Interactional Analysis Uniting Scientific and Everyday Concepts in Teacher Development

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ABSTRACT

This research paper investigates the integration of everyday and scientific concepts within language teacher reflective practice (RP), framed by sociocultural theory (SCT). SCT posits that both everyday knowledge, derived from personal experience, and scientific knowledge, rooted in culturally developed systems, inform our understanding of teaching practices. The study involves six graduate TESOL trainee teachers who participated in a RP intervention, comprising microteaching sessions and conversational analysis using Walsh's (2006) SETT model. The intervention aimed to bridge the gap between teachers' intuitive understanding of effective teaching and systematic insights provided by scientific concepts. Analysis of teachers' data and peer reflections explores how these knowledge forms were integrated and their impact on professional development. The findings highlight a shift towards collaborative and data-driven reflection in RP, moving away from isolated, top-down approaches. This approach emphasizes the importance of integrating diverse knowledge sources to enhance teaching practices and ensure ongoing professional growth. By examining the interplay between everyday and scientific knowledge within RP, this study contributes to current discussions in SLA and education, offering insights into effective teacher development strategies. It underscores the relevance of SCT in guiding reflective practices that are both grounded in personal experience and enriched by broader educational theories, promoting more effective and informed teaching methodologies.

INTRODUCTION

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Across our personal and professional lives, we encounter and internalize a kaleidoscope of varying knowledge forms. From the perspective of sociocultural theory (SCT), both everyday and scientific concepts that act as lenses help us to make sense of the tapestry of input and experience that we are exposed to on a daily basis. While everyday concepts are "rules of thumb" (Swain, Kinnear, & Steinman, 2015, p. 56) grounded in lived experience, scientific concepts are born from broader culturally-developed systems of understanding such as natural sciences or humanities. For instance, if we read a massive amount of literature, we may gain an intuitive general "feel" for what makes an effective narrative and develop some basic guidelines based on that. However, by learning the scientific concepts relating to literary devices, character development, narrative structures, and genre conventions, we view literature in a whole new way and may even come to be able to manipulate it ourselves as active agents.

With SCT's considerable impact on many areas of SLA and education, it is unsurprising that everyday and scientific concepts have also been applied to language teaching and reflective practice (RP) (Johnson & Golombek, 2016). Indeed, SCT has greatly influenced a recent move within RP away from reflection being conducted in a top-down and isolated fashion with teachers engaging in box-checking activities (Farrell, 2018; Mann & Walsh, 2017). Instead, the necessity for data-led and collaborative reflection has been stressed by many key figures within the field so as to ensure that RP does not become "bloated and so riddled with inconsistencies" that it reaches a state of "RIP" (Mann & Walsh, 2013, p. 292).

Building on these developments in the field of language teacher RP, this study presents six trainee teachers' perspectives based on a RP intervention within a graduate TESOL program. Each teacher conducted a short microteaching session and subsequently engaged in conversational analysis (CA) of the interactional features of their teaching utilizing Walsh's (2006) SETT model. By examining each teacher's data and their individual and dialogic peer reflections on their own practice, in this paper we will explore the ways in which everyday and scientific concepts were integrated in this intervention and how this impacted their continuing professional development (CPD).

LITERATURE REVIEW

Everyday and Scientific Concepts in SCT

Concepts, from Vygotsky's (1978, 1986) perspective, are one of numerous cognitive tools that mediate the development of higher mental processes. One central claim within SCT is that scientific concepts–systematized academic frameworks or forms of knowledge that can be generalized across contexts–can "transcend our everyday knowledge" (Johnson & Golombek, 2016, p. 5) born out of lived experience. However, while scientific concepts provide generalizable scientific models that allow us to analyze and manipulate the world around us, without integrating them with everyday knowledge, declarative knowledge of scientific concepts can remain as "empty verbalism" (Vygotsky, 1986, p. 150). By combining the groundedness and relevance of everyday concepts with the analysis and control afforded by scientific concepts, one can form *true* concepts (Johnson & Golombek, 2016) that open up opportunities for lifelong development. This formation of true concepts is described as a reciprocal process in which everyday knowledge–primitive but full of "body and vitality"–grows upwards while scientific concepts grow downwards–enhancing "consciousness and deliberate use" (Vygotsky, 1986, p. 194) (See Figure 1).

Figure 1
Reciprocal formation of true concepts
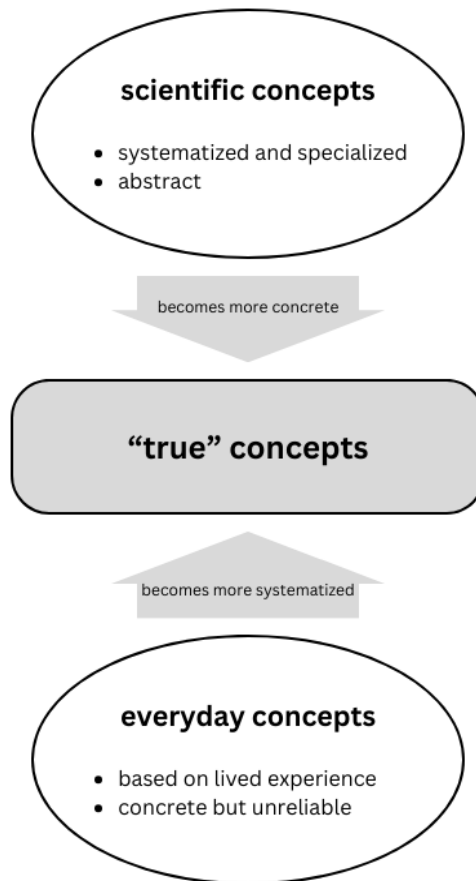
In the field of teacher education, Johnson and Golombek (2016) created *structured mediational spaces*, intentionally-designed conditions that stimulated the integration of everyday and scientific concepts in line with a learner's zone of proximal development (ZPD), within language teacher training programs. In one instance, through careful materials design and dialogic scaffolding (a form of what the authors refer to as *responsive mediation*) with both instructors and peers, trainee teachers were guided to examine the teaching of passages including the forms, "used to" and "would". The trainee teachers were encouraged to combine their intuitive (everyday) knowledge of these forms with scientific knowledge pertaining to tense/aspect and genre (Figure 2).

Figure 2
Tense/aspect activity (Johnson & Golombek, 2016, p. 133)

> Directions:
>   Each section focuses on a certain tense/aspect combination that occurs within certain genres to help convey specific communicative intentions. We will go through each section and work through a series of questions in order to identify the focal tense/aspect and genre, but even more importantly, how the particular focal tense/aspect function in the genre to enable the speaker/writer to convey intentions beyond the descriptive rules of the grammar.
>
> 1. Identify the verb/tense aspect that is bolded. There may be more than one, which we'll contrast.
> 2. Identify the genre.
> 3. Recall our understandings of the grammatical explanation of the focal tense/aspect combination.
> 4. Explain how the tense/aspect is functioning in the genre. What meaning/intention do you think the speaker/writer is trying to convey through this combo? Or, how does the grammar function within this contextualized discourse to achieve particular communicative aims?
> 5. Identify a context in which this excerpt might be spoken (the written ones are more obvious).
>
> *Excerpt 1*
> The bad thing was they **used to** laugh at us, the Anglo kids. They **would** laugh because **we'd** bring tortillas and frijoles to lunch. They **would** have their nice little compact lunch boxes with cold milk in their thermos and **they'd** laugh at us because all we had was dried tortillas. Not only **would** they laugh at us, but the kids **would** pick fights. (Suh, 1992, as cited in Celce-Murcia & Larsen-Freeman, 1999, p. 169)
>
> *Excerpt 2*
> I **used** to phone my wife three, four times every trip. In Calcutta **I'd** wait five hours to get a phone call through. If I didn't get it through one night, **I'd** call again and wait three, four hours the next morning. Finally, just hearing her voice, **I'd** stand and actually choke up on the phone. (Celce-Murcia & Olshtain, 2000, p. 66)

A key element of Johnson and Golombek's educational approach was the creation of an *intermental development zone* in which both instructor and trainee teachers worked through the interplay of everyday and scientific concepts together and "stay[ed] attuned to each other's changing states of knowledge, emotions, and understanding" (p. 92). The value of mutually-reinforcing dialogue and the reciprocal relationship between everyday and scientific concepts is not only observable in Johnson and Golombek's work, but has been increasingly recognized within English language teaching (ELT) reflective practice more broadly in recent years.

Dialogic and Data-Based RP
        RP in teaching is grounded in the idea that by reflecting on our lessons and teaching behaviors, we are able to continuously gain new insights into our practice and prevent what we do in the classroom becoming "purely impulsive or purely routine action" (Dewey, 1933, p. 15). RP has become an established focus within contemporary ELT with many recognizing its benefits in terms of linking classroom practices with teacher beliefs, bridging gaps between research and practice, and developing teacher self-efficacy and positive self-concept (Cirocki & Farrell, 2017; Farrell, 2015; Watanabe, 2016). Over the last decade, however, there have been some who have raised concern about RP becoming increasingly top-down, resulting in the "paradoxical situation" of RP being "used in an unreflected manner" (Bengtsson, 2003, p.

295). This situation is arguably compounded by the fact that much RP is conducted in purely written form and in isolation from others (Mann & Walsh, 2017). Such activities can become "a box checking exercise" (Walsh & Mann, 2015, p. 353) divorced from their actual experiences, consequently, resulting in teachers completing "fake reflection" activities for the sake of it (Pang, 2017). Solo activities also deny teachers the opportunity to experience collaboration and accountability within a professional community of practice (hereafter CoP) or "critical friendship" (Farrell, 2018; Mann & Walsh, 2017; Verla Uchida & Roloff Rothman, 2023). Additionally, others have claimed that, without drawing on clear forms of data when reflecting, RP is in danger of becoming based on mere intuitions about one's teaching, thus falling into the original trap that Dewey was striving to avoid (Farrell, 2015, 2022; Mann & Walsh, 2013). Mann & Walsh (2017), therefore, advocate for RP approaches that are both dialogic and data-led in nature such as the utilization of adaptable self-observation tools or stimulated recall integrating dialogic reflection with a critical friend. Mann and Walsh cite sociocultural theory in their rationale for this type of RP due to the fact that it foregrounds the importance of both dialogue and collaboration in "promoting new understandings" (p. 202) and facilitating enhanced self-awareness in teachers. In the following section, we will present Walsh's (2011) SETT model, a data-led RP approach grounded in both the dialogic/collaborative foundations of sociocultural theory and the integration of everyday and scientific concepts.

Self Evaluation of Teacher Talk (SETT)

Steve Walsh, in collaboration with other language teachers, developed the SETT framework in 2006 (Walsh, 2006a, 2006b) and it has since been used in numerous general education and ELT contexts throughout the world (Walsh, 2011). SETT centers on two key analytical foci; 1) micro-contexts or *modes* within classroom discourse, and 2) 14 specific interactional features that Walsh (2011) terms "interactures*"* (p. 110). The inclusion of four classroom modes–managerial, materials, skills and systems, and classroom context–within the SETT model (Table 1) helps teacher-researchers to distance themselves from the notion that one lesson represents a monolithic entity driven by one singular purpose from start to finish. Instead, SETT's modes foreground the multifaceted nature of a given lesson, governed by the needs and judgements of both teacher and students. As can be observed in Table 1, SETT systematically illustrates the pedagogical goals of a given classroom mode as well as the interactional features that are characteristic of or congruent with them. In the case of managerial mode, for example, pedagogical goals are concerned with issues such as transmitting information or setting up a class activity. Consequently, the emphasis in this mode is control, clarity, and efficiency. This is reflected in the use of interactional features such as teacher-led explanations incorporating transition markers ("Now, could you turn to page…") and confirmation checks ("What do you need to do first?"). These interactional features, however, when applied to classroom context mode, which emphasizes learner expression and oral fluency development, would be unfit for the pedagogical goal and therefore incredibly counterproductive.

Table 1
Classroom modes and interactional features (Walsh, 2006a)

Mode	Pedagogic goals	Interactional features
Managerial	Transmit information	A single, extended teacher turn which uses explanation &/or illustration
	Organize the physical learning environment	Use of transitional markers
	Refer learners to materials	Use of confirmation checks
	Introduce or conclude an activity	Absence of learner contribution
	Change from one mode of learning to another	

Materials	Provide input or practice around a piece of material	Predominance of IRF (Initiation, Response, Feedback) pattern
	Elicit responses in relation to the material	Extensive use of display questions
	Check and display answers	Content-focused feedback
	Clarify when necessary	Corrective repair
	Evaluate contributions	Use of scaffolding
Skills and Systems	Enable learners to produce correct answers	Use of direct repair
	Enable learners to manipulate new concepts	Use of scaffolding
	Provide corrective feedback	Extended teacher turns
	Provide learners with practice in sub-skills	Display questions
	Display correct answers	Teacher echo
		Clarification requests
		Form-focused feedback
Classroom Context	Enable learners to express themselves clearly	Extended learner turns
	Establish a context	Short teacher turns
	Promote dialogue and discussion	Minimal repair
		Content feedback
		Referential questions
		Use of scaffolding
		Clarification requests

When teachers engage in self- or peer observation activities and use SETT to analyze classroom data, they are able to identify not only classroom modes, but also the interactional minutiae that make up their individual teaching styles. Walsh states that some of these interactures (Table 2), such as display questions, are commonly present in both general and language classes (Walsh, 2011) and can sometimes be overused. A key concept within SETT is that interactures are not good or bad in and of themselves in terms of fostering *classroom interactional competence*–"teachers' and learners' ability to use interaction as a tool for mediating and assisting learning" (Walsh, 2013, p. 65). Rather, Walsh (2011) stresses the need to focus on the degree of *mode congruence* or to what extent the interacture is appropriate for achieving a given pedagogical goal. For instance, while extended learner turns and ample referential questions are highly desirable for promoting learner dialogue and expression within classroom context mode, this type of

interaction would likely be time-consuming and inefficient when trying to set up class activities within managerial mode.

Table 2
Interacture types (Walsh, 2006b, p. 141)

A) Scaffolding	*1) Reformulation (rephrasing a learner's contribution)* *2) Extension (extending a learner's contribution)* *3) Modeling (providing an example for learner(s))*
B) Direct repair	*Correcting an error quickly and directly.*
C) Content feedback	*Giving feedback to the message rather than the words used.*
D) Extended wait-time	*Allowing sufficient time (several seconds) for students to respond or for*
E) Referential questions	*Genuine questions to which the teacher does not know the answer.*
F) Seeking clarification	*1) Teacher asks a student to clarify something the student has said.* *2) Student asks the teacher to clarify something the teacher has said.*
G) Extended learner turn	*Learner turn of more than one utterance.*
H) Teacher echo	*1) Teacher repeats the teacher's previous utterance.* *2) Teacher repeats a learner's contribution.*
I) Teacher interruptions	*Interrupting a learner's contribution.*
J) Extended teacher turn	*Teacher turn of more than one utterance.*
K) Turn completion	*Completing a learner's contribution for the learner.*
L) Display questions	*Asking questions to which teacher knows the answer.*
M) Form-focused feedback	*Giving feedback on the words used, not the message.*

From a Vygotskian perspective, SETT provides a systematized scientific concept that teachers can integrate with the experience and intuitive professional skill set that they bring with them into a teacher training program or simply within ongoing CPD efforts.This scientific concept subsequently allows teachers to "transcend their everyday knowledge" (Johnson & Golombek, 2016, p. 5) and gain the ability to consciously reflect upon and manipulate understandings of our pedagogical practice (Moll, 2014). One attractive facet of the SETT approach is that it can be utilized by simply recording and conducting conversation analysis (CA) of classroom data in isolation (Walsh, 2011), thus affording CPD opportunities even for those teachers outside of an active reflective practice group. However, acknowledging the valuable role of dialogue in RP (Farrell, 2015; Gill & Hooper, 2020; Mann & Walsh, 2017; Verla Uchida & Roloff Rothman, 2023) congruent with Dewey's original vision of reflection as a collaborative process (Walsh & Mann, 2015), utilizing RP tools like SETT in tandem with other teachers is likely to deepen the reflective process further. Moreover, collaborative RP neatly sidesteps accusations of narcissism or egocentricity often leveled at solo teacher reflections (Pang, 2017) while affording horizontal accountability rather than top-down judgment (Pemberton & Brown, 2020; Verla Uchida & Roloff Rothman, 2023). Finally, the co-constructed insights that emerge from collaborative RP can integrate both emic (inside) and etic (outside) voices, as discoveries about one's own teaching can be shared with a reflective practice group or with the

wider educational community via conferences or research papers (Gill & Hooper, 2020; Gill & Hooper, 2023).

In the following section, we will present a RP intervention utilizing the Walsh's (2006) SETT framework that six in-service teachers (Braun, Kako, Kurashita, Soto Prado, Tajima, and Watashima) participated in as part of a graduate course on SCT in TESOL. By illustrating and examining each teacher's experiences and reflections from engaging in SETT, in this paper we address the following research question:

In what ways were everyday and scientific concepts integrated through in-service teachers' use of SETT as a RP tool in a teacher training program and what impact did this have on their continuing professional development?

METHODS

Participants
The participants of this study were six in-service teachers enrolled in an optional course on SCT as part of the MA TESOL program at Nagoya University of Foreign Studies in 2023. Each teacher had differing backgrounds, levels and types of teaching experience, and were all working in markedly different pedagogical contexts (Table 3). All participants subsequently expressed a desire and gave written consent to collaboratively work as participant-authors on a research paper based on their microteaching experiences within the course.

Table 3
List of Participants

Participant	Nationality	Teaching Context	Years of Teaching Experience
Amy Braun	American	Grade 1, Private Elementary School	12
Mayumi Kako	Japanese	School owner	25
Noriko Kurishita	Japanese	University instructor	30 (at various schools such as cram schools, public schools, and universities)
Roberto Soto Prado	Chilean	Grade 5 International IB PYP Elementary school	(10 years in Chile) 7 years in Japan
Yuria Tajima	Japanese	Private High School	6
Shiori Watashima	Japanese	English instructor at a private English conversation school	3

Procedure
Due to a number of the participating teachers working in contexts in which they were teaching young learners, we determined that it would unfortunately be impractical due to the need for a lengthy ethical/institutional approval process to record actual classes conducted by each teacher. Therefore, we judged that by conducting microteaching sessions with peers "acting" as students, we would still be able to get a general, if not truly authentic, sense of our respective interactional styles when teaching. This could essentially act as a trial run utilizing a SETT approach that could prepare teachers for taking this RP tool

with them back to their respective contexts and conduct SETT-based interventions purely for their own CPD in the future.

Table 4 outlines the procedure that the teacher-participants followed for this study. Upon teaching and recording video of their microteaching sessions, the teachers were asked to watch the recording at home numerous times and analyze the classroom modes and interactures that they utilized within their microteaching and the degree to which they felt mode convergence was present or absent. Inspired by the CA approach to reflective action research advocated by Hale, Nanni, and Hooper (2018), they were also asked to select short portions of the recording that they found to be salient-interesting or problematic in some way- that they wished to explore further. These portions were then transcribed using CA conventions (Appendix A) (see Hale et al., 2018 and Gill & Hooper, 2020 for other examples of this approach). These transcriptions and notes taken based on the SETT analysis were later collaboratively analyzed and discussed in the following lesson with a peer advisor from the same class that they had been assigned to. These reflective discussions were also audio recorded and subsequently analyzed as part of the reflective process that led to the writing of this paper.

Table 4
RP Analytical Process for the Current Study

Who?	Stage
Together	1. Record a 10-15-minute microteaching lesson on a topic/focus of your choice
You and peer advisor	2. As soon as possible after the lesson, watch/listen to the recording of your lesson and analyze according to the **classroom mode**
You and peer advisor	3. Watch the recording again, this time focussing on the specific **interactional features** of your teacher talk.
You	4. Evaluate your teacher talk in terms of your overall aim and modes used. To what extent do you think that your use of language and pedagogic purpose matched? That is, how appropriate was your use of language, bearing in mind your stated aims and the modes operating. Choose some areas of your recording that you found particularly interesting and transcribe them using CA conventions.
You and peer advisor	5. The final stage is a feedback interview with your peer advisor. Both of you should refer to your recording, CA transcription, and your notes based on SETT.

Teachers' analysis of their recordings and transcriptions were guided in part by SETT and therefore did not represent the wholly inductive *unmotivated looking* (Seedhouse, 2004) featured in other CA-based studies (Gill & Hooper, 2020; Hale et al., 2018). However, they were concurrently encouraged to move beyond a pure deductive approach based on the SETT framework if they encountered areas of interest that they determined to be beyond its scope. Therefore, teachers were able to iteratively move between data and theory to find means of explaining the phenomenon they encountered in their microteaching recordings. In the following sections, each teacher will illustrate the analysis of their microteaching session and discuss the relevance of their findings in terms of their developing understanding of their classroom interactional competence.

TEACHER REFLECTIONS

Amy

I have been teaching young learners for twelve years. During this time, I have focused mainly on developing my students' communicative competence and language skills. However, I never really considered how teacher-student interactions could impact our mutual learning opportunities. I was always more concerned with the outcome, such as whether my students could speak English or communicate their thoughts to me in English. I overlooked the importance of the learning process itself.

To gain a better understanding of the language learning process, I decided to take this SCT class. Through this course, I learned about the social, emotional, and cognitive aspects of teaching and learning from both the teacher's and the student's perspectives. I also learned how to incorporate both scientific and everyday concepts into my lessons to create a deeper understanding of the material.

However, I realized that I needed to take a closer look at how the modes and interactional features within the SETT framework were being applied in my everyday teaching. This would allow me to enhance my awareness as a teaching professional and better understand how to create a more effective learning environment for my students.

Peer contribution

While watching my microteaching lesson, Yuria provided me with feedback from the class. We discussed the primary classroom mode that was being used, along with the interactional features. We both agreed that the example below (see Figure 1) was a clear illustration of the Classroom Context mode. This was due to the utilization of scaffolding, teacher echo, referential questions, seeking clarification, and form-focused feedback.

Figure 1

1   T: horses are cuter than sharks. Agree or disagree. show me.
2   S1: >>no<< ((gestures disagree))
3   T: no?
4   S1: >>no<<
5   T: ah, Robert, why? >do you disagree?<
6   S1: sharky smile
7   T: (0.5) s,smile, shark's <u>smile</u>. is it <u>scary</u>? or is it ↑scary or
8   S1: smile. so the guy happy. horses are,
9   T: <u>happy</u>? so, what will you say? you'll say, °everybody°sh,
10   T: [sharks,]
11   Ss: [sharks]
12   T: you could say, sharks are cuter than horse. horses.
13   Ss: sharks are cuter than horse.
14   T: sharks are cuter than horses. That's right.
15   T: Ok. ho::w about you::? W::hy?
16   S2: ((show agreement gesture))

In line 5 of the conversation, I asked Robert (S1) a referential question to know why he did not think horses were cuter than sharks. Robert's reply, "sharky smile," puzzled me as I did not know whether it meant something good or bad. To seek clarification, I framed my response as a question in line 7, "s,smile, shark's smile. is it scary? or is it ↑scary or?" Robert clarified his response in line 8 with "smile. so the guy happy. horses are." The conversation ended with a teacher echo and form-focused feedback of "sharks are cuter than horse" in line 12. Throughout the conversation, scaffolding was used to help Robert express his opinion on which animal was cuter and why. The scaffolding was done through a turn-taking process where the teacher built upon the student's response with questions.

The Four Modes

During my microteaching lesson, I found myself mostly in Classroom Context mode. As the students were practicing a specific language pattern that I presented, they also came up with their statements and

reasons in their own words. This is perhaps unsurprising given that my colleagues often refer to me as the type of teacher who teaches like having a conversation with the students, with everyone contributing equally in the learning process. My teaching, at that moment, being in the Classroom Context mode is something akin to what Breen (1998) wrote about the teacher's role as it is to "orchestrate the instruction" while being front and center, as this influences the learning opportunities.

Although I primarily used the Classroom Context mode during my lesson, I also incorporated the other three modes, albeit sparingly, and found them to be valuable. For instance, I used meditation artifacts, such as semiotic mediation, social mediation, and tool meditation, to assess my students' understanding of the material. I noticed that incorporating these artifacts not only helped me better evaluate their comprehension but also enriched their learning experience. Additionally, during the microteaching session, I learned about the importance of using pictures and gestures to mediate language. In line 12, I also used the Skills and Systems mode to provide form-focused feedback. While the student and I were equally engaged in the conversation, I then utilized the Managerial mode to organize the learning environment and guide the conversation cycle with scaffolding.

Through the use of the SETT framework, I was able to evaluate my teaching in this microlesson in a structured fashion while also obtaining dialogic feedback from my classmates. This experience allowed me to gain a deeper understanding of how I teach in my class, by integrating my everyday teacher intuition with scientific concepts, such as different types of meditation, classroom modes, and interactional features. As a result, I have developed a more nuanced awareness of my personal teaching style and have been able to identify areas for improvement in future lessons. Put simply, this experience has provided me with a better understanding not only of myself as a teacher but also of how my students interact and learn in the classroom.

Mayumi

As a self-employed teacher in the after-school context, I strive to do everything I can to help my students to develop. Being able to closely observe each student in a small class setting makes me feel engaged. On the other hand, however, relying on my intuitive everyday knowledge and concepts sometimes puzzles me because each student learns in a very different way. In addition, they are affected by numerous social factors. This is the main reason I applied for the MA TESOL program and started action research, as I can reinforce my everyday knowledge with scientific concepts and also reflect and ask for help from my peers in class. The session described below provided me with a clearer picture of how to improve my teaching with dialogic analysis based on the SETT framework.

1. Peer contribution

Shiori, my peer, highlighted several points of interest she noticed in my demonstration class. Below (Figure 2) is an excerpt with Yuria (Y) that Shiori marked as one positive point where she identified a lot of scaffolding and teacher echoes:

Figure 2
[01:22]
24   T: =$Alright$ how about Yuria so [what did you say-=
25   Y: [I forgot.
26   T: you for[got
27   [I forgo:t what-
28   T: =okay: [think: (.) ↑yeah: wha- <what do you [like to do:>=
29   Y: [ummm
30   =umm ↑<Da:nc:ing>
31   T: = ah $Da:nc:[ing$ >yeah you can [say< =
32   Y: [hh   [yeah
33   T: =yeah you are [(   )
34   Y: [good (.) I:m [goo:d a:t (.)
35   T: [good at

36   Y: da::n[cing
37   T: [da:nci:ng O:h ↑pe:rfect

In line 28, I reformulate my question "What are you good at?" to more familiar "What do you like to do?" According to Walsh (2011), this type of speech modification is one of four key features of communicative teacher talk, along with referential questions, content feedback, and negