 11 (16.7%)	More than 16 years 19 (28.8%)

4.2. Data Collection and Analysis

4.2.1. Phase 1

The data for Phase 1 (quantitative data collection) were collected through an online questionnaire. The questionnaire was derived from Doak (2018) and was modified by adding items to measure three variables: EFL teachers' awareness, perceptions, and use of PLNs in PD practice. To ensure its reliability and credibility, the questionnaire was piloted twice and ultimately achieved a Cronbach's alpha reliability of 0.933. The questionnaire was created using Google Forms and consisted of three sections: (1) informed consent, (2) demographics, and (3) items concerning PLNs. The research procedure was ethically approved by the English language institutes involved before the questionnaire was distributed online to the teachers through their work emails and WhatsApp groups. As part of the questionnaire, teachers were asked to provide their contact information if they were willing to participate voluntarily in Phase 2 of the study. The questionnaire was analyzed descriptively and inferentially (using a one-sample t-test).

4.2.2. Phase 2

In Phase 2, qualitative data were collected through semi-structured interviews featuring open-ended questions, which were also based on Doak (2018). The questions were slightly modified to suit the context of this study and more questions were added based on the analysis of teachers' responses to the questionnaire. This phase focused on identifying broader contextual knowledge regarding the use of PLNs as an informal PD tool and how the Saudi EFL teachers perceived them.

The participants in Phase 2 were selected purposefully depending on their answers to the questionnaire regarding their views of PLNs as a PD tool. The interviews were held face-to-face or online through Zoom, depending on what was convenient for each participant. The interviews were analyzed thematically using NVivo software.

5. Results

5.1. Questionnaire Results

5.1.1. Descriptive Results

The results were divided according to the three variables, which were awareness, perceptions, and practice. All the questions were on a scale of 1 to 4, with 1 = strongly disagree (SD), 2 = disagree (D), 3 = agree (A), and 4 = strongly agree (SA). The individual items were analyzed separately and a response percentage was calculated for each one. The item numbers given in the following tables are the same as those given in the questionnaire.



Teachers' Awareness

To answer the first research question (RQ1), Table 2 presents the findings from the questions that focused on teachers' awareness and understanding of the use of PLNs for their PD.

Table 2: EFL Teachers' Awareness of PLNs

Item #	Item	SD %	A %	D %	SA %	Mean	Std. Dev.
1.	I am familiar with what a personal/professional learning network (PLN) is.	4.5	56.0	21.2	18.1	2.88	0.755
4.	I know that participating in online groups with people from the same field for the sharing of knowledge is considered to be a personal/professional learning network (PLN).	4.5	43.9	10.6	40.9	3.21	0.814
9.	I am a member of English as a Foreign Language (EFL) online groups or communities.	7.5	39.3	27.2	25.7	2.83	0.904
15.	My personal learning networks (PLNs) include my colleagues from work and English language teachers from all over the world.	3.0	50.0	3.03	43.9	3.35	0.690
18.	I have received training and/or attended a tutorial on how to use social networking sites for professional reasons.	21.2	27.2	39.3	12.1	2.30	0.944
20.	I can use social media as an informal method of professional development.	3.0	65.1	4.5	27.2	3.17	0.646
23.	My institute/school/university supports the use of personal learning networks (PLNs) for professional development.	7.5	43.9	27.2	21.2	2.79	0.869

The results presented in Table 2 show that Saudi EFL teachers are aware of PLNs as a PD tool. A high number of teachers agreed or strongly agreed with the statements. Item 15 had the highest score (M=3.35, SD=0.690), with overall 93% agreeing (50%) or strongly agreeing (43%). The second highest score was for Item 4 (M=3.21, SD=0.814). Item 20, regarding the use of social media as a PD method, also had a high mean (M=3.17, SD=0.646). However, 60.6% of the participants reported that

they had not received training on how to use social networking sites for professional purposes, and this item achieved the lowest score of all the statements (Item 18; M=2.30, SD=0.944).

Teachers' Perception of PLNs

Table 3 presents the findings on EFL teachers' perceptions of PLNs in the Saudi EFL context.

