RESEARCH

Open Access

Scenario-based classroom context mode: reshaping non-native teachers' decision-making and pedagogical reasoning



Sam Saeedian^{1*} and Ata Ghaderi²

*Correspondence: saeediansam1@gmail.com; ssaeedian@sina.tums.ac.ir

¹ Department of Foreign Languages, TUMS International College, Tehran University of Medical Sciences, Tehran, Iran ² Department of English Language and Literature, Faculty of Foreign Languages and Literatures, University of Tehran, Tehran, Iran

Abstract

Teacher decision-making and pedagogical reasoning have been extensively investigated in the last two decades. However, there is a scarcity of research that examines the two constructs together in one single study. This study was an attempt to address this gap by implementing a teacher education course using the self-evaluation of teacher talk (SETT) framework that aimed to reshape the decision-making and pedagogical reasoning of ten non-native teachers. Data were collected over a 10-week period through Camtasia, which facilitated video-stimulated recall sessions. Conversation analysis was employed to analyze the interactions in classroom context between the learners and the novice teachers and the interactions between the novices and the first researcher-as-a-participant or experienced teacher. The findings showed that the novices relied on the SETT-oriented metalanguage to justify their decisions after the teacher education course (POST-TEC). In addition, although in the PRE-TEC phase, they lost their temper and codeswitched because of frustration when facing learners' reticence, they used a number of useful interactive decisions such as avoiding teacher echoes and on-the-spot corrections during discussions in the POST-TEC. It can be concluded that examining the SETT modes separately contributes to our richer understanding of classroom discourse, as each mode has its own specific pedagogic goals that teachers should pay attention to in their classroom decisions. Suggestions for further research and implications for making the decisionmaking and pedagogical reasoning of language teachers more explicit are provided.

Keywords: SETT framework, Classroom context mode, Teacher decision-making, Pedagogical reasoning, Video-stimulated recall

Introduction

Teachers' decision-making with its pervasive and unconscious nature frequently affects teachers' professional life (Krepf & König, 2022). It can be viewed as the embodiment of the teaching skills and strategies that the teachers have acquired throughout the course of their professional development (Silver et al., 2019). Owing to the nature of teaching, teachers permanently encounter such classroom situations in which they are obliged to make online and on-the-spot decisions (Stefaniak et al., 2021). The importance of classroom decision is so crucial that Brumfit and Rossner (1982, p. 229) categorized it as the



© The Author(s) 2023. Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http:// creativecommons.org/licenses/by/4.0/.

base or the constituent of their proposed 'decision pyramid' without which there would "be no apex." Teacher decisions are also indirect indicators of their cognitive processes and pedagogical knowledge which can have substantial effects on student learning (Shulman, 1987; Stefaniak et al., 2021). In this study, decision-making refers to the decisions made by novice English as a foreign language (EFL) teachers throughout the class time. The term 'online' decision-making, meaning all abrupt or pre-planned decisions made by teachers whilst teaching, has also been interchangeably used instead of decision-making throughout the study.

Closely connected to decision-making is another term called pedagogical reasoning by Shulman (1987). It is regarded as a process and is beneficial from two aspects: (a) it can make for changes in understanding, and (b) it can be a platform on which teachers can base their knowledge base. This process encompassed six phases, namely (a) comprehension, (b) transformation, (c) instruction, (d) evaluation, (e) reflection, and (f) new comprehension. In line with Shulman's (1987) definition, in this study, pedagogical reasoning is considered as a process consisting of all six phases. An attempt was made to keep track of the development of the novice EFL teachers in terms of the phase they were in at the outset of the study and the one they concluded with.

A number of studies have investigated teacher decision-making (e.g., Krepf & König, 2022; Riley, 2019; Siuty et al., 2018) and pedagogical reasoning (e.g., Masinire & Rusznyak, 2018; Rainey & Storm, 2021) independently from each other. However, only a few studies in which the two concepts were scrutinized in conjunction (e.g., Khatib & Saeedian, 2021a, 2021b; Martin et al., 2017) can be found. Despite the relatively substantial literature on the two constructs, the lack of research exploring them jointly seems like a blind spot in the knowledge base of teacher education. The exigency for further inquiry into this domain becomes more pronounced in light of the fact that these two concepts are inextricably linked to each other (Forkosh-Baruch et al., 2021; Stefaniak et al., 2021). Pedagogical reasoning stems from "what teachers know, believe, and think" (Borg, 2003, p. 81) and as such it affects the decisions they make in their instruction. Therefore, studying teachers' classroom decision-making and their pedagogical reasoning for those decisions is essential for improving the teachers' understanding of their thinking and instructional practices.

To improve such an understanding, teachers can take the lead and start moving toward their own development. Teacher development has a personal dimension (Akiri & Dori, 2022; Watkins et al., 2021), and the importance of self-initiated professional development for teachers has been underscored by Shen and Bai (2019), who asserted that the teachers in their study were not equipped with effective education and represented a felt need for professional development to reach an acceptable level of effective pedagogy (; Huber, 2012). Self-directed professional development enables teachers to gauge their success, identify the areas of their achievement, and create opportunities for personal development (Everard & Morris, 1985; Pella, 2015).

While there are a few instances such as Coombe et al. (2007) and Howard and Donaghue (2015), Borg and Edmett (2019, p. 656) argue that "research on teacher education is not widespread." Therefore, this study was a step toward bridging this identified gap. In addition, to bring in more novelty concerning the role of teacher evaluation in developing novice EFL teachers' pedagogical reasoning and decision-making, Walsh's (2011) self-evaluation of teacher talk (SETT) framework was implemented in the study. Despite the clearly defined nature of the SETT framework, there remains a noticeable paucity of research coping specifically with its pedagogic goals and interactures (interactional features), either in part or as a whole. A search of the literature on the topic of this framework indicates that SETT has received considerable attention (e.g., Saeedian, 2022; Skinner, 2019; Walsh, 2006a, 2006b, 2011), but few records of previously published articles focusing on restructuring novice teachers' classroom decision-making and pedagogical reasoning can be found (e.g., Derakhshan et al., 2023; Khatib & Saeedian, 2021a, 2021b).

All in all, this study investigated how novice Iranian EFL teachers' classroom decision-making and pedagogical reasoning develop regarding pedagogic goals and interactures of one of the SETT modes, namely classroom context mode, which has not been examined so far. The classroom context mode is where meaning and function prevail over form and the students find a space to engage in negotiation of meaning. The teacher grants his agency to the learners and allows them to take charge of their learning. In this context, the teachers' actual pedagogical reasoning and decisionmaking before and after the teacher education course (PRE- and POST-TEC) were identified. The study, then, aimed to chronicle what the teachers decided to do and why they decided to do so at the beginning of the study so that it could be later compared with the development they made at the end of the teacher education course. The teachers' actual decisions are assessed through video vignettes of their own realtime classroom instruction. This method of classroom interaction analysis is referred to as scenario-based analysis, and it is eminently useful in raising the teachers' consciousness of their own actual practice in the classroom. By observing the real scenarios, the teacher finds a meaningful opportunity to identify points of improvement while also benefitting from the expert mentoring of the teacher educator.

