

Impact of ELTAI Webinars on Professional Development of English Language Teachers in India

M. S. Xavier Pradheep Singh¹, M. Joseph Vinoth², & H. Daniel Raj³

Abstract

This paper investigates the impact of webinars on the professional development of English language teachers in India, focusing on both the COVID-19 pandemic period and beyond. Utilising a quantitative approach with a cross-sectional survey design, data from 367 participants were analysed to assess the perceived impact of webinars on teachers' knowledge, skills, and attitudes (KSA). The findings indicate a significant positive impact on knowledge and skills, though less pronounced on attitudes. Factors influencing teachers' webinar choices and strategies for effective learning, such as note-taking and interactivity, were also explored. The research underscores the potential of webinars for immediate professional development while suggesting the need for enhanced engagement and targeted approaches to fostering long-term attitudinal changes. This study contributes to the understanding of webinars as valuable tools for teacher professional development and calls for further context-specific investigations.

Keywords: Webinars; Professional Development; English Language Teachers

INTRODUCTION

Continuing Professional Development (CPD) is defined as “a planned, continuous, and lifelong process whereby teachers strive to enhance their personal and professional qualities, improve their knowledge, skills, and practices, thereby fostering empowerment, increasing their agency, and contributing to the development of their organizations and students” (Padwad & Dixit, 2011, p. 7). Teachers' professional development is critical, as it enhances “student outcomes through improving teacher learning and altering teacher-classroom behaviours” (Perkasa & Surono, 2023, p. 200) within an ever-evolving educational landscape shaped by epistemological, technological, and societal advancements (Komives & Carpenter, 2016; Mizell, 2010). Professional development leads to teachers upskilling themselves after their formal education (Richards & Farrell, 2005) and

also positively influences teaching practices, school improvement, and learner outcomes (Balta & Eryılmaz, 2019; Mundry, 2005).

Teachers engage in professional development through two modes: conventional in-person and online programmes. In-person programmes such as in-service training, add-on courses, workshops, classroom observations, seminars, conferences, peer discussions, reading, and conducting action research have been foundational. However, with the advancement of the internet, online options, such as email lists, blogs, discussion groups (Duncan-Howell, 2010), social media groups (Coutinho & Lisboa, 2013), webinars, online courses, and MOOCs, have increasingly complemented traditional programmes. Online professional development is preferred for its flexibility, convenience, accessibility, and affordability (AWHONN, 2010; Peuler & McCallister, 2019). Among these, webinars and

¹ Assistant Professor, Department of English, St. Joseph's College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli. ☎ 0000-0002-8827-2494 ✉ xavierpradheep.sjc@gmail.com

² Ph.D. Research Scholar (Full Time), Department of English, St. Joseph's College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli. ☎ 0000-0002-5929-0554 ✉ josephvinothlit@gmail.com

³ Ph.D. Research Scholar (Full Time), Department of English, St. Joseph's College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli. ☎ 0000-0003-0497-2598 ✉ danielrajh94@gmail.com

online courses are particularly popular and widely recognised by teachers and institutions.

The global shift to Emergency Remote Teaching (ERT) during the COVID-19 pandemic further accelerated the popularity of webinars among educators. The sudden transition left teachers with limited preparation time (Barbour et al., 2020), leading to an increased demand for virtual teaching and learner engagement skills. In this context, webinars were pivotal in equipping teachers with remote teaching competencies (Bozkurt & Sharma, 2020), addressing pedagogical challenges, and promoting professional growth (Shin et al., 2022). From a development perspective, webinars offered “just-in-time professional development” (Neumann & Smith, 2020, p. 527, as cited in Shin et al., 2022, p. 1), supporting teachers’ adaptation to ERT. This paper investigates the impact of webinars on the professional development of English language teachers during and after the COVID-19 pandemic. Additionally, it explores the factors influencing teachers’ selection of webinars and proposes strategies to maximise the effectiveness of professional learning through this medium.

REVIEW OF LITERATURE

Format of Webinars

A webinar is a seminar held in an online mode or through a website (Srinivas, 2010). Eric R. Korb (Korb, 2000) originally introduced webinar as “a new internet-based, interactive desktop meeting and presentation service” designed for training, educational, and business purposes. Webinars have since evolved into a distinct medium of learning, incorporating features such as chat boxes, polls, and audio-video options, which facilitate interaction between speakers and participants. Many webinars include Q&A sessions to address participant queries, and the ability to record and archive sessions ensures continuous access to learning materials. These features enhance the flexibility and accessibility of webinars, making them a preferred choice for professional development, particularly in remote learning contexts.

A key characteristic of webinars is their purpose and duration. Typically, webinars are designed to introduce participants to a new topic within a brief period (Mai & Ocriciano, 2017). Unlike traditional lectures, webinars are not intended for in-depth teaching but rather to guide participants on their learning journey. Most webinars last for about an hour (Peuler & McCallister, 2019), though some can extend up to three hours (D. Mishra et al., 2021). Despite their brevity, webinars are often structured as series, where each individual session is complete in itself.

Webinars as Professional Development Tools

While the popularity of webinars surged during the COVID-19 pandemic, their use as a professional development tool predates this period. Webinars have been utilised in various fields (AWHONN, 2010; Buxton et al., 2012; Hoke et al., 2018; Peuler & McCallister, 2019). Their versatility, cost-effectiveness, and flexibility make webinars an effective tool for professional development, particularly in times requiring remote learning solutions.

Webinars have long been an essential tool for professional development in ELT. Even before the pandemic, global organisations frequently used webinars for training English teachers. For instance, the Regional English Language Office (RELO) began hosting webinars for English teachers as early as 2015, while the International Association of Teachers of English as a Foreign Language (IATEFL) also organised webinars during the same period. In India, the English Language Teachers’ Association of India (ELTAI) held its first webinar in 2017, indicating the long-standing presence of webinars in ELT professional development.

Effectiveness of Webinars

Webinars have been widely used as a professional development tool, particularly during the COVID-19 pandemic. Various studies assessing the impact of webinars on professional development have highlighted both their advantages and limitations. A recurring theme in the literature is the varied perceptions and outcomes of webinars. For instance, Al-naabi (2023) and Sakulprasertsri et al. (2021) recognise that webinars help improve

participants' knowledge of online tools and provide new perspectives. However, they also point out challenges such as the lack of practical, hands-on training and personal interaction. Al-naabi (2023) specifically attributed the low impact of webinars on teachers' pedagogy to their lack of contextual relevance and the mandatory attendance requirements. On the other hand, Sakulprasertsri et al. (2021) reported high satisfaction levels but suggested that extended webinar durations are necessary for fostering deeper engagement and interaction.

Further studies by Perkasa and Surono (2023), Alifah and Jumrah (2021), and Gegenfurtner et al. (2020) emphasise the flexibility of webinars and the positive attitudes of educators towards them. However, these studies also highlight the challenges associated with limited interaction and the reliance on didactic formats. Mai and Ocriciano (2017) echoed these concerns, noting that while webinars introduce participants to new topics, engagement is often passive, limiting the potential for deep learning. Similarly, Amado-Salvatierra et al. (2020) observed a misalignment between the stated objectives of professional development programmes and the actual content delivery, advocating for purpose-driven webinar design to better meet participants' needs.

Innovative models, such as the ACRES virtual professional learning community (Brasili & Allen, 2019), offer potential solutions to these challenges. This model incorporates reflective group discussions and facilitator-led small groups, which contrast with traditional webinar formats and foster more meaningful interaction. However, the scalability and practicality of such models remain uncertain, especially considering the high demand for flexible solutions in post-pandemic education.

Other studies, such as those by Compen et al. (2021) and Hoke et al. (2018), link webinars to improved teaching outcomes and increased self-efficacy among educators. Yet, these findings are tempered by the limited evidence of long-term knowledge transfer to practice. Tanucan and Uytico (2021) further emphasised the importance of participants' technological

literacy and environmental conditions in ensuring the effectiveness of webinars.

The effectiveness of webinars is influenced by factors such as participant satisfaction, knowledge improvement, and the flexibility they offer (Gegenfurtner et al., 2020; Sakulprasertsri et al., 2021). Customisation of webinars, where participants can take an active role instead of remaining passive, has been identified as an important element for improving webinar outcomes (Brasili & Allen, 2019).

Research Gaps and the Need for Studies

A review of existing literature on the impact of webinars on the professional development of teachers reveals a notable gap in research, particularly regarding English teachers in India. While studies such as those by Al-naabi (2023), Alifah and Jumrah (2021), Amado-Salvatierra et al. (2020), and Perkasa and Surono (2023) have been small-scale and conducted outside India, there is a clear need for large-scale studies, especially within the Indian context. The diverse professional development needs of teachers from various regions and cultures in India necessitate comprehensive investigation. Understanding the impact of webinars on English teachers' professional development in India can provide insights into the current trends and challenges in teachers' professional growth. This, in turn, will help organisers design more relevant and effective professional development programmes in the future.

RESEARCH QUESTIONS

This study seeks to explore the impact of webinars organised by the English Language Teachers' Association of India (ELTAI) during and after the COVID-19 pandemic on the professional development of English language teachers in India. The research aims to address the following questions:

1. To what extent do webinars organised by ELTAI influence the professional development of English language teachers in India? How do teachers perceive changes in their knowledge, skills, and attitudes as a result of attending webinars?
2. What criteria do English language teachers in India use to select webinars? What are

their primary objectives for attending webinars, and what other factors influence their choices?

3. What strategies do English language teachers in India employ to maximise their learning from webinars? How frequently do they attend webinars, and through what approaches do they engage with them?

RESEARCH DESIGN

This study employed a quantitative approach using a cross-sectional survey design to examine the perceived impact of ELTAI webinars on the professional development of English language teachers in India. According to Creswell (2012, p. 405), “a cross-sectional study can examine current attitudes, beliefs, opinions, or practices,” where attitudes, beliefs, and opinions reflect thought processes, and practices refer to actual behaviours. The research design was descriptive, non-experimental, and correlational.

Participants

The study included 367 Indian English language teachers (210 females and 157 males) who attended ELTAI webinars. Of the participants, 81.5% (N=299) were aged 31–55, while 9.25% (N=34) were under 30 and 9.25% (N=34) were over 55. Regarding educational qualifications, 52.3% (N=192) held doctorates, 40.9% (N=150) were postgraduates, and 6.8% (N=25) had Bachelor’s degrees. Most respondents (73.8%; N=271) were professors in higher education institutions, with 24.8% (N=91) as school teachers and 1.4% (N=5) as teacher educators. Institutional affiliations included private (51%; N=189), government (29%; N=106), and government-aided (20%; N=72). Teaching experience was over 10 years for 75% (N=275), 5–10 years for 12% (N=44), and under 5 years for 13% (N=48). The demographic profile indicates a participant base actively seeking professional development.

Survey Instrument

The researchers developed a 15-item questionnaire, excluding demographic details. Responses were collected using a five-point Likert scale and close-ended questions, focusing on webinar impact and preferences.

Table 1: Questionnaire and its components

Components	Number of items
ESL Teachers’ Perception of the Impact of Webinars	8 (agreement scale)
ESL Teachers’ Preferences in Choosing and Attending Webinars	7 (close-ended)

A pilot study with 20 English language teachers ensured content validity. Participants were briefed on the study’s purpose, and real-time feedback led to refinements for clarity and impartiality. Data from the pilot were excluded from the main study. Reliability, assessed via Cronbach’s Alpha, yielded a value of 0.683, surpassing the recommended threshold of 0.5 for instruments with fewer than 10 items. A standardised items alpha of 0.719 further confirmed reliability.

Table 2: Cronbach Alpha of the instrument

Cronbach’s Alpha	Cronbach’s Alpha (based on Standardised Items)	Number of Items
0.683	0.719	8

Data Collection Procedure

The survey was conducted between October 2021 and March 2022 using Google Forms. Participants, who had already attended ELTAI webinars, were invited to complete the questionnaire at their convenience.

Ethical Considerations

Four key ethical issues were addressed: (i) Confidentiality: Participants were assured their data would be used only for the study’s objectives. (ii) Informed Consent: Participants were informed about the study’s aims and provided consent before participation. (iii) Anonymity: No identifying information was collected, ensuring participant anonymity. (iv) Voluntary Participation: Respondents participated willingly, without coercion.

ANALYSIS OF RESULTS

ESL Teachers’ Perceived Impact of Webinars

This study primarily explores ESL teachers’ perceptions of webinars and their impact on professional development. Professional growth encompasses the enhancement of knowledge, skills, and attitudes (KSA), critical for effective

teaching (Guskey, 2003; Sancar et al., 2021; Sierra-Piedrahita, 2007). To assess the webinars' impact, eight survey items were used: one focused on overall professional development, three on knowledge, three on skills, and one on attitude. Responses were measured on a 5-point Likert scale, with 'Strongly Agree' = 5 and 'Strongly Disagree' = 1.

■ **Knowledge:** Knowledge includes content knowledge, pedagogical knowledge, and technological knowledge (Koehler et al., 2013; P. Mishra & Koehler, 2006; Shulman, 1986). For ESL teachers, content knowledge involves mastering linguistic principles, grammar, and cultural aspects. Pedagogical knowledge covers language acquisition theories, instructional strategies, and assessment methods, while technological knowledge pertains to effectively incorporating digital tools into teaching. Statistical analysis presented in Table 3 revealed a significant positive impact on knowledge, with an average Single Moving Average (SMA) of 4.24, Mode=4, and Median=4 across three items, indicating strong agreement. A low standard deviation (SD=0.823) reflects consistent responses. Survey items addressed awareness of new areas, learning new topics, and achieving conceptual clarity. The highest SMA (4.28) was for the statement, "Webinars helped me learn new areas in English Language and Literature," indicating that webinars keep teachers updated. Notably, 91% of respondents agreed or strongly agreed, surpassing Altan's (2016) findings, where 72% credited INSET programmes for fostering subject innovation. Unlike INSET, the self-selected nature of webinars enhances their perceived relevance to teachers' professional interests.

■ **Skills:** Skills refer to acquired abilities demonstrated through proficiency and expertise, developed via training, practice, and experience. ESL teachers require communication skills for clear information delivery, pedagogical skills for lesson planning, classroom management, adaptation to diverse learners, and technological skills for using digital tools

effectively. Survey items on skills showed improvement across all areas, with SMA scores ranging between 4.08 and 4.16 (see Table 3). The negligible variance among these scores highlights the interdependence of skill domains; for instance, mastering new technologies often leads to improved teaching strategies, which, in turn, enhance communication. During the pandemic, webinars addressed critical professional needs such as integrating technology for emergency remote teaching (Bozkurt & Sharma, 2020; Tanucan & Uytico, 2021). Many teachers sought technology-focused webinars to engage students and meet professional demands, highlighting their ability to fulfil immediate needs (Perkasa & Surono, 2023).

■ **Attitude:** Attitude, a strong predictor of professional actions, encompasses professionalism, adaptability, and reflective practice. Professionalism involves engaging with current research and continuous learning (Pierre & Oughton, 2007). Adaptability is key to adopting new methodologies and technologies, while reflective practice fosters self-assessment and ongoing improvement. The SMA for attitude (3.8) was the lowest among KSA domains, suggesting that webinars have a limited impact on altering teachers' attitudes (see Table 3). While 81.74% of respondents chose webinars aligning with their interests, this alignment may restrict exposure to new ideas that could challenge or broaden their viewpoints. Furthermore, the short duration of webinars might not provide sufficient depth to inspire significant attitudinal shifts. Future efforts could explore longer or more interactive webinar formats to better influence professional outlooks.

Overall, webinars had the greatest impact on knowledge, followed by skills, with a comparatively limited influence on attitudes. This reflects their utility in addressing immediate professional development needs, especially when self-selected. To maximise their effectiveness, future webinars could focus on fostering deeper engagement and addressing long-term attitudinal changes.

Table 3: Teachers' perceived impact of webinars on their professional development

Survey Items		Degrees of Agreement					SMA	SD	Mode	Median
		Strongly Agree (5)	Agree (4)	Neither Agree nor Disagree (3)	Disagree (2)	Strongly Disagree (1)				
The webinars that I have attended so far have...										
Knowledge	1. contributed to my professional development	N 167	170	15	1	14	4.29	0.875	4	4
		% 45.5	46.3	4.1	0.3	3.8				
	2. made me aware of the latest developments in English Language and Literature.	N 147	184	26	2	8	4.25	0.792	4	4
		% 40.1	50.1	7.1	0.5	2.2				
	3. helped me learn more about new areas in English Language and Literature.	N 162	172	18	3	12	4.28	0.862	4	4
		% 44.1	46.9	4.9	0.8	3.3				
	4. helped me gain conceptual clarity on familiar areas in English Language and Literature.	N 130	200	24	2	11	4.19	0.823	4	4
		% 35.4	54.5	6.5	0.5	3				
	Overall average of items on knowledge (rounded off)						4.24	0.826	4	4
	Skill	5. supported me to adopt new teaching methodologies in my classes.	N 125	198	31	4	9	4.16	0.816	4
		% 34.1	54	8.4	1.1	2.5				
6. supported me in using technological tools in my classes.		N 107	215	27	8	10	4.09	0.831	4	4
		% 29.2	58.6	7.4	2.2	2.7				
7. supported me to explain concepts/topics better in my classes.		N 102	216	34	6	9	4.08	0.808	4	4
		% 27.8	58.9	9.3	1.6	2.5				
Overall average of items on skills (Rounded off)						4.11	0.818	4	4	
Attitude	8. changed my point of view about a topic/area.	N 68	187	86	21	5	3.8	0.855	4	4
		% 18.5	51	23.4	5.7	1.4				
	Overall average of items on attitude (Rounded off)						3.8	0.855	4	4

Factors Influencing ESL Teachers' Choice of Webinars

The survey also examined factors influencing participants' choice of webinars, including purpose, duration, focus, and preferred device. Respondents could select multiple options, with six predefined choices and an open-ended entry. Three options aligned with items assessing the impact of webinars on knowledge and skills.

- Purpose of attending webinars:** Regarding purpose, 82.83% (N=304) attended webinars to learn about new topics, aligning with findings on knowledge impact, where 91% (N=234) agreed webinars expanded their understanding of new areas. Additionally, 73.8% (N=271) attended to deepen their

knowledge of known topics, correlating with 89.9% (N=330) who reported gaining conceptual clarity in familiar areas. This purposeful attendance aligns with Vygotskian Constructivist theory, which posits learning occurs when inputs are interest-based and build on existing knowledge within the learner's zone of proximal development (Vygotsky & Cole, 1978). Similarly, 67.3% (N=247) attended webinars to develop skills, with 86.7%-88.1% (N=318-323) agreeing that webinars enhanced their skills. These results affirm participants' intent to develop skills and achieve desired outcomes. Other purposes included interacting with like-minded teachers (36.7%, N=135), collecting

materials (33.5%, N=123), and obtaining certificates (32.4%, N=119).