Table 3: EFL Teachers' Perceptions of PLNs

Item #	Item	SD %	D %	A %	SA %	Mean	Std. Dev.
2.	Personal learning networks (PLNs) can encourage me to do my job when I feel unmotivated or overwhelmed while working.	3.0	6.0	68.1	22.7	3.11	0.636
5.	Personal learning networks (PLNs) can improve my ability to plan innovative lessons/projects.	4.5	0.0	60.6	34.8	3.26	0.686
7.	Personal learning networks (PLNs) can improve my ability to teach English using technology more effectively.	4.5	0.0	60.6	34.8	3.26	0.686
10.	Personal learning networks (PLNs) can help me to become more confident by making me aware of new teaching methods/techniques.	4.5	1.5	56.0	37.8	3.27	0.714
12.	I can make professional connections through social media.	3.0	12.1	57.5	27.2	3.09	0.717
16.	Personal learning networks (PLNs) can make me feel that I am a part of the EFL global community.	1.5	6.0	51.5	40.9	3.32	0.660
19.	I am not sure what I could gain from my personal learning networks (PLNs).	24.2	50.0	25.7	0.0	2.98	0.712
21.	Personal learning networks (PLNs) can encourage me to become a lifelong learner.	1.5	6.0	43.9	48.4	3.39	0.677
24.	Using personal learning networks	37.8	42.4	15.1	4.5	3.14	0.839



(PLNs) is a waste of time.							
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The results from Table 3 indicate that Saudi EFL teachers had positive perceptions of PLNs as a tool for their PD. Over 92% of the participants agreed (48.5% strongly agreed, 43.9% agreed) with Item 21, which achieved the highest score ($M=3.39$, $SD=0.677$). Most participants (92.4%) acknowledged that PLNs can make them feel part of the EFL global community. The two statements regarding the utility of PLNs for improving teachers' ability to plan innovative lessons/projects and teach English using technology had the same score ($M= 3.26$, $SD=0.686$). Additionally, 94% of the participants agreed that using PLNs could help them to become more confident teachers. Further analysis indicated a positive correlation between the use of PLNs and teachers' confidence, improving teachers' ability to use technology, and motivating them to become lifelong learners.

Teachers' Practice of PLNs

Table 4 presents the findings on how EFL teachers' used PLNs in practice.

Table 4: Teachers' Use of PLNs in Practice

Item #	Item	SD %	D %	A %	SA %	Mean	Std. Dev.
3.	I can use personal learning networks (PLNs) to look for resources for my EFL teaching, such as new techniques or worksheets.	1.5	1.5	62.1	34.8	3.30	0.581
6.	I can use personal learning networks (PLNs) to share resources with my colleagues, such as sharing worksheets or useful journal papers.	3.0	7.5	53.0	36.3	3.23	0.719
8.	I can use personal learning networks (PLNs) to share resources with other educators around the world.	4.5	3.0	53.0	39.3	3.27	0.735
11.	I can use personal learning networks (PLNs) to connect with other like-minded educators.	4.5	3.0	54.5	37.8	3.26	0.730
13.	I can participate in online discussions about EFL topics.	3.0	10.6	48.4	37.8	3.21	0.755

14.	I can use personal learning networks (PLNs) to seek help for professional problems, such as difficulties with explaining grammar rules to my students.	3.0	4.5	56.0	36.3	3.26	0.686
17.	I can find interesting ways to teach English through my personal learning networks (PLNs).	3.0	3.0	60.6	33.3	3.24	0.658
22.	I usually make an effort to develop my personal learning networks (PLNs).	3.0	31.8	43.9	21.2	2.83	0.796
25.	Personal learning networks (PLNs) can help me find online courses and conferences regarding EFL teaching around the world.	3.0	1.5	57.5	37.8	3.30	0.656
26.	I look forward to cooperating with other EFL educators on language teaching projects.	4.5	6.0	57.5	31.8	3.17	0.736
27.	I find it difficult to commit to using personal learning networks (PLNs) for my professional growth.	10.6	54.5	31.8	3.0	2.27	0.692
28.	I can work on research or projects with other EFL educators, whom I was introduced to online.	4.5	19.6	60.6	15.1	2.86	0.721