Literature review

Self-evaluation of teacher talk

The SETT framework, whose basis is on teacher talk, contends that a lesson stage (e.g., classroom initiation stage and teaching vocabulary or content) can severely impact its pedagogical purpose and accordingly proposes four modes, each with their specific distinctive 'fingerprints' (to use the term from Seedhouse, 2005). Seeking to actualize this potential practicality of the framework, all of the four modes, along with their pedagogic goals and interactures were involved in investigating the professional development of novice English teachers' pedagogical reasoning and decision-making in this study (Hobbs, 2013; Li & Dervin, 2018).

Although the modes are simply representative, and not comprehensive, the adaptability of the framework renders its use quite feasible in local contexts (Walsh, 2011). After many years of research on language teaching and learning, it is now a widely accepted maxim that there is no single fixed second language (L2) context; instead, both teachers and learners engage in the co-construction of meanings and the local context (Lantolf & Thorne, 2006), which is "transformable at any moment" (Drew & Heritage, 1992, p. 19).

Classroom context mode

Classroom context mode seems to be in total contrast with skills and systems mode, which has already been explored by Saeedian (2022), inviting other scholars to elaborate on the modes separately. The power of agency shifts from the teacher to the local context in classroom context mode. Turn-taking and competition for holding the turns are mainly controlled by learners. In a similar vein, topic selection is managed by the learners in accordance with the local context (Jacknick, 2011). The teacher loses his dominance, which provides learners with the opportunity to manage all the required interactional space. Referential questions, for which the teacher seeks an answer because he does not really know it, substitute for display questions. Overall, the pedagogical orientation refrains from practicing linguistic forms and is directed toward more genuine communication. The interactures in this context and their effect on student engagement were explored in Derakhshan et al. (2023). A comparison is also done between novice and experienced teachers. However, the study addresses neither the pedagogical reasoning nor the decision-making of the teachers and how they develop over the course of a TEC initiative. In fact, the researchers have included these considerations in their suggestions for further research.

As Table 1 illustrates, three pedagogic goals are to be achieved through classroom context mode. It initially aims to engage learners in a holistic way, focusing on enhancing their oral fluency based on their own desire rather than limiting them to their roles merely as learners (Walsh, 2011). It revives the spirit of clear self-expression in learners by motivating them to make their contributions without being worried about erroneous utterances (Waring, 2011; Waring et al., 2016). Establishing a classroom context is the final goal of this mode, which facilitates higher leaner engagement (Derakhshan et al., 2022a, 2022b). In this context, learners play a more prominent role, manage turn-taking, maintain a topic or change it while the teacher is simply supporting or listening to them.

Because this mode focuses on fluency, its most defining interacture is constructing more interactional space for learners by having more extended learner turns as opposed to shorter teacher turns. Learners' mistakes are generally ignored, and instead of focusing on correcting form-related errors, remarkably more weight is given to contentfocused feedback. Display questions are replaced with referential questions, which are genuine, and the teacher does not really know what responses learners might provide. This mode has two interactures in common with other modes. In line with 'materials' and 'skills and systems' modes, scaffolding is one of the interactures in this mode.

Mode	Pedagogic goals	Interactures
Classroom Context	To enable learners to express themselves	Extended learner turns
	clearly	Short teacher turns
	To establish a context	Minimal repair
		Content feedback
	To promote oral fluency	Referential questions
		Scaffolding
		Clarification requests

Table 1 Adopted classroom context mode of the SETT framework (Walsh, 2011, p. 113)

Clarification requests are also shared between this mode and the skills and systems mode.

Decision-making and pedagogical reasoning

Because teachers' decisions can have a substantial impact on students' academic achievement (Südkamp et al., 2014), and student achievement is the ultimate goal of all educational initiatives (Desimone, 2009; Johnson & Golombek, 2011), it is of high importance for teachers to participate in situations where they can reconsider and restructure their teaching practices, which in turn leads to more cogent decisions (Smith & Loughran, 2017; Xu & Stefaniak, 2023). Decisions are thus affected by teachers' teaching practices (Asghari et al., 2022), and these practices are affected by how importantly teachers view their own roles as "agent(s) of change" or "decision maker(s) in the classroom" (Yoshida, 2011, p. 144). The former coveys a promising message in that it stipulates the idea that it is *teachers* who decide to take a forward or backward step toward their own professional development. The latter, while being influenced by how the first role is played, concerns the "students' learning experiences and educational trajectories" (Südkamp et al., 2014, p. 5), meaning that teachers' decisions can directly have a constructive or detrimental influence on the path a student undergoes.

One of the "central aspect(s) of teacher cognition," Richards (2011, p. 19) stated, is teacher pedagogical reasoning. Through exemplifying, he justified how teachers could use pedagogical reasoning to pave their own way in fulfilling such tasks as evaluating the content of a lesson and setting special goals to be achieved upon completion of that lesson (Berliner, 1986). In addition, the same was done to fulfill predicting potential problems that may occur during teaching the lesson and making cogent contextsensitive decisions to conduct the lesson and overcome those problems (Bailey, 1996; Harmer, 2007; Sliver et al., 2019). Such teacher reasoning has been studied in Watkins et al. (2021), for example, to show how teachers viewed the pedagogical process in their classes. However, the data in this study comes from only two teachers. Besides, although the study employs real teaching scenarios in the interviews conducted with the teachers, the decisions teachers make are not analyzed and this provides a limited view of the actual pedagogical reasons the teachers report.

Pedagogical reasoning initiates with *comprehension* and terminates with *new comprehension* after passing through four other phases. The first step to teaching is understanding the content of the subject matter, preferably in different ways, and having the ability to link a specific idea to other ideas within and beyond the subject area in question. Understanding the content does not merely lead to having a knowledge base in teaching, though. Understanding the underlying purposes why that content is taught is deemed to be essential as well. In fact, there are some 'to' verbs for teaching. For instance, we teach to achieve educational goals, to assist students to develop literacy, to improve our own practice skills to reach excellence, and so forth. A combination of comprehension of *content* and *purposes* fails to guarantee the knowledge base and to differentiate "a teacher from non-teaching peers" (Shulman, 1987, p. 15). The key to solve this problem, thus, lies in Shulman's (1986) highly cited paper, where he stated that content (what is known) and pedagogy (how to teach it) need to be embodied as they are integral parts of understanding. This coalition enables a teacher to transform the content into "pedagogically

powerful" forms (Richards, 2011, p. 20) that are tailored or tuned to the students' level of proficiency (Forkosh-Baruch et al., 2021).

Central to the pedagogical reasoning model is new comprehension, which is commonly called "the "aha" of a moment" (Shulman, 1987, p. 19). The concept of the '*aha*' moment has found its way in research on the purview of teacher education (e.g., Caniglia et al., 2017), where it is considered a "form of reflective practice" (p. 55).

In conclusion, although Shulman's pedagogical reasoning model is a valuable framework based on which teacher educators become aware of the way decisions are made (Starkey, 2010; Watkins et al., 2021), caution should be exercised when using this model. Presenting the aspects of the model in sequence should not be interpreted as a rigid plan to follow. In fact, there is no hierarchy among these aspects; each is equally weighted and preferred, but their appearance or non-appearance depends on acts of teaching. In light of the aspects of teacher decision-making and pedagogical reasoning that need more investigation, the following research question guided this study.