- **Rationale for Choosing Webinars:** Interest emerged as the primary factor in choosing webinars, with 81.7% (N=300) selecting it. This aligns with findings by Perkasa and Suroño (2023), who observed that teachers often select topics relevant to their teaching needs. Needs (e.g., handling a new topic) ranked second (63.4%, N=233). These findings underscore participants' autonomy in choosing webinars based on teaching requirements. Other factors included speakers/resource persons (55.8%, N=205), timing (41.4%, N=152), organisers (25.3%, N=93), free registration (23.7%, N=87), colleagues' suggestions (16%, N=59), and duration (15.2%, N=56).
- **Duration of Webinars:** The preferred webinar duration was one hour (67.8%, N=249), followed by two hours (44.7%, N=164), three hours (10.9%, N=40), and more than three hours (5.1%, N=19).
- **Focus of Webinars:** Subject-related webinars were the most preferred (89.1%, N=327), followed by pedagogy-related (72.5%, N=266) and technology-related (59.1%, N=217).
- **Preferred Device:** Smartphones (46%, N=169) were the most preferred device for attending webinars, reflecting their portability and widespread use. Laptops were the next choice (44.9%, N=165), followed by desktops (6.3%, N=23) and tablets (2.1%, N=8).

Strategies Adopted by ESL Teachers for Maximising Learning from Webinars

The study also explored the engagement strategies employed by ESL teachers during webinars. Data from the survey revealed a variety of strategies used by participants to enhance their learning experience. The most commonly adopted strategies included taking notes (65.9%, N=242), capturing screenshots of presentation slides (65.1%, N=239), posting questions to speakers via the chat box (62.3%, N=230), and completing activities assigned by the speaker (57.5%, N=211). These findings suggest that participants actively engage with webinar content.

Notably, 230 participants reported asking questions in the chat box, highlighting the interactive nature of webinars. Other strategies, ranked by frequency, included listening attentively to the speaker (37.9%, N=139), adding comments on the speaker's ideas (36.2%, N=133), responding to questions posed by the speaker in the chat box (34.9%, N=128), interacting verbally via a microphone (30.8%, N=113), replying to questions and comments from other participants (11.4%, N=42), and recording webinars for later review (11.4%, N=42).

CONCLUSION

In conclusion, this study underscores the significant role of ELTAI webinars in enhancing the professional development of English language teachers in India. The findings reveal that webinars substantially improved teachers' knowledge and skills, particularly in content, pedagogy, and technology. However, the study also highlights that the impact on teachers' attitudes remains limited, suggesting that while webinars are effective in knowledge and skill development, they may not sufficiently influence long-term attitudinal changes. The research identifies key factors influencing webinar participation and provides insights into ESL teachers' strategies to maximise learning. These findings offer valuable implications for optimising webinar formats to better address teachers' professional development needs, particularly in fostering attitudinal shifts. To maximise their effectiveness, webinars in future could focus on fostering deeper engagement, addressing long-term attitudinal changes, and contributing to more holistic professional growth for ESL teachers.

Future research studies could focus on conducting large-scale, longitudinal studies to examine the long-term effectiveness of webinars on professional development for English language teachers in India. Researchers could also explore the specific needs and constraints faced by teachers from different regions and cultural backgrounds to tailor webinar content accordingly. Additionally, investigating strategies to enhance engagement and foster deep attitudinal changes through the

use of more interactive and longer webinar formats would be valuable. Limitations of the current study include potential biases in self-reported data, generalisability issues, and the survey instrument's scope in capturing the full impact of professional development. Addressing these limitations may involve employing qualitative methods and exploring practical implementation challenges to gain a holistic understanding of webinar efficacy in various educational contexts.