The findings presented in Table 4 indicate that Saudi EFL teachers use PLNs in practice for their PD. Over 95% believed that PLNs could help them to find online EFL courses and conferences around the world (Item 25), and used these tools in their teaching (Item 3) ($M=3.30$ for both, $SD=0.656$ and $SD=0.581$, respectively). Around 92% of the participants used PLNs to share resources with other EFL educators, while 89% used PLNs to share resources with their colleagues. Moreover, over 29% used PLNs to seek help for professional problems they faced during their teaching, and while over two-thirds of those surveyed (65.1%) reported that they had no difficulty using PLNs for PD, 34.8% found this difficult. Additionally, 65.1% reported that they usually put extra effort into developing their PLNs. Further analysis showed that participants also used PLNs for different professional purposes, such as connecting with other EFL teachers, sharing resources, working on online projects, and participating in online EFL discussions.

5.1.2. Inferential Results

A one-sample t-test was run to examine teachers' awareness, perceptions, and use of PLNs; the results can be seen in Table 5.

Table 5: One-sample t-test

Variable	Mean	Std. Dev.	Test value	T-test	Sig.
Awareness	20.53	3.587	17.5	6.863 **	0.000
Perception	28.82	4.451	22.5	11.532**	0.000
Practice	37.21	5.914	30	9.908**	0.000

The inferential results show that teachers had positive perceptions of PLNs. Table 5 illustrates that the mean scores were high, indicating a positive trend. Teachers were aware of PLNs as a resource for PD ($M=20.12$, $SD=3.559$). Teachers also had positive perceptions of using PLNs as part of their informal PD ($M=28.33$, $SD=4.478$). In addition, the t-test results revealed that EFL teachers used PLNs in practice for PD purposes ($M=36.93$, $SD=6.170$). The results were significant at $p=0.000$ for all three variables, indicating that participants had high awareness and positive perceptions, and used PLNs in practice for professional growth. The results further indicate that the participants' practical use of PLNs for PD was higher than their perceptions and awareness of PLNs.

5.2. Semi-Structured Interview Results

The qualitative data gathered through the semi-structured interviews were analyzed and are presented in this section under the themes that emerged from the analysis.

5.2.1. Theme 1: EFL Teachers' Understanding and Application of PLNs

All the teachers were asked to share their understanding of the concept of PLNs by recalling their experiences as language teachers. Although the academic terminology itself seemed to be a novel concept to most of the participants, their professional practices reflected their awareness of the concept and its presence. Alaa's views were similar to those of the other participants on this point:

I wasn't familiar with the term 'personal learning network'. But as far as I know, it's related to the network the person chooses to learn from and to expand their knowledge. (Alaa)

It was also evident from the interviews that teachers used PLNs in practice, but with no explicit understanding of the term itself, as they were not familiar with the acronym or its use in academia, as was pointed out by Maya:

The concept of professional learning networks exists and is practised in academia by many of our colleagues, but the word itself may be unknown. (Maya)

While discussing their understanding of PLN, the EFL teachers shared the nature of their professional practice that reflected the existence of the notion of PLNs in the Saudi EFL context. The following quote by Aminah was also indicative of what the other participants stated:

Although we do not use the term PLN here, we do discuss professional matters in groups. For example, student-related issues, lesson plans and other tasks are often talked about not only face-to-face, but also in our WhatsApp group. (Aminah)

The participants' responses suggest that PLN exists in the Saudi EFL context in one form or another. It was also evident from the teachers' responses that their interactions mainly took place online using different types of virtual platforms. Teachers seemed aware of their professional learning needs and Ward highlighted the positive aspects of PLN:

I remember one of the teachers shared this website with us, which was called Kahoot. And I think, I don't know if you're familiar with it, but it's very, it's very interesting, like a website that you can like, open it up in the link on your in class, and then students on their phones, they can like, answer some questions. And it's very good to start the class in a very energetic and fun way. So, this is one of the good examples of how I benefited from those networks. Like, I didn't ever know about this cohort, until one of the teachers shared this link with us. (Ward)

Similarly, Sumaya remarked, "Networking with professionals from different countries and backgrounds is always an amazing learning experience". Nevertheless, the qualitative data also suggested some hindrances to the application and utilization of PLNs, as discussed by Aminah in detail:

Sometimes, when I get like, overwhelmed, you know that in teaching, you need to plan, you need to write lesson plans, and then you have to attend meetings, you have to observe classes as well. So, when you have all of these things, and like on your shoulder, you just tend to ignore all of the resources and ignore everything and ignore the strategies even, and you just have to go there and give the class and leave. (Aminah)

5.2.2. Theme 2: EFL Teachers' Attitudes Towards the Use of PLNs

Overall, the participants made the best use of various forms of PLN in their workplace. The data show that teachers are very much aware of their professional learning needs; hence, they had a positive attitude towards the use of PLN for their professional learning needs, and they utilized available platforms accordingly. The following quote was reflective of what most of the participants believed:

I started being a part of those PLNs because I wanted to be part of professional groups that share my interest and knowledge. It was more about networking and getting to know people from the field. (Maya)

It was also interesting to see that some participants, such as Layla and Anwar, follow PLNs; however, they preferred not to stay in touch with professionals in the field; rather, their interest was limited to attending webinars or workshops. For example, Layla stated:

I don't really have any relationships with people who like, personal relationships with people who help me develop or are interested in these developmental activities or pedagogical methods. So, I would say only workshops and webinars are useful in this regard. (Layla)

The data further illustrate the positive attitude of the participants towards the use and application of virtual PLNs in their institutional contexts. However, Layla and Anwar were two EFL teachers who did not seem to appreciate the contribution of PLNs to their professional learning and development. They highlighted one of the key reasons as being their lack of interest in the use of social media. The following quote exemplifies their standpoints:

I'm not very interested in using social media and I don't have any personal accounts on the social media. So, I wouldn't use it for my teaching or for my career. (Anwar)

Unlike the other participants, Layla preferred to work alone for her professional learning and growth and did not rely on anyone else. Like Anwar, she was also not keen on using social media for personal or professional purposes; hence, there was no question of her having a personal PLN:

I'm currently working at the language institute. ...Here, everyone reads on their own, they do have experiences. But I've never really felt the need to approach anybody, because we do have workshops and webinars, which are helpful enough. (Layla)

Layla's professional stagnation can be seen in her claim when she stated, "I've never felt the need to develop for a certain curriculum because I could use it anytime and anywhere".

5.2.3. Theme 3: Making Use of Technology and Social Media to Achieve Professional Goals

The participants unanimously considered technology to be a key source of their professional learning and development. The interviews illustrated the teachers' ability to use technology in the form of social media to improve their professional practice. It was also evident that the teachers saw technology as a chief source of information that nourished teaching practices:

Technology is a blessing for every one of us. It's not difficult to use it. Its usage is a positive one. The only difficult part would be if you're not interested. If you're doing a workshop on social media, you'll have to develop interest and skills in technology

and social media. If you want others to benefit in your network, you have to show them skills. (Sura)

Although most of the participants showed a keen interest in the use of technology, some preferred to use it specifically for professional purposes. For example:

I have created an account on Twitter recently, just for the purpose of sharing my knowledge or commenting on others' posts, or to share things that I have learned from my work or colleagues, and sometimes even from my students. (Walaa)

Overall, the initial results indicated that the teachers were aware of PLNs, but further analysis showed that they were aware of the concept but not the term itself. Despite this, in general, teachers' perceptions of PLNs were positive. Teachers who, in the questionnaire, reported negative perceptions regarding the use of PLNs, turned out to have positive perceptions in the interviews, but they had some negativity related to the challenges of using them. Teachers reported using PLNs in their PD practice for different reasons but the general view was that this had positively affected their teaching practice.

6. Discussion

The results are discussed in this section relative to the research questions outlined earlier.

RQ1: To what extent do Saudi EFL teachers understand how PLNs can be used as a vehicle for their professional development in the Saudi EFL context?

The findings indicate that a very high proportion of Saudi EFL teachers were aware of the concept of PLNs in the Saudi Arabian context. Furthermore, the awareness-related items in the questionnaire scored very highly in terms of the teachers agreeing or strongly agreeing that they were aware of the concept. This is in line with previous studies that outline the need for EFL teachers to be aware of the role of PLNs in informal PD (Trust et al., 2016) and the need for teachers to take an active role in their PD. The teachers in this study were aware of the use of social media as part of their PLNs for informal PD. This result aligns with the research of Trust (2012), Tinker (2003) and Visser et al. (2014), who all suggest that using social media and social learning networks could lead to successful PLNs in the education field. Participants in this research were also aware that PLNs enabled them to connect with other teachers in the English language field and be part of the local and global EFL community.

Furthermore, the findings suggest that despite the teachers lacking awareness of the term PLNs before participating in the research, they nonetheless were familiar with the concept itself. That is, although they were not able to reference the term specifically, they were familiar with what PLNs represent and how they affected their professional practice. The findings suggest that teachers use PLNs as an informal method of PD, which is in line with Visser et al. (2014), who also report that PLNs

have become popular among teachers for informal PD. This also adds to Elliott's (2009) argument that PLNs represent the professional individual's choice of a set of real and virtual resources that can be used to develop their required skills and knowledge.

To fully utilize PLNs, it is suggested that teachers need to be digitally literate so they can share information, and interact and collaborate with other teachers on social media. Being digitally literate is critical for teachers who want to develop the necessary skills to construct learning and meaning from the PLN experience. In terms of the teachers' awareness, a high number of teachers who participated in this research noted they had not received any formal training on using social media as PLNs for PD purposes, although they reported that their university encouraged and supported them to use PLNs in this way. This result is similar to that of Ozbligin and Erkmen (2016), who state that governments support the idea that personal awareness is a key element in improving teachers' perceptions of PD.

The results also indicate that PLNs encourage Saudi EFL teachers to use technology more effectively, which is similar to arguments by Padwad and Dixit (2011) that PLNs can be used at the narrow level to teach teachers to use new teaching software. Our data show that teachers use PLNs, which suggests that they have sufficient amount of digital literacy and the necessary knowledge to enable them to use PLNs for their PD. This supports Beach (2012), Davis (2013) and Luo et al. (2016), who report that PLNs are easy to use for any teachers wanting to share knowledge and connect with other teachers. Nevertheless, Forte et al. (2012) emphasize the importance of training on such tools and suggest that teachers who understand educational technologies and are on Twitter are different to teachers who are not; they argue that teachers who are on Twitter perceive themselves to be technology evangelists and are more able to quickly implement new ideas into their professional communities of practice. This highlights the critical role of universities and institutions in providing teachers with sufficient training to implement PLNs and utilize specific social media platforms for their PD. In this regard, as Alshaikiki (2018) highlighted, there is a need to reflect on the importance of professional learning for teachers in Saudi policies and practices, as this could help to professionalize and continually develop the teaching workforce in the country.

In line with Trust et al (2016), and Owston et. al., (2008), this study finds that Web 2.0 tools, such as social media platforms, can help teachers develop their professional skills at any time and from any location by providing platforms on which they can create a self-directed learning community that is based on their needs and interests.

RQ2: How do Saudi EFL teachers perceive PLNs and use them in practice as a vehicle for their professional development in the Saudi EFL context?

The study indicates that EFL teachers have positive perceptions of specific lesson planning and teaching skills and activities and a propensity towards lifelong learning

in general, which aligns with other research on EFL teachers' perceptions of the importance of PD (Lee, 2013; Shukri, 2014; Hartoon, 2016; Alshumaimeri & Almhaisen, 2017). Although some of the teachers evidenced negative perceptions of PLNs in their questionnaire responses, when interviewed, they reported more positive perceptions. This suggests that these teachers had negative perceptions of only specific aspects of PLNs, such as the use of apps, digital literacy, and the overwhelming number of different resources, but were more positive about its use as a general tool to assist their professional growth. Whilst these teachers saw the benefits of engaging with other EFL teachers beyond their immediate context through PLNs, it is also important to note that some qualifying factors were identified in the interviews, with teachers noting that they felt a sense of potentially being overwhelmed by the wealth of resources available on the variety of social media and platforms. This echoes the findings of Perryman et al. (2022), who note that teachers benefit from accessing the vast array of resources and inspirations, but at times, this can be overwhelming.