How does engagement in the SETT-based teacher education course reshape novice Iranian English language teachers' decision-making and pedagogical reasoning?

Method

Design

While being qualitative, the study benefitted from pre- and post-design with a treatment phase in the middle. In other words, it enjoyed a causal design in which the researchers observed how the independent variables (i.e., SETT) impacted on the two dependent variables of decision-making and pedagogical reasoning.

Participants

The participants of this study consisted of novice EFL teachers who were teaching in a private English language institute in Kurdistan, Iran. According to a purposive sampling strategy, that is recruiting participants who will be most useful in answering specific research questions to gain in-depth insights into the topic, 12 teachers who met the desired criteria and agreed to contribute to the study were initially identified. However, two of these teachers had to stop their collaboration due to quitting their jobs and the lockdown of their institute caused by the Coronavirus pandemic. In line with Farrell (2012) and for the teachers to be identified as novices, only those with fewer than 3 years of teaching experience were chosen to take part in this online-based study. Also, the first researchers, who had more than 10 years of teaching experience, was closely in touch with the participants, collected the data, and taught the SETT-based TEC. Therefore, he is sometimes referred to as an experienced teacher. In this regard, Nassaji (2020) stated that A basic characteristic of qualitative research is the issue of researcher positionality, which requires researchers to maintain an active role throughout the study. As indicated in Table 2, the participating teachers were between 19 and 25 years old. With regard to teaching experience, two of the teachers had been teaching for over a year when the study began, while the others had entered the profession for no more than

Participants (age)	Gender	Experience (years/months)
Researcher (30)	Male	10 years and 6 months
T1 (25)	Female	1 year and 9 months
T2 (22)	Female	1 year and 2 months
T3 (22)	Female	8 months
T4 (21)	Female	4 months
T5 (20)	Male	8 months
T6 (20)	Female	8 months
T7 (20)	Male	5 months
T8 (19)	Female	7 months
T9 (19)	Female	4 months
T10 (19)	Female	4 months

 Table 2
 The demographic information of the teacher participants

8 months. Eight of the teachers were female, and two of them were male. In order to observe the codes of ethical research, all the aims and procedures were clarified for the teachers before the study began, and their written consent was sought. Furthermore, to ensure that their identity remains confidential, teachers number 1-10 will be referred to as T1–T10.

Instrumentation (instruments and materials)

In order to collect the required data, three instruments, namely teaching scenarios for the classroom context mode, classroom observation, and video-stimulated recalls were utilized. Furthermore, the SETT framework, described by Walsh and Mann (2015, p. 357) as an "ad hoc self-observation" instrument, was employed throughout the data collection. The three pedagogic goals of the classroom context mode on the SETT framework were the main source to design the teaching scenarios.

Teaching scenarios

The researchers meticulously used the three pedagogic goals of the classroom context mode of the SETT framework to design the teaching scenarios. To ascertain that the content of the scenarios aligned with the articulated pedagogic goals, the comments highlighted by the three experts (i.e., two Associate Professors and one Full Professor in Applied Linguistics at one of the universities in Tehran, Iran) were applied. The experts offered to combine the scenarios so that they matched the pedagogic goals of the mode. This led to reducing redundancy and making the scenarios more comprehensive and reflective of the specified pedagogic goals. Therefore, although there were ten teaching scenarios at the beginning for this mode, the number decreased to five.

Classroom observation through Camtasia

The first researcher observed each teacher's class for four sessions (2 weeks) before and 12 sessions (6 weeks) after the teacher education course. As there were 10 novice EFL teachers in this study, an overall 160 sessions were observed. The data collection was completed in 10 weeks; 8 weeks for recording and analyzing the observations and 2 weeks for the teacher education course. Two sessions of each single teacher's class were

observed weekly and, on the weekend, a private online session was managed with that teacher to deal with the observed classes to check the teacher's pedagogical reasoning. Thus, there were eight one-on-one sessions (two in the PRE-TEC and six in the POST-TEC) during the process of data collection with every single teacher to see the pedagogical reasoning of each teacher for the specific decisions actually made in the classroom.

For the purposes of classroom observation, the teachers' classes, which were all online and held on Google Meet and/or Skyroom, were audio- and video-recorded by Camtasia, a powerful screen recording software program developed by the TechSmith Company. Camtasia has aided the process of research in a variety of classroom contexts (Smith & Smith, 2007), especially in English as a second language (ESL) classrooms (Gromik, 2007), and it is available for use at http://www.techsmith.com/camtasia.html. With a large number of affordances and a user-friendly environment the software provides, it will prove valuable for future EFL classroom research (Dewi et al., 2020). In fact, the need for video-assisted second language teacher education (SLTE) programs has been called out by Hüttner (2019), who states "there is a surprising dearth of structured integration of video in teacher education programs" (p. 483). In the same vein, this study benefited from video-stimulated recalls as a powerful tool of data collection (Gass & Mackey, 2000; Mann & Walsh, 2017). As Martinelle (2020) and Yuan et al. (2022) suggest, these videos can be employed as a methodology to aid teachers in their effort to recall the pedagogical decisions they made and to reflect on those decisions (Allan, 2018).

Video-stimulated recalls

Stimulated recalls, which are the same also called "*postprocess oral observation*" and "Retrospective reports" by Gass and Mackey (2000, p. xi, italics original), were employed to gather the data. It is gaining increasing advocacy in research on the purview of the L2, in general, and on the area of SLTE, in particular (Borg, 2003). In stimulated recalls, teachers are engaged with their own real performance (Gass & Mackey, 2000).

Data collection

Prior to data collection, the participants were contacted to ensure if they agreed to participate in all phases of the study. Upon the participants' agreement and receiving their consent form, the researchers compared their actual PRE-TEC decisions and reasons with their POST-TEC decisions and reasons. Through this comparison, the teachers' development regarding their instructional decision-making and pedagogical reasoning could be traced.

As Table 3 shows, upon discovering the teachers' PRE-TEC actual decision-making and their possible pedagogical reasoning, the TEC phase was run for 2 weeks. One 5-h

Participants' pseudonyms	The data collection time and number of sessions* observed			
	PRE-TEC (2 weeks)	TEC (2 weeks)	POST-TEC (6 weeks)	
T1-T10	4 sessions	4 sessions: each session for one mode	12 sessions	

Table 3 Overview of the collected data

*Every session took 90 min, and each teacher's class was observed biweekly

session, including its two 20-min breaks, was dedicated to classroom context mode and its details so that the participants could fully master the mode and distinguish it from the others. The teachers were also provided with some tasks in which the discussed mode was reflected. These tasks were mainly videos extracted from the teachers' own teaching practice.

Data analysis

To answer the research question, the PRE-TEC observations were analyzed to reveal the teachers' actual decisions. While benefitting from stimulated recall sessions, the researchers analyzed the teachers' pedagogical reasoning for their decisions that they made during their observed classes through conversation analysis (Rädiker & Kuckartz, 2020).