REFERENCES

- Al-naabi, I. (2023). Did they transform their teaching practices? A case study on evaluating professional development webinars offered to language teachers during COVID-19. *International Journal of Higher Education*, 12(1), 36–44. <https://doi.org/10.5430/ijhe.v12n1p36>
- Alifah, N., & Jumrah, A. (2021). American Corner webinar and its impact on Indonesian English teachers to their professional development. *International Journal of Innovative Science and Research Technology*, 6(1), 281–287.
- Altan, M. (2016). The need for more effective in-service training for professional development of English language teachers. *British Journal of Education, Society & Behavioural Science*, 15(2), 1–12. <https://doi.org/10.9734/BJESBS/2016/24594>
- Amado-Salvatierra, H. R., Rizzardini, R. H., & Chan, M. M. (2020). The rise of webinars: Thousands of learners looking for professional development. A practical case study. *2020 IEEE Learning With MOOCS (LWMOOCS)*, 191–194. <https://doi.org/10.1109/LWMOOCS50143.2020.9234365>
- AWHONN. (2010). Webinars: An economical and efficient way to provide staff education. *Nursing for Women's Health*, 14(5), 419–421. <https://doi.org/10.1111/j.1751-486X.2010.01584.x>
- Balta, N., & Eryilmaz, A. (2019). The effect of the teacher-led PD for teachers' professional development program on students' achievement: An experimental study. *Teacher Development*, 23(5), 588–608. <https://doi.org/10.1080/13664530.2019.1659176>
- Barbour, M. K., LaBonte, R., Hodges, C., & Moore, S. (2020). Understanding pandemic pedagogy: Differences between emergency remote, remote, and online teaching. In *State of the Nation: K-12 e-Learning in Canada* (December).
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education*, 15(1), i–vi.
- Brasili, A., & Allen, S. (2019). Beyond the webinar: Dynamic online STEM professional development. *Afterschool Matters*, 29, 9–16.
- Buxton, E. C., Burns, E. C., & De Muth, J. E. (2012). Professional development webinars for pharmacists. *American Journal of Pharmaceutical Education*, 76(8), 1–7. <https://doi.org/10.5688/ajpe768155>
- Compen, B., De Witte, K., & Schelfhout, W. (2021). The impact of teacher engagement in an interactive webinar series on the effectiveness of financial literacy education. *British Journal of Educational Technology*, 52(1), 411–425. <https://doi.org/10.1111/bjet.13013>
- Coutinho, C. P., & Lisbôa, E. S. (2013). Social networks as spaces for informal teacher professional development: Challenges and opportunities. *International Journal of Web Based Communities*, 9(2), 199–211. <https://doi.org/10.1504/IJWBC.2013.053244>
- Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Duncan-Howell, J. (2010). Teachers making connections: Online communities as a source of professional learning. *British Journal of Educational Technology*, 41(2), 324–340. <https://doi.org/10.1111/j.1467-8535.2009.00953.x>
- Gegenfurtner, A., Zitt, A., & Ebner, C. (2020). Evaluating webinar-based training: A mixed methods study of trainee reactions toward digital web conferencing. *International Journal of Training and Development*, 24(1), 5–21. <https://doi.org/10.1111/ijtd.12167>
- Guskey, T. R. (2003). What makes professional development effective? *Phi Delta Kappan*, 84(10), 748–750. <https://doi.org/10.1177/003172170308401007>
- Hoke, A. M., Francis, E. B., Hivner, E. A., Lipsett Simpson, A. J., Hogentogler, R. E., & Kraschnewski, J. L. (2018). Investigating the effectiveness of webinars in the adoption of proven school wellness strategies. *Health Education Journal*, 77(2), 249–257. <https://doi.org/10.1177/0017896917734017>
- Koehler, M. J., Mishra, P., & Cain, W. (2013). What is technological pedagogical content knowledge (TPACK)? *Journal of Education*, 193(3), 13–19. <https://doi.org/10.1177/002205741319300303>
- Komives, S. R., & Carpenter, S. C. (2016). Professional development as lifelong learning. In *Handbook of Student Affairs Administration* (4th ed., pp. 346–361). Jossey-Bass: John Wiley & Sons.
- Korb, E. R. (2000). *Webinar* (U.S. registered trademark serial no. 75478683). U.S. Patent and Trade-mark Office.
- Mai, T., & Ocriciano, M. (2017). Investigating the influence of webinar participation on professional development of English language teachers in rural Vietnam. *Language Education in Asia*, 8(1), 48–66. https://doi.org/10.5746/LEiA/17/V8/11/A04/Mai_Ocriciano
- Mishra, D., Nair, A., Verma, L., Grover, A., Mathur, S., & Srivastav, T. (2021). The perceived impact of webinars during the COVID.19 pandemic: A survey of ophthalmology trainees from India. *Oman Journal of Ophthalmology*, 14(2), 78–84. https://doi.org/10.4103/ojo.ojo_87_21
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for

- teacher knowledge. *Teachers College Record*, 108(6), 1017–1054. <https://doi.org/10.1111/j.1467-9620.2006.00684.x>
- Mizell, H. (2010). *Why professional development matters*. Learning Forward. <https://learningforward.org/wp-content/uploads/2017/08/professional-development-matters.pdf>
- Mundry, S. (2005). Changing perspectives in professional development. *Science Educator*, 14(1), 9–15. <http://files.eric.ed.gov/fulltext/EJ740949.pdf>
- Padwad, A., & Dixit, K. (2011). *Continuing professional development: An annotated bibliography*. British Council. <https://www.teachingenglish.org.uk/sites/teacheng/files/CPDbiblio.pdf>
- Perkasa, A. B., & Surono, S. (2023). Teachers' attitudes towards webinars in professional development: A case study at secondary school in Indonesia. *Journal of Innovation in Educational and Cultural Research*, 4(2), 200–208. <https://doi.org/10.46843/jiecr.v4i2.559>
- Peuler, M., & McCallister, K. C. (2019). Virtual and valued: A review of the successes (and a few failures) of the creation, implementation, and evaluation of an inaugural virtual conference and monthly webinars. *Journal of Library & Information Services in Distance Learning*, 13(1–2), 104–114. <https://doi.org/10.1080/1533290X.2018.1499240>
- Pierre, E., & Oughton, J. (2007). The affective domain: Undiscovered country. *College Quarterly*, 10(4), 1–7. <https://eric.ed.gov/?id=EJ813766>
- Richards, J. C., & Farrell, T. S. C. (2005). *Professional development for language teachers: Strategies for teacher learning*. Cambridge University Press.
- Sakulprasertsri, K., Tangkiengsirisin, S., Phoocharoensil, S., Kanokpermpoon, M., & Koowuttayakorn, S. (2021). Online English teacher training during the COVID-19 pandemic in the Thai contexts. *Asia Pacific Journal of Educators and Education*, 36(2), 299–316. <https://doi.org/10.21315/apjee2021.36.2.15>
- Sancar, R., Atal, D., & Deryakulu, D. (2021). A new framework for teachers' professional development. *Teaching and Teacher Education*, 101, 1–12. <https://doi.org/10.1016/j.tate.2021.103305>
- Shin, J. K., Borup, J., Barbour, M. K., & Quiroga Velasquez, R. V. (2022). Webinars for English language teachers during the pandemic: Global perspectives on transitioning to remote online teaching. *AERA Open*, 8(1), 1–15. <https://doi.org/10.1177/23328584221083976>
- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4–14. <https://doi.org/10.3102/0013189X015002004>
- Sierra-Piedrahita, A. M. (2007). Developing knowledge, skills and attitudes through a study group: A study on teachers' professional development. *Íkala, Revista de Lenguaje y Cultura*, 12(1), 279–305. <https://doi.org/10.17533/udea.ikala.2721>
- Srinivas, R. (2010). Webinar networking with teachers nationwide. *English Teaching Professional*, 5, 26–27.
- Tanucan, J. C. M., & Uytico, B. J. (2021). Webinar-based capacity building for teachers: "Lifeblood in facing the new normal of education". *Pertanika Journal of Social Sciences and Humanities*, 29(2), 1035–1053. <https://doi.org/10.47836/pjssh.29.2.16>
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard University Press.