Participants in the current study showed positive perceptions of different aspects of using PLNs for their PD. Most had positive perceptions about using PLNs when they felt unmotivated or overwhelmed by their work. This is similar to research by Trust et al. (2016), who report that teachers use PLNs when they feel demotivated and alone. The participants in this research also perceived PLNs as tools that could enable them to feel connected to other teachers outside their district regardless of their location and be part of the global EFL community. These professional connections with other teachers help teachers stay positive, encourage them to seek help, promote autonomy, and provide access to resources (Booth, 2012; Derby, 2008).

Participants also had positive perceptions of using PLNs to help them become more confident about enhancing their teaching practice. They agreed that PLNs helped them plan innovative lessons, find new teaching techniques, and make professional connections. These findings are similar to some studies in the literature (e.g. Beach, 2012; Trust, 2012; Maloney, 2016), that suggest that PLNs allow teachers to keep abreast of the latest practices and pedagogies through professional contact and interaction with other teachers and resources in the field.

One of the outcomes of this study was that Saudi EFL teachers had positive perceptions towards using PLNs as tools to support them in implementing their day-to-day teaching activities (Darling-Hammoned et al., 2009; Elliot, 2017). Thus, they can help teachers to become lifelong learners. This aligns with research by Sywelem and Witte (2013), who reported that the modern view of PD is that it is a long-term learning process. Being a lifelong learner is crucial for a teacher's career growth and the participants in this research agreed that PLNs enabled them to become lifelong learners. This finding echoes research by Watson (2006), who found that online PD provides teachers with long-term connections that help them increase their confidence and level of comfort. This might help teachers to become lifelong learners. Similarly,

Holland (2001) suggests that long-term support enhances teachers' practice. Sei et al. (2013) and Holmes (2013) present similar results, suggesting that online networks that are freely chosen by teachers could provide them with continuous, authentic, tailored, and customized PD. This indicates, therefore, that using PLNs enables teachers to have long-term support and the knowledge they need, and allows them to access up-to-date information, which encourages them to be lifelong learners; in turn, this can lead to more effective practice. This supports arguments by Willson and Bernie (1990), who characterize effective PD as being easy to access and having sufficient follow-up time.

The literature in the field illustrates that teachers use PLNs in a variety of ways in order to improve themselves and impact their teaching practice. The participants in this study showed that they used different PLNs for different purposes; for example, to search for resources or share them with colleagues or other EFL teachers worldwide. This is consistent with Maloney (2016), who discovered that educators who regularly use PLNs employ a variety of tools that match their learning preferences.

This study also showed that teachers use PLNs to identify potentially relevant sources and resources for further PD that can influence their future teaching. According to the findings, the participants used PLNs for a variety of professional learning purposes, including connecting with other EFL teachers, sharing resources, working on online projects, and participating in online EFL discussions. This aligns with previous findings about using PLNs to change practice (Sywelem & Witte, 2013), which indicates that teachers must continue to learn and grow throughout their careers in order to develop their professional knowledge and pedagogical practices.

Whilst there were differences in how Saudi EFL teachers used their PLNs and the access these provided, the interviews conducted for this research clarified teachers' PD needs and the role that PLNs could play in meeting them. The qualitative data further revealed that some teachers were more proactive in their use of PLNs for PD purposes than others. There could be many reasons for this, but inequity in terms of the teachers' technological capabilities and literacy could play a part and should always be considered in future research and practice (Forte et al., 2012).

7. Conclusion

This study investigated Saudi EFL teachers' awareness, perceptions, and use of PLNs in practice as a form of informal PD. It also determined whether age, years of experience, and qualifications affect their views. Based on the results, it can be concluded that Saudi EFL teachers are aware of the concept of using PLNs for PD. They also hold positive perceptions of the concept and use PLNs in different ways to enhance their professional growth.

The current study sheds light on the important role of PLNs in teachers' continuing PD and indicates that universities and practitioners should engage with using such

networks. Thus, it is recommended that educational workshops are implemented to help teachers use such tools more effectively and professionally, both in a local and global context. To explore the phenomenon of PLNs for PD in more detail, future studies could have a wider scope and involve a larger number of participants.

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