Table 4 was employed to make the data collection more systematic. The PRE-TEC observations were analyzed to see what decisions the teachers actually made. Thus, without any need for novice-experienced interactions, the teachers' decisions were already revealed. Through replaying these cut scenarios in which the teachers' actual decisions were represented, the interactions between the novice teachers and the experienced teacher were formed. From this part, the study benefitted from conversation analysis to uncover the reasoning behind each decision made by the teachers. Walsh's (2011) study in which he found four classroom modes, was consulted to make this part more systematic, make comparisons between the teachers' PRE- and POST-TEC decisions and reasoning possible, and more importantly, facilitate the pathway of their development in these two concepts. In fact, by doing so, the researchers determined whether the teachers' decisions rested on the four modes, more specifically classroom context mode, and in what phases the teachers made important decisions.

The researchers followed Rädiker and Kuckartz's (2020) advice regarding showcasing the key points of interactions in preference to writing them word-by-word to make the analysis plausible. Of course, a number of verbatim transcriptions of the interactions between the novice teachers and the experienced teacher have been mentioned to help justify the findings (more will be provided to interested readers upon request).

Interacture	Examples from the recording (Time)	Your decision at this interacture	Your reasoning at this interacture	To what extent do you think that your use of language and pedagogic purpose coincided?
A. Extended learner turns				
B. Short teacher turns				
C. Minimal repair				
D. Content feedback				
E. Referential questions				
F. Scaffolding				
G. Clarification requests				

Table 4 Identifying interactures of classroom context mode and rationalizing the decisions

Results

After receiving the three experts' recommendation, we reduced the number of scenarios to five. These scenarios were in line with the pedagogic goals of classroom context mode. Two scenarios were assigned to the first two goals, but the third goal was reflected only in the third scenario of the mode. The POST-TEC findings of the first scenario revealed that all of the teachers in some parts of a single session prepared the stage for the learners to discuss a topic and relate it to their own real life. When the topic was set, the learners could be seen grabbing and holding the turns for a longer time, offering the stage and retaking it, and subsequently, shorter turns from the teachers could be observed. They were all in favor of what they were performing and considered extended learner turns as the most desirable point of their own class. They argued that the more such learning opportunities were provided for the learners, the more their learning would be facilitated.

Other pertinent interactures such as no correction of the learners' ill-formed utterances or lack of form-focused feedback could be noticed in this scenario as well. Where the learners failed to continue the discussion, they were asked some referential questions so that the challenge would be reheated. The teachers believed any further interruption than making use of referential questions would lead to shortening the learners' turns, which shows they knew what they were doing and why. Not all their utilized interactures were germane to the mode, however. They also used some signposts or discourse markers (e.g., OK? aha? ...) with a rising intonation, claiming that they were inviting the learners to extend their turns and minimizing their own turns as much as possible. T4 stated that instead of asking the learners to "*tell me more examples*," "I only said ok? it means I need more... tell me more and my TTT becomes less and less". She preferred the latter sentence for two reasons: (1) to avoid extending her own turn and (2) to open more space for the learners. This decision can be regarded as a step toward professionalism because the teacher was aware of the possible effects it will have for student learning.

In another attempt to empower the learners to express themselves clearly, the fourth scenario was designed to check the teachers' reactions when the learners produced short, albeit accurate contributions. The number of referential questions being asked from the learners increased to a great extent when this was the case. The teachers mainly asked such questions as "what do you mean by that? [T1, T2, T3, T6, T8, and T9]," "Can you explain more? [T1, T3, T4, T5, T6, T7, T8, T9, and T10]," and "Can you say why? [T5]" for which they did not know the answer. These could also be regarded as clarification requests as they were asked when the teachers were not satisfied with the learners' amount or quality of contributions. The use of these questions was a reassuring way for the teachers to minimize their own turns and extend those of the learners. Although it could be assured that the learners extended their turns through these questions, it was only through scaffolding that the teachers ensured that the learners could express themselves clearly. Sometimes the teachers went for reformulating the learners' output instead of asking them to rephrase their utterances and rationalized their decision by not getting the type of response they expected. Sometimes they modelled one response, especially when one topic was chosen and some ideas extracted from the learners' minds were jotted down on the board, but the learners failed to use the ideas in their own sentences. Finally, they sometimes extended the learners' contributions when they failed to discuss the topic under consideration the way the teachers expected.

In excerpt 1, having instructed comparative and superlative adjectives and all the related exercises in the book, T10 asked the learners to personalize the topic and discuss three items of one product they favored more. They all did so, but here S1's contribution was analyzed as she initially sufficed to mention a short response, but thanks to the teachers' clarification requests and scaffolding, she included almost all the instructed points regarding the use of the two types of adjectives.

Excerpt 1. Empowering learners to clearly express themselves in classroom context mode in the POST-TEC

20	E:	(after watching the video playback) as we just saw
		er this video was exactly a reflection of the scenario. How do you evaluate your own performance? Do you think what you did was good?
21	T10:	well, yes you're right. well at first, Zhino (the learner's
		name) just said PS3 (PlayStation) is not convenient, and PS4 is more convenient, and PS5 is the most convenient but I needed more because it wasn't enough
22	E:	ok, good; how did you show that you needed more?
23	T10:	(watching the video playback again) look here I said
		and? and the student also talked about the differences between the PS3, PS4 and PS5 (2) about intelligence and look she said her memory of using these three she talked about the intelligence of PS4 and she said
24	S1:	it is more intelligent (mispronounced) than PS3 (3) I
		can remember that when I bought PS4, I plugged the PS3 controller into that and it said it is PS4 not PS3! don't plug PS3 controller there into PS4 (laughing) and it was funny and I said you are so intelligent
25	E:	good. it was a nice example. but why did you ask her to
		speak more because she had already said three accurate sentences and had used the grammar (2) accurately?
26	T10:	you're right. She said some accurate sentences but I needed
		more connections of this grammar to their real life and because I knew how interesting it was you know she talked about her idea about those PSs (laughing because he wasn't sure of the plural word), I thought it was a good moment to ask her to speak more so (2) I tried to ask her to speak more

In excerpt 1, T10 made use of a simple and short clarification request, namely *and?* in (23), and observed its significance in extending the learner's turn in (24). The teacher's demand for this more extended learner turn happened despite S1's accurate and even long response, which included three sentences about her favorite game counsel. Prior to asking her the clarification request, the teacher carried a pedagogic goal (i.e., *I needed more connections of this grammar to their real life*), to which he linked his use of the interacture. The use of this short interacture demanded that the learner regain the floor and keep it for a more prolonged time. More importantly, the teacher's effective use of the word *and?* was interpreted by S1 as a call for a more elaborate response, which was truly indicative of her real feeling when she was expressing the words as she burst into laughing at the time of expressing her opinion (in 23). This accounts for T10's successfully fulfilled pedagogic goal, namely empowering the learner to express herself clearly, which was his reason for demanding that clarification.

The second and fifth scenarios were both reflective of the second pedagogic goal of classroom context mode, namely establishing a context for learners to extend their own turns. The second scenario dealt with learners' *unwillingness to continue the discussion*

at hand and how the teachers attempted to solve the learners' reticence. A number of useful interactive decisions were actually made by the teachers that helped engaging the learners who were not willing to take part in the discussion at the moment. These were thoroughly different from their PRE-TEC decisions, where frustration could evidently be visible through their lost tempers and codeswitches to their mother tongue. Very few teacher echoes, and even fewer types of corrections were seen. The teachers did not accept one-word responses from the learners and demanded them to extend their turns through the use of modeling, referential questions, and clarification requests like T8 in excerpt 2. Making use of referential question was the number one strategy employed by the participants when facing learner silence. When challenged by the experienced teacher for their frequent use of such questions, they argued that display questions were useful for improving accuracy, but the focal point at this specific scenario was fluency. Therefore, they were made aware of what they were performing and why.

In addition, through promoting modelling as a way to cope with the problem, they automatically dedicated some wait-time to the learners to ponder over their own sentences and reflect on those of their classmates. Interestingly, T3, T5, T7, and T10 declared that the learners did not have to worry about their response as there was no single right one for their discussion topic. They even made the learners more motivated to partake in the discussions by allocating a certain degree of their final score (i.e., class participation) to those who could challenge their peers. Although a number of grammatical and phonological mistakes could be seen, all teachers, except for T1 and T8, only provided a type of feedback that was related to the content or the words stated by the learners and ignored their grammatically and phonologically erroneous productions.

In excerpt 2, T8 had instructed present simple and a number of adjectives in an elementary class and aimed to get the learners to activate the tense and the lexical terms through discussion. Many of the learners did not show any willingness toward the selected topic mainly because they seemed to lack any ideas to support themselves. Although discussions are not mainly bound to some specific sentences, the teacher's strategic use of modelling, referential questions, and clarification requests contributed to engaging the learners in the discussion (i.e., extending learner turns and shortening teacher turns) as well as guaranteeing a certain degree of novelty among them.

Excerpt 2. Dealing with learners' reticence in classroom context mode in the POST-TEC.

E: what was your goal here?
 T8: I wanted them to speak more and discuss about... about their favorite course at school and use the grammar and vocabulary too, but you saw that they didn't speak... they just said simple sentences like my favorite book is X or Y =
 E: = but what you did was really great! I think, finally they spoke a lot
 T8: (smiling) oh thank you. yeah I used a sentence myself (she wrote I like...) and write it on the board but again they just said their subject so I added *because*... and said one example I myself then again (laughing) they just said the adjectives and =
 E: = I think it was good because they made longer sentences and correctly

lenging things

6 T8: but it was discussion and talk show and they should speak more so I asked them what do you mean? or for example here (replaying the related part in the video) why do you think psychology is interesting? then she said because I love the teacher we are friends and he says important things about life then another learner disagreed with her she said but teacher I hate psychology because =
7 E: = yeah sometimes unexpectedly a student says something that heats up the discussion but here I think you played a really good role (3)
8 T8: thank you a lot. this way is a good way that we learned in this course together (she means the TEC course) because in this way I know the students... use the correct grammar and words that we had in the unit and they also have some innovation if I (asking for the word in Kurdish) (4) take it hard on them or take it seriously and ask them why or even to say chal-

In this excerpt, T8 was aware of her own pedagogic goal in (2). She intended to both activate the grammar and vocabulary items they had just learnt and promote their fluency. Encountering the problem of reticence, the teacher attempted to establish the context by modelling (i.e., *I used a sentence myself*) so that the learners could cooperate more in the discussion. Tailoring her prompts to the learners' needs, she *added because* in (4) and even modelled one example to facilitate the learners' contribution. Although extended learner turns could be noticed at least theoretically (i.e., saying more than one utterance: *I like ... because...*), the teacher sought for help from clarification requests (e.g., what do you mean? and why do you think psychology is interesting?) where the learner's idea receives disagreement from another learner. This point is regarded as the climax of the excerpt as it contributed to the learners' extended turns, all expressed through their true feelings. Finally, the teacher defended her decision in (8), where it could be implied from her remarks that that modelling leads to learner extended turns provided the teacher uses clarification requests too.

The idea of topicalization or *bringing up a new topic by a learner* shaped the heart of the fifth scenario. This was also an attempt to see how the novice teachers reacted to the often-abruptly brought-up topics by the learners, which are mostly not within teachers' lesson plans. Like the PRE-TEC phase, most of the teachers gave special weight to such cases by welcoming the idea proposed by the learners. T4 and T6 reasoned that such topics increased the learners' willingness to participate in the self-initiated discussions. T2 and T3 underscored the value of such cases by claiming that the learners were not called upon to cooperate in the discussion. For T1, T5, T7, T8, and T9, true emotions, expressed through either laughter or a high degree of seriousness, were what made them settle on allowing the learners to build upon their own initiated topics. They contended that topicalization was a successful way that could help the learners express themselves as clearly as possible. Through this process, minimal teacher turns and extended learner turns were quite evident, and there was no need for the teachers to employ any specific interactures like extended wait-time or even clarification requests. This was mainly because the topic was naturally controlled by the learners who did not seem to need any incentives to keep the stage warm and the teachers had kept their own backstage and letting the situation go by.

The final pedagogic goal of classroom context mode was directed by how the teachers promoted the learners' fluency in speaking. The extracted videos reflecting how the teachers *dealt with mistakes or errors in discussions* shaped the third scenario of this mode. The analysis of video-stimulated recalls showed that eight of the novices did not

repair the errors produced in the discussions. Five of them did not provide any type of corrective feedback after the termination of the discussion time, but T2, T6, and T10 did so. When asked about the reason behind their decision, they stated that intermittent pauses amidst discussions would be interruptive and damage the flow of their production. This way they could secure the oral fluency of the learners to a great extent. The post-discussion evaluative comments for those three teachers were highly important owing to the time of their expression. They were offered after the discussion, so no damage faced the learners' fluency. T5 and T7, who did not differentiate the discussion time from activating newly instructed grammar or vocabulary items, provided both types of form-focused feedback and content feedback. While the former is not common at all in this mode, the latter is an engaging interacture that can help teachers gain their goal if it is to develop learners' oral fluency. T5 and T7's use of form-focused feedback at the heat of discussions showed that there was a divergence in the teachers' goal and their employed interacture, which could be regarded as a hindrance ahead of making the learners fluent speakers of English.

Discussion

This study sought to both shed more light on the literature of the framework and also employ Walsh's framework in novice EFL teachers' pedagogical reasoning and decision- making to see how these two concepts got reconstructed. The findings of this study supported the effectiveness of using video-stimulated recalls in EFL classrooms. To be more specific, the classroom interactions, which specifically centered on uncovering the teachers' pedagogical reasoning, were guided by video-stimulated recalls that, in accordance with Pella's (2015) study, proved effective in this study too. Owing to its effectiveness in enabling the novice teachers to remember their real-world classroom decisions and paving the way for disclosing their pedagogical reasoning, videostimulated recall is highly suggested to be utilized in similar studies (Borg, 2003; Gass & Mackey, 2000; Hüttner, 2019; Mann & Walsh, 2017; Yuan et al., 2022).

Regarding classroom context mode, the teachers' actual PRE- and POST-TEC decisions and reasoning did not match each other in three of the scenarios. This could reflect the multifaceted nature of classroom decision-making (Siuty et al., 2018; Xu & Stefaniak, 2023) and the number of factors that are effective in changing the reasoning behind that (Smith & Loughran, 2017).

Although decision-making is regarded cognitive (e.g., Berliner, 1986), the findings of this study support those of Allan (2018) and Watkins et al. (2021), who reached the teachers' improvement under a specific offered treatment. After they had been familiarized with the SETT framework, the teachers seemed to act more professionally in their decisions and reasoning. The inclination of novice teachers to revise and restructure their situation-specific decisions as a result of training has also been corroborated by Krepf and König (2022). The findings of the study also suggested that the SETT framework is capable of making the L2 classroom interaction analysis more systematic. The growing interest in classroom discourse analysis can also be explained by this fact (Sert, 2019). In line with Huber (2012) and Li and Dervin (2018), who approved learning more systematically using a framework, our study also supported that Walsh's (2011)

framework was highly effective in the systematic analysis of the teachers' POST-TEC performance. The conversation analysis of the data showed the following findings:

Tackling the issue of reticence among the learners proved to be one of the principal concerns among the teachers. The second scenario in classroom context mode centered on this issue. Shifting from losing temper and codeswitching caused by frustration in the PRE-TEC phase to employing a number of useful interactive decisions in the POST-TEC indicated that the teachers succeeded in tackling the problem of reticence among the learners, leading to higher engagement in the learning process (Derakhshan et al., 2022a, 2022b). Developing a sense of professionalism and a higher degree of control over their temper and emotions is another notable outcome of the TEC initiative, which in turn culminates into greater work commitment (Derakhshan et al., 2022a, 2022b). The teachers' use of extended wait-time and referential questions and providing content feedback in the POST-TEC can be regarded signs of their professional development and are in keeping with the findings of Walsh (2011) and Saeedian (2022). This might be an explanation for more numbers of extended learner turns in the POST-TEC where the learners were initiators of the turns or showed student agency in controlling the turns. This was in line with the findings of Jacknick (2011) and Sert (2019) who both valued the situations brought up by the learners themselves.

The theme extracted from the teachers' performance on the fifth scenario in classroom context mode was topicalization or bringing up a new topic by a learner. Although there was no difference between the participants' decisions in the PRE- and POST-TEC phases, the way they defended their decisions enjoyed a more pedagogical flavor in the latter. In agreement with Waring (2011), Waring et al. (2016), and Walsh (2011), the teachers in this study stated that topicalization increased the learners' willingness to participate as there was no need to call them to cooperate in the self-initiated discussions.

The more we leaned toward the end of the study, the more naturalistically the teachers utilized the common technical language or metalanguage, so the use of metalanguage was another important finding. They had mastered most of the terms or learned them by heart, so they found using them more supportive of their instructional decisions when elaborating on their details. Consistent with the existing literature (e.g., Walsh, 2006a, 2006b, 2011), this finding showed that the teachers consciously used the appropriate SETT-oriented metalanguage, and through which they justified the changes in their classroom decision. It was thanks to the learned metalanguage that the changes in the teachers' way of self-reflection, their description of their PRE-TEC imaginary and actual decisions, and POST-TEC actual decisions and reasoning were meaningfully recorded. To put it more simply, the metalanguage, in agreement with Walsh (2006a, p. 136), helped the novice teachers "verbalize their understanding of key concepts". The evidence of being aware of SETT-based metalanguage, based on Walsh (2006a), can be reliably interpreted as turning into a teacher who is a more conscious decision-maker as well. The validity of this claim can be further buttressed if a comparison of the teachers' decisions and reasoning in the PRE-TEC is made with those in the POST-TEC. The impoverished nature of their decision-making and pedagogical reasoning owing to not having reliable metalanguage was evidently traceable.

A comparison of the PRE- and POST-TEC responses to the scenarios using conversation analysis could easily reveal that the teachers' way of expressing their reasoning underwent a dramatic change after getting familiar with SETT. This framework, as highlighted by Sert (2019), acted like a point of departure as their desire and confidence to keep their words even when challenged by the experienced teacher enhanced. This was even more revealing through a comparison made between their reaction to unexpected events. During the PRE-TEC, they mainly neglected such events, but turning them into learning opportunities by making a change in their lesson and creating magic moments, in line with (Walsh, 2011), Harmer (2007), and Bailey (1996), was the most frequent decision in the POST-TEC. The same was true of topicalization or bringing up a new topic by a learner, as another finding of the study, during these two phases.

Conclusion

This study aimed to discover actual PRE-TEC classroom decision-making and pedagogical reasoning of EFL teachers. It also sought to implement the SETT-oriented TEC to investigate whether it could reshape the two concepts in the practice of the EFL teachers. Classroom context mode as the fourth mode of SETT is directed by only three pedagogic goals. However, a total of five scenarios, as suggested by the three experts, were designed for this mode. The teachers' decisions and reasoning on four of the scenarios in this mode have been roughly different in the two examined times. The decisions and reasoning for the fifth scenario have been the same by seven of the teachers, though. Therefore, it can be concluded that there have been a much greater number of mismatches or discrepancies between the teachers' decisions and reasoning in PRE- and POST-TEC times. This justifies the necessity of running TEC to address these mismatches.

Based on the findings, it can be concluded that clarification requests from learners are not always obstructive for learning. They are completely context-bound; sometimes, they can lead to extended learner turns, so they are constructive and facilitative. Their hindrance or constructiveness is highly related to the (in)congruity of a teacher's immediate pedagogic goal. Teachers usually do not like to receive clarification requests from their students about the how-to-do instructions. Therefore, the use of stepwise teaching is highly recommended to provide clear and concise instructions that are easy to understand. However, teachers sometimes ask or are asked for the content or words that are used in the class, which in both cases it is creating learning chances for the learners in the real-world classroom context. These should not be confused with requests for howto-do instructions.

A potential limitation in this study is that because only some classes of each teacher were recorded, the totality of decision-making of a single teacher which happens in other sessions might not be known. The reports were based on the recorded sessions of the teachers. Thus, it is probable that one situation is not represented in one teacher's class during the recorded sessions. Another limitation to consider is the relatively few number of teachers that we had as participants in this study; future research can be conducted to examine the decision-making and pedagogical reasoning of a greater number of teachers. In addition, exploring the discrepancies between novice and experienced teachers in how they respond to expert mentoring using the SETT framework is likely to be a viable research direction in future studies.

Finally, the findings of this study can be used by language institutes or institute managers and language teacher educators. In their pursuit of development, all language institutes will face some situations when novice teachers apply for the job of teaching. These institutes are to hold short-term teacher training courses, which are not recommended by Hobbs (2013). These courses can be enriched through developing the teachers' awareness of the importance of their online decisions on constructing or hindering learning spaces for their students. This awareness can be accomplished through recording some teaching videos and analyzing them employing SETT interactures. The implication of this study for language teacher educators is making the whole process of SLTE as explicit as they can. Decision-making and pedagogical reasoning are unobservable concepts in themselves. Making them as explicit as possible is a burden that falls on the shoulders of language teacher educators. This action in this study was accomplished through making use of such tools as video-stimulated recalls, as highlighted by the findings.

Abbreviations

SETT	Self-evaluation of teacher talk
L2	Second language
EFL	English as a foreign language
PRE-TEC	Prior to the teacher education course
TEC	Teacher education course
POST-TEC	After the teacher education course
Interactures	Interactional features
SLTE	Second language teacher education
T1T10	Teacher 1Teacher 10
E	Experienced teacher or the researcher
TTT	Teacher talk time

Acknowledgements

We would like to cordially thank the dear teachers who participated in the study.

