



## Teachers' Voices of TPACK Practices on ELT in the Post-COVID-19 Pandemic

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### Abstract

This narrative study aimed to interpret evolving themes of teachers' TPACK practices through an entirely different lens. This study engaged two in-service EFL teachers, one who taught in a rural school and another who taught in an urban school. This study was conducted from May to October. In-depth interviews were utilised to shed light on their emotional experiences. Then, we analysed the data through Critical Thematic Analysis. Findings demonstrated how ongoing regulations generated conditions teachers encountered with shifting teachers' paradigms. Participants truly believed that their TPACK has transitioned to the enhancement of the dominant technology-related knowledge domain (TCK, TPK & TPACK). However, they experienced a deterioration of the quality of the non-technology-related knowledge domain (CK, PK & PCK). There was a gap between teachers' perceived importance of technology-integrated activities and actual integration, which remained a persistent barrier to teachers' technology integration. The study suggests policymakers should pay heed to maintaining sustainable educational system stability rather than forcing teachers to implement an unsteady policy.

**Keywords:** educational policy; EFL; ICT; narrative inquiry; TPACK.

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The society we live in has evolved to be characterised by altering livelihoods, the unpredictability of legislation, population displacement, and conflicts of principles, all within the complex and uncharted intricacy of this era (Campbell, 2020). As a result, increasing requirements have been placed on educators, education stakeholders, and educational establishments. Conventional conceptions of the responsibility of educators and instructors typically focused on issues with material, teaching, learner assistance, or the application of reforms to educational policy. The intended function of education has changed along with changes in both the domestic and global political and social landscapes over time (Aslan et al., 2021). This phenomenon has necessitated reevaluating how education institutions and teachers can satisfy these evolving needs in a more unstable situation. Indeed, the COVID-19 epidemic raised the multiplicity of the duties that administrators of schools and teachers do.

The activities of teachers and school administrators persisted, but in a completely new way, lacking prior notice, preparation, or organised reaction preparations. The globe has been monitoring, evaluating the reactions, and attempting to comprehend the implications (Scull et al., 2020). The flexible character of teaching staff' and principals' reactions to the greater national light provide fresh perspectives into how they should respond in emergencies. Creating strategies that address education concerns has relied heavily on effective pedagogical perspectives (Nurfitri et al., 2020).

Likewise, pedagogical perspectives are the teachers' interpretive judgments about language learning and teaching (Hossain et al., 2021; Ní Dhuinn & Ann Garland, 2022). These assumptions are primarily the result of their background, life encounters, possible coaching, and administrative regulations. For instance, switching administrative rules is not simply negotiable because establishing them requires effort and dedication. One of these perspectives is how teachers view the teaching-learning process. They frequently need more time to adopt and adapt to educational policy shifts (Campbell, 2020). Multiple kinds of research have explored the effects of a particular policy, and they showed that the policy affected education negatively. Nevertheless, there is a paucity of literature regarding pedagogical programs and initiatives which might have mitigated or exacerbated these differences integrally (Dhuinn & Ann Garland, 2022).

The adoption of the Technological Pedagogical and Content Knowledge (TPACK) framework is becoming more widespread in classroom instruction as a core component of an educational mandate plan for the transformation and modernisation of curriculum (Zhang & Chen, 2022). TPACK itself was initiated by Mishra & Koehler (2005). Technology-related knowledge domains covered technological knowledge (TK), technological content knowledge (TCK),

technological pedagogical knowledge (TPK), and technological pedagogical content knowledge (TPACK). Non-technology-related knowledge domains involved pedagogical knowledge (PK), content knowledge (CK), and pedagogical content knowledge (PCK). The significance of incorporating TPACK into English as a Foreign Language (EFL) instruction was highlighted further by regulations, mostly seeing the prevalence of technology platforms in today's generation. It also tremendously suited non-English speaking teachers and students who were about to comprehend English in fundamental English-speaking surroundings by enabling the development of genuine language-rich surroundings and boosting communicative language educational practices.

Nevertheless, the practical application of TPACK in education has historically been a complex topic involving multiple elements (Syamdianita & Cahyono, 2021; Anderson & Kyzar, 2022). The emergence of the Covid-19 crisis compelled the education system to rapidly reinvent and reconsider how classes and courses could remain, where learners might be graded and advanced, and how requirements had been preserved (Akyuz, 2018; Lie et al., 2020). Numerous personal attributes, including certain teachers' technology expertise and competence, academic values, and technology acceptance, would substantially impact how they utilise ICT in education. Teachers' perceptions and awareness were probably the two most frequently reported structural issues that impeded their technological incorporation (Karchmer-Klein & Konishi, 2021; Demeshkant et al., 2022). In addition, few researchers have examined specific technological issues handled in academic establishments, the effect of these issues on curriculum implementation, and the epistemological foundation for including these issues in the curriculum (Bostancioğlu & Handley, 2018; Hsu & Chen, 2022). Particularly, Tseng (2016) asserts that prospective teachers require highly qualified guidance about how to teach their essence to digitalization while concurrently directing learners in developing recent technological advancements.