. .

Author contributions

Both authors have contributed in the process of getting the research done, but the corresponding author has run the teacher education course and analyzed the data. Both authors have read the final version of this manuscript.

Funding

We have not been awarded any grants or financial support from any external institutions.

Availability of data and materials

The authors confirm that the data supporting the findings of this study are available within the article.

Declarations

Competing interests

The authors report that there are no competing interests to declare.

Received: 4 June 2023 Accepted: 30 July 2023 Published online: 08 October 2023

References

- Akiri, E., & Dori, Y. J. (2022). Professional growth of novice and experienced STEM teachers. *Journal of Science Education and Technology*, 31(1), 129–142. https://doi.org/10.1007/s10956-021-09936-x
- Allan, C. E. (2018). Decision-making: A reflective journey of the lived experiences of experienced teachers [Doctoral dissertation]. Kent State University.
- Asghari, M., Alemi, M., & Tajeddin, Z. (2022). In-service EFL teachers' decision-making in classroom instruction: The impact of a teacher education course. *Journal of Foreign Language Research*, 12(4), 416–440. https://doi.org/10.22059/jflr. 2022.345439.965
- Bailey, K. M. (1996). The best laid plans: Teachers' in-class decisions to depart from their lesson plans. In K. M. Bailey & D. Nunan (Eds.), Voices from the language classroom: Qualitative research in second language education (pp. 15–40). Cambridge University Press.
- Berliner, D. C. (1986). In pursuit of the expert pedagogue. *Educational Researcher*, 15(7), 5–13. https://doi.org/10.3102/0013189X015007007

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, *36*(2), 81–109. https://doi.org/10.1017/S0261444803001903

Borg, S., & Edmett, A. (2019). Developing a self-assessment tool for English language teachers. *Language Teaching Research*, 23(5), 655–679. https://doi.org/10.1177/1362168817752543

Brumfit, C., & Rossner, R. (1982). The 'decision pyramid' and teacher training for ELT. *ELT Journal*, 36(4), 226–231. https://doi.org/10.1093/elt/36.4.226

- Caniglia, J. C., Borgerding, L., & Courtney, S. (2017). AHA moments of science and mathematics pre-service teachers. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 90*(2), 53–59. https://doi.org/10.1080/ 00098655.2016.1256745
- Coombe, C., Al-Hamly, M., Davidson, P., & Troudi, S. (2007). Evaluating teacher effectiveness in ESL/EFL contexts. University of Michigan Press.
- Derakhshan, A., Doliński, D., Zhaleh, K., Enayat, M. J., & Fathi, J. (2022a). A mixed-methods cross-cultural study of teacher care and teacher-student rapport in Iranian and Polish University students' engagement in pursuing academic goals in an L2 context. *System*. https://doi.org/10.1016/j.system.2022.102790
- Derakhshan, A., Greenier, V., & Fathi, J. (2022b). Exploring the interplay between a loving pedagogy, creativity, and work engagement among EFL/ESL teachers: A multinational study. *Current Psychology*. https://doi.org/10.1007/s12144-022-03371-w
- Derakhshan, A., Karimpour, S., & Nazari, M. (2023). Interactional features in second language classroom discourse: Variations across novice and experienced language teachers. *Applied Linguistics Review*. https://doi.org/10.1515/ applirev-2023-0001
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, *38*(3), 181–199. https://doi.org/10.3102/0013189X08331140
- Dewi, N. K. A. P., Adnyani, L. D. S., & Wahyuni, L. G. E. (2020). Describing Camtasia video as learning media: An analysis of response in EFL context. *Journal of Education Research and Evaluation*, 4(2), 165–170.

Drew, P., & Heritage, J. (1992). *Talk at work: Interaction in institutional settings*. Cambridge University Press. Everard, K. B., & Morris, G. (1985). *Effective school management*. Harper and Row.

- Farrell, T. S. (2012). Novice-service language teacher development: Bridging the gap between preservice and inservice education and development. *TESOL Quarterly*, *46*(3), 435–449. https://doi.org/10.1002/tesq.36
- Forkosh-Baruch, A., Phillips, M., & Smits, A. (2021). Reconsidering teachers' pedagogical reasoning and decision making for technology integration as an agenda for policy, practice and research. *Educational Technology Research* and Development, 69, 2202–2224. https://doi.org/10.1007/s11423-021-09966-7
- Gass, S. M., & Mackey, A. (2000). Stimulated recall methodology in second language research. *Lawrence Erlbaum Associates*. https://doi.org/10.4324/9781410606006
- Gromik, N. (2007). Video tutorials: Camtasia in the ESL classroom. JALT CALL Journal, 3(1), 132–140. https://doi.org/10. 29140/jaltcall.v3n1-2.41
- Harmer, J. (2007). *How to teach English*. Pearson Education.
- Hobbs, V. (2013). 'A basic starter pack': The TESOL Certificate as a course in survival. *ELT Journal*, *67*(2), 163–174. https://doi.org/10.1093/elt/ccs078
- Howard, A., & Donaghue, H. (2015). Teacher evaluation in second language education. Bloomsbury. https://doi.org/10. 5040/9781472593726
- Huber, S. G. (2012). The impact of professional development: A theoretical model for empirical research, evaluation, planning and conducting training and development programmes. *Professional Development in Education*, 37(5), 837–853. https://doi.org/10.1080/19415257.2011.616102
- Hüttner, J. (2019). Towards 'professional vision': Video as a resource in teacher learning. In S. Walsh & S. Mann (Eds.), The Routledge handbook of English language teacher education (pp. 473–487). Routledge.
- Jacknick, C. M. (2011). "But this is writing": Post-expansion in student-initiated sequences. NovitasROYAL (research on Youth and Language), 5(1), 39–54.
- Johnson, K. E., & Golombek, P. R. (2011). Research on second language teacher education: A sociocultural perspective on professional development. Routledge.
- Khatib, M., & Saeedian, A. (2021a). Identifying and informing novice Iranian English language teachers' classroom decision making and pedagogical reasoning regarding managerial mode. *Language Related Research*, 12(3), 119–147. https://doi.org/10.29252/LRR.12.3.5
- Khatib, M., & Saeedian, A. (2021b). Novice non-native English language teachers' imaginary and actual decision making and pedagogical reasoning: Student and personal features. *Two Quarterly Journal of English Language Teaching and Learning*, 13(27), 239–264. https://doi.org/10.22034/elt.2021.45582.2375
- Krepf, M., & König, J. (2022). Structuring the lesson: An empirical investigation of pre-service teacher decision making during the planning of a demonstration lesson. *Journal of Education for Teaching*. https://doi.org/10.1080/02607 476.2022.2151877
- Lantolf, J. P., & Thorne, S. L. (2006). Sociocultural theory and the genesis of second language development. Oxford University Press.
- Li, Y. D., & Dervin, F. (2018). Continuing professional development of teachers in Finland. Palgrave Macmillan. https:// doi.org/10.1007/978-3-319-95795-1
- Mann, S., & Walsh, S. (2017). Reflective practice in English language teaching. *Routledge*. https://doi.org/10.4324/ 9781315733395
- Martin, J., Keast, S., & Anders, L. (2017). Becoming professionally agentic: researching pedagogical reasoning in initial teacher education. In J. Nuttall, A. Kostogriz, M. Jones, & J. Martin (Eds.), *Teacher education policy and practice: Evidence of impact, impact of evidence* (pp. 67–81). Springer Singapore. https://doi.org/10.1007/ 978-981-10-4133-4_5
- Martinelle, R. (2020). Using video-stimulated recall to understand the reflections of ambitious social studies teachers. *The Journal of Social Studies Research*, 44(3), 307–322. https://doi.org/10.1016/j.jssr.2020.03.001

Masinire, A., & Rusznyak, L. (2018). The role of developing pre-service teachers' pedagogical reasoning to support contextually responsive teaching. In E. Walton & R. Osman (Eds.), *Teacher education for diversity* (pp. 53–68). Routledge. https://doi.org/10.4324/9781315209418

- Nassaji, H. (2020). Good qualitative research. Language Teaching Research, 24(4), 427–431. https://doi.org/10.1177/13621 68820941288
- Pella, S. (2015). Pedagogical reasoning and action: Affordances of practice-based teacher professional development. *Teacher Education Quarterly*, 42(3), 81–101.
- Rädiker, S., & Kuckartz, U. (2020). Focused analysis of qualitative interviews with MAXQDA. MAXQDA Press. https://doi.org/ 10.36192/978-3-948768072
- Rainey, E. C., & Storm, S. (2021). English teacher interpretive communities: An exploratory case study of teachers' literacy practices and pedagogical reasoning. *Literacy Research and Instruction*, 60(4), 352–371. https://doi.org/10.1080/ 19388071.2020.1867264

Richards, J. C. (2011). Competence and performance in language teaching. Cambridge University Press.

- Riley, T. (2019). Exceeding expectations: Teachers' decision making regarding aboriginal and Torres Strait Islander students. *Journal of Teacher Education, 70*(5), 512–525. https://doi.org/10.1177/0022487118806484
- Saeedian, A. (2022). Classroom discourse: The skills and systems mode in the Persian reading and writing literacy development course. *Language Related Research*, *13*(5), 253–280. https://doi.org/10.52547/LRR.13.5.10
- Seedhouse, P. (2005). Conversation analysis and language learning. *Language Teaching*, 38(4), 165–187. https://doi.org/10. 1017/S0261444805003010
- Sert, O. (2019). Classroom interaction and language teacher education. In S. Walsh & S. Mann (Eds.), *The Routledge hand-book of English language teacher education* (pp. 216–238). Routledge. https://doi.org/10.1007/978-3-030-02899-2_35
- Shen, B., & Bai, B. (2019). Facilitating university teachers' continuing professional development through peer-assisted research and implementation team work in China. *Journal of Education for Teaching*, 45(4), 476–480. https://doi.org/ 10.1080/02607476.2019.1639265
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4–14. https://doi.org/10.3102/0013189X015002004
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1–22. https://doi.org/10.17763/haer.57.1.j463w79r56455411
- Silver, R. E., Kogut, G., & Huynh, T. C. D. (2019). Learning "new" instructional strategies: Pedagogical innovation, teacher professional development, understanding and concerns. *Journal of Teacher Education*, 70(5), 552–566. https://doi. org/10.1177/0022487119844712
- Siuty, M. B., Leko, M. M., & Knackstedt, K. M. (2018). Unraveling the role of curriculum in teacher decision making. *Teacher Education and Special Education*, 41(1), 39–57. https://doi.org/10.1177/0888406416683230
- Skinner, B. (2019). 'Let's move on': Second language trainee teachers' talk and its impact on learner interaction. *The Language Learning Journal*, 49(5), 1–14. https://doi.org/10.1080/09571736.2019.1642371
- Smith, K., & Loughran, J. (2017). Quality learning: Teachers changing their practice. Sense Publishers. https://doi.org/10. 1007/978-94-6300-914-0
- Smith, L. A., & Smith, E. T. (2007). Using Camtasia to develop and enhance online learning: Tutorial presentation. Journal of Computing Sciences in Colleges, 22(5), 121–122. https://doi.org/10.5555/1229688.1229710
- Starkey, L. (2010). Teachers' pedagogical reasoning and action in the digital age. Teachers and Teaching: Theory and Practice, 16(2), 233–244. https://doi.org/10.1080/13540600903478433
- Stefaniak, J., Luo, T., & Xu, M. (2021). Fostering pedagogical reasoning and dynamic decision-making practices: A conceptual framework to support learning design in a digital age. *Educational Technology Research and Development*, 69, 1–17. https://doi.org/10.1007/s11423-021-09964-9
- Südkamp, A., Kaiser, J., & Möller, J. (2014). Teachers' judgments of students' academic achievement. In S. Krolak-Schwerdt, S. Glock, & M. Böhmer (Eds.), *Teacher's professional development: Assessment, training, and learning* (pp. 5–25). Sense Publishers, Springer. https://doi.org/10.1007/978-94-6209-536-6
- Walsh, S. (2006a). Talking the talk of the TESOL classroom. *ELT Journal, 60*(2), 133–141. https://doi.org/10.1093/elt/cci100 Walsh, S. (2006b). Investigating classroom discourse. *Routledge*. https://doi.org/10.4324/9780203015711
- Walsh, S. (2011). Exploring classroom discourse: Language in action. Routledge. https://doi.org/10.4324/9780203827826
- Walsh, S., & Mann, S. (2015). Doing reflective practice: A data-led way forward. ELT Journal, 69(4), 351–362. https://doi.org/ 10.1093/elt/ccv018
- Waring, H. Z. (2011). Learner initiatives and learning opportunities in the language classroom. *Classroom Discourse*, 2(2), 201–218. https://doi.org/10.1080/19463014.2011.614053
- Waring, H. Z., Reddington, E., & Tadic, N. (2016). Responding artfully to student-initiated departures in the adult ESL classroom. *Linguistics and Education*, 33, 28–39. https://doi.org/10.1016/j.linged.2015.12.001
- Watkins, J., Portsmore, M., & Swanson, R. D. (2021). Shifts in elementary teachers' pedagogical reasoning: Studying teacher learning in an online graduate program in engineering education. *Journal of Engineering Education*, 110(1), 252–271. https://doi.org/10.1002/jee.20369
- Xu, M., & Stefaniak, J. (2023). Pre-service teachers' instructional design decision-making for technology integration. *Tech-Trends*. https://doi.org/10.1007/s11528-022-00830-w
- Yoshida, T. (2011). Moodle as a mediational space: Japanese EFL teachers' emerging conceptions of curriculum. In K. E. Johnson & P. R. Golombek (Eds.), Research on second language teacher education: A sociocultural perspective on professional development (pp. 150–166). Routledge. https://doi.org/10.4324/9780203844991
- Yuan, R., Mak, P., & Yang, M. (2022). 'We teach, we record, we edit, and we reflect': Engaging pre-service language teachers in video-based reflective practice. *Language Teaching Research*, 26(3), 552–571. https://doi.org/10.1177/1362168820 906281

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.