Following the publication of the TPACK framework in recent years, few researchers have used hierarchical linear modelling to study the interrelationship between TPACK knowledge domains, yet the findings persist equivocally (Tseng et al., 2020). The existing researches lack a thorough itself has covered the quality of detailed examination of the elements contributing to teacher internal conflict, and analyses of the connection between internal conflict and personality development are still uncommon due to the likelihood that the seven sub-domains may not be practicable (Tseng et al., 2020). It tends to obscure the underlying difficulties. To accomplish this research aim, it is vital to offer the field of TPACK research with examples of practical implementation. Analysing TPACK in various areas and in conjunction with other essential dimensions might be facilitated using a brief, cost-effective assessment instrument (e.g., beliefs, self-efficacy). As an attempt to bridge the aforementioned information

gaping holes, the problem of this research is: What are teachers' voices about TPACK practices in their teaching during educational policy transitions?

## **METHOD**

This research was a narrative qualitative study. It studied the emotional meaningfulness the teachers attached to the happenings (Barkhuizen et al., 2014). We adopted the narrative method since we believed that this method was an effective instrument for capturing the arrangements of teachers' ideas, practices, and self-perceptions. Also, by using narratives, academics might learn more about how past events continue to influence teachers' present-day patterns of thinking, discourses, and performance terms (Barkhuizen et al., 2014). The subtlety of how teachers modelled and emphasised how their environment affected their students' behaviour.

In this study, we chose participants who had certain characteristics so that participants were able to participate in the research by providing accurate and detailed information and experiences. The participants were Maya and Farah. They were senior high school teachers with varying qualifications and experiences, i.e., having taught - the English language that integrated ICT experiences for more than five years. Maya taught at a rural school, whereas Farah taught at an urban school. All were pseudonyms. The participants voluntarily joined this study for six months. Taking these considerations into account, this research could provide broader and more representative insights into how EFL teachers are adapting their teaching practices.

For this research, we relied on the following principles to assure ethical concerns. Those who consented to participate in the study provided us with written consent after first being informed of its objectives. Second, since this research focused on the practices, we sparked their autobiographical recollections of the subject. As a result, it assisted us in focusing the participants' thoughts on the topic under research. Finally, in order to get their consent and permission to gather the information from the participants, the school administrators were addressed before the research started by the researchers.

The information about their TPACK practices on their teaching during educational policy transitions was gathered through semi-structured interviews to describe the early variance they explained, either in the print text or as transcribed narratives, after they shifted their learning. The face-to-face interviews, which averaged 50 minutes, were performed after the COVID-19 pandemic had passed.

To analyse the data, we adopted the Critical Thematic Analysis (CTA) developed by Braun & Clarke (2006). This present research followed Braun & Clarke's (2006) deductive thematic analysis model in analysing qualitative data. To gain a more thorough comprehension of the narratives of participants, we performed a deductive thematic analysis. These procedures included becoming

acquainted with the data, creating preliminary coding, seeking out themes, checking themes, specifying and labelling themes, and presenting the results.

We arranged unorganised data at first. Following that, we read and recorded the interview transcript data. We found concepts and themes as we looked over the data and gave them preliminary codes or labels. This was our initial attempt to open code the vast amount of raw data into analytical categories. Subsequently, using Tseng's (2016) TPACK theory, we performed axial coding that was centred on verifying the practice of the initial seven TPACK domains conception. Finally, we conducted a selective coding analysis of the data utilising the major themes and concepts. We carefully searched the data for a number of compelling instances that amply demonstrate each topic and subject.

After taking into account the central theme of the study, we looked at how the theme was represented by various participants and interpreted the data to come up with an informed interpretation. The comparison of Farah's and Maya's practices in this study never was made to juxtapose opposing viewpoints but rather to show how differently the participants rebuilt their teaching during changes in educational policy. As a result, the description of the practices would appear in the results section, including the interpretation.

## FINDINGS

### *Maya's Story: Pouring Out Her Ideas about Technology-based Learning Activities*

Once the regulation evolved, Maya's early professional perspective profoundly affected her, shaping her behaviour and thoughts about her profession as an imaginative teacher. Maya noted that she constantly innovated her teaching way while she did much experimentation. She stated that she had no fear of failure and thought attempting fresh stuff was integral to development. She highlighted that innovation was a significant problem for her. She might detest being one of several teachers who regrettably performed the identical stuff repeatedly. She stated:

*"Perhaps you find it hard to believe, but I have reorganised the educational materials, including lesson plans, tasks, and evaluations. I did it since I genuinely love it. The beginning of the academic year is an opportunity to begin anything latest." (Maya. Interview. 2022. 11)*

When requested to offer materials that reflect her rejuvenating strategy and her inventive instructional methods, Maya outlined the steps she utilised to produce a new program in response to the question. Maya continued by describing the approach and the material as a roadmap to inspire students with concepts for constructivist teaching responsibilities and processes. In continuation with her following excerpt, she continued by saying:

*"I propose that the idea is participatory, interactive, creative, and approachable to the individuals engaged, envisioning them as part of a work. It intends to be a*



*pedagogical toolset that could be adjusted, altered, taught, and applied to communicate ideas and behaviours. It blends exercises, instruments, theatrics, riddles, and songs to provide a constructivist teaching program with a multidisciplinary and entertaining strategy.” (Maya. Interview. 2022. 8)*

In her detailed discussion of the objects; she employed in her classroom, Maya's ideas and originality shone through. Exclusively, she purposefully and exhaustively detailed, through each artefact, how she would guide her students through achieving the class-specific objective. As an illustration, she seems to have a collection of twisted yarn in a miniature photo frame. She argued that the small example in the educational stuff was symbolic and that her viewpoint was convoluted. Every item's explanation was theorised and strongly emphasised equality, availability, and uniqueness.

As a teacher, Maya's dedication to her students inspired her to employ access-oriented techniques, inclusion-oriented techniques, and technology to stimulate students' communication. It included graphical interfaces, real-time subtitles, and adaptable coding. According to Maya, her unique strategy was intended to stimulate students' comprehension of concepts and projects and was, in response, motivated chiefly by the heterogeneity of the students she represented. Maya felt her effort as a teacher was intended to be redemptive concerning her instructional strategies.

Maya employed technological advances and new instructional approaches with zeal to fulfil those she considered to be her primary duties as a teacher. Her professionalism drove her to develop her mission to expand students' exposure to transformative educational encounters. Maya determined that perhaps the school's facilities and absence of adequate instructional technologies impeded her practical instructional approach and, consequently, diminished the value of education for her students. In essence, Maya's remarks implied that the school had not considered innovative thinking a concern by denying the availability of educational tools.

On the other hand, Maya was concerned with their beginning judgments of the circumstance for teaching purposes, which was to meet their students' learning demands. Nevertheless, the fast shifts in educational policy posed a significant risk to achieving this objective. She had the sense that she had been doing her job well her whole life. Still, when hybrid learning was introduced, she found that she could no longer carry out her instructional responsibilities similarly since all had shifted in her attachment to her students. As a result, Maya perceived a significant risk of challenge to her professional motivation of being a teacher.

### ***Farah's Story: Negotiating Her Learner-centred Pedagogical Style: Opportunities and Limitations***

Farah started her working life as an honorary teacher until securing an official teaching job. Farah was credited with making the school's first innovative educational packages due to her reputation for getting technologically progressive at her school. She recalled studying how to construct the boxes for years. Farah continued to learn and teach for another year. At that period of time, she designed and taught classes on virtual platforms and technological literacy. Farah demonstrated technological literacy in education and encouraged her coworkers unofficially as they learned to perform just that.

Farah viewed the regulatory transition optimistically and was prepared to step up to the confrontation of hybrid learning. Yet, for her, it was frustrating because, as a teacher, she understood what they were required to accomplish and the advanced technologies. Still, they were hindered mainly by the unpredictability of the rapidly moving regulatory climate and the lack of management and advanced technical assistance during the first few weeks of teaching. Consequently, she thought she could not accomplish her profession effectively because of unexpected circumstances. Farah was in an unfamiliar scenario than she had been in the preceding two years. She instantly saw the challenge regarding her work happiness and social interaction management. She stated that she was unable to complete the period. She was unable to participate in all the onsite-related activities in hybrid learning. She evaluated the issue and the need for changes as challenges to their objective of boosting performance.

On another point, Farah's viewpoint on the need for creativity and adaptability in the classroom was evident across their numerous interactions. She admitted that she enjoys being stimulated and is always trying to expand her approach to education. She stated that her personality leads her to question and contest anything. In regard to education, she frequently utters the following:

*"There has to be more than one way to complete this task. We ought to figure out a more effective approach to deal with situations like this. I think I must be ready for the responsibilities and acknowledgement that come with teaching. My preparation for classes is rather exhaustive, and I prefer to get everything of- my intentions mapped out in advance." (Farah. Interview. 2022. 4)*

According to her perspective, Farah's remarks emphasised the significance of management as an accelerator of creativity. Farah remarked that even if the headmaster was not encouraging, this could beat the snout from one's credentialed development. Farah's opinion of the significance of management of the organisation mirrored in her remarks that focused on the headmaster's direct effect on a teacher's commitment to keeping innovating. In conclusion, Farah cited personnel, management styles, regulations, and administration as obstacles to the institution-wide expansion of the creative teaching process. Undoubtedly, there seemed to be institutional idiosyncrasies that limit the use of ICT.

Nevertheless, this would not imply that she adhered to the scheme precisely; she noted that she was more adaptable than the current teaching period

required a deviation. Farah might utilise technologies to keep students interested and attribute her capacity to maintain subject matters more intriguing to her improvisational skills. Farah, an avid teacher, discussed her intention to develop teacher development and her belief that the activities helped her to innovate her pedagogical practices. Farah thought that developing communities and exchanging information could improve education. She expounded:

*“Teachers are fortunate to be in this position (in the education field) where we are free to experiment and be innovative. And even if it does mess up, that's not a problem. And I feel that others with whom I've collaborated in the past could consider that it should be invigorating since I think that most of the time, we brought things somewhat more heavily.” (Farah. Interview. 2022. 9)*

She had the demeanour that mistakes were an inevitable and necessary part of the learning process. This attitude was brought into further focus whenever she observed that perfectionism was something she had never struggled with. She was highly content and at ease with the fact that everything was imperfect and they might have failed. This remark proved that Farah's perspective as a teacher was intimately connected to her status as a student. She offered greater insight into her learner-centred pedagogical style by acknowledging the complexities of the learning experience and valuing the diversity of her students.

When Farah explained how she determined whether or not a piece of technological advance was valuable, she displayed her rationality and ability to use discernment in her thinking. She admitted that if a type of emerging technology were too complicated for her to operate, she would stop utilising it since Farah referred to her method as a quick modelling method and clarified that she would spend half an hour observing how much she could perform and gauging the steepness of the learning curve. Farah explained that if she concluded that the technology could be utilised in actual practice, she would invest in understanding the whole instrument. This indication demonstrated Farah's level-headed approach to evaluating cutting-edge emerging advancements and her mental readiness to withdraw from technology if she did not have an affinity for it. In general, it seemed that Farah was in a good position in this field and could use contextual cues in this sector.

## DISCUSSION

These research findings indicated that the participants commonly experienced a persistently high level of technology knowledge development. The application of TPACK help EFL teachers to develop their skill to provide learning with many noteworthy aspects, including multimodal learning (Drajati et al., 2018), motivation and engagement, assessment, feedback, adaptation, and communication between the household and the school (Tseng et al., 2020). This research finding is in line with Drajati et al. (2018), who exposed that technology



facilitates teachers in promoting multimodal-based teaching to students. Learning with many modes increases student motivation in learning because knowledge is obtained from various learning sources.

Based on the results of observations and interviews about technology knowledge, both participants showed confidence in practical teaching situations and learning plans. It confronted Demeskant's (2022) study that there was a significant difference in terms of confidence in integrated technology for teachers who teach in different demographic characteristics. In this study, both teachers showed confidence in implementing technology. The underlying point that pursues teachers to use technology is not teachers' confidence but the availability of adequate tools to apply technology and the ease of using it. Since the pandemic, teachers have been demanding to facilitate learning in online environments, and this condition forces them to upgrade their technology literacy. In this situation, teachers tried many mobile learning applications for their teaching target since the mobile application were learning tools which could be accessed easily by the students in distance learning. Hossain (2021) argues that using mobile devices regularly has an effect on teachers that has a solid and significant association between the TPACK constructs and continuation intentions. In line with it, Hsu & Chen (2021) also identified teachers' rapid use of mobile devices during distance learning since it assists the teacher in improving students' performance.

From TCK perspective, they provided students with digital instructional materials that allowed them to study the subject matter better. They empowered students to tackle genuine challenges by utilising digital resources and technologies. They used specialist software to research their teaching subject and used relevant technologies (e.g., simulation, multimedia resources) to integrate ICT into the subject matter of their instruction. There was a separation between teachers' perceived importance of technology-integrated activities and actual integration, a persistent barrier that continued to challenge teachers' technology integration and three critical attributes (Christopoulos & Sprangers, 2021; Scull et al., 2020). The three critical attributes were the necessity of integrating technology into the teacher's teaching process, the contrast between teachers' perceived importance of technology-integrated undertakings and actual incorporation, and the participants' beliefs (Karchmer-Klein & Konishi, 2021).

Dealing with TPK, they employed technological means for elucidation. They introduced their students to practical situations using advanced technologies. They leveraged technology to increase interaction with students. They used technology to enhance instructional activities and foster students' use of available technology to develop diverse knowledge representations. It is similar to Ni Dhuinn & Ann Garland (2022) and Syamdianita & Cahyono's (2021) study, which found claimed that students were able to feel comfortable and confident enough to engage, articulate themselves, and contribute to the module thanks to the provision of multiple points of engagement and tasks for students,

which could be completed in either synchronous or asynchronous manner. The teachers tried to seek learning applications that provide similar situations with the real learning situation for their students' language knowledge improvement. This is in line with Drajadi et al. (2021), who argued that learning applications which serve authentic material and describe real-world tasks to explain phenomena in a natural context could improve students' achievement since the students could build their knowledge by practising using those ideas in real-life contexts.

For TPACK, they explained clearly the combination of material and suitable instructional methodologies through multiple technologies in their classroom. ICT-appropriate assignments help students make sense of content knowledge (e.g., simulations, web-based materials). It was likely affected by their experiences when they taught the material through laptops or smartphones. It was similar to Aniq et al.'s (2022) finding that teachers were accustomed to giving equitable access to digital tools and resources for language learning since they engaged in multimedia training forums to investigate innovative uses of emerging technologies to enhance learning outcomes. It informs our efforts to encourage digital communication technologies in educational settings. (Zhang & Chen, 2022)

Furthermore, policy uncertainty under COVID-19 provided a dilemma that caused a decrease in non-technology-related knowledge fields. The indefiniteness regarding the quality of their content knowledge, pedagogical knowledge, and pedagogical content knowledge caused teachers' anxiety in the educational establishment (Aslan et al., 2020). It was uncontradicted with Anderson & Kyzar's (2022) findings that the various levels of student involvement, student contributions throughout online and offline components of the module, and how the overall module design positively influenced both students' motivation and academic results.

They added that teachers' nervousness stemmed from the fact that they faced a transitional period of two years of virtual teaching during which they would not interact with students and would frequently be assigned individual research in replacement of classroom instruction. It demonstrated that neither Maya nor Farah mastered a more profound knowledge of the subject matter of their lesson (CK). Several times, they sidestepped the material's genuine debate. At first, they established a pleasant classroom environment and fostered positive relationships between students and the instructor (PK). It seemed they did not assist students in active group conversations. They relied on technology to facilitate constructive discourse about the subject matter and stimulate their students' brains through periodic tasks (PCK).

The research provided a contextual description of teachers' readiness to adopt and adapt from one particular policy to another. Due to the era's development and uncertain challenges in the future, shifting educational policy to get better human resources is inevitable for an extended amount of time.

However, before regulating a new policy, the government's attempts to provide the equality of teachers' readiness and ICT infrastructure quality must be guaranteed. These teachers' voices also may become cross-reference as a material consideration for determining the next policy direction.

This research had limitations in several essential respects. To begin, it was also debatable how accurately a six-month observational period reflected their upcoming instruction and how broadly applicable the methods in issue were. After that, the fundamental shift of this research concentrated on the more general aspects of TPACK, including whether or not the use of advanced technology was intended and by whom it was anticipated that - it would be utilised. It is possible that the exploration of technology use, in the manner that it was presented here, is too broad and too general to detect substantial changes. After that, the analyses were not based on overarching subject categories to concentrate on a large enough number of teachers. Future studies are encouraged to investigate the relationships between self-reported TPACK, more objective TPACK measures, other types of ICT integration assessments, and how the concepts may alter depending on the introductory course.

## CONCLUSION

This study examined evolving themes of teachers' TPACK practices during policy transitions. Due to the educational policy shifts, academic establishments should adjust the requirement of educational policymakers. The unexpected switch to distant learning pushed them to alter their styles and employ appropriate information to fit the unpredictable conditions. Maya's and Farah's stories indicated that both participants shared a persistently high level of technology-related knowledge domains, followed by a deterioration of the quality of non-technology-related knowledge domains. The uncertainty regarding the quality of their content knowledge, pedagogical knowledge, and pedagogical content knowledge causes teachers' anxiety in the educational establishment. This study provided illustrations of the execution of the root of education that the government should do. However, research limitations covering research duration, amounts of participants, and narrow seven domains of TPACK interpretation may be covered by future researchers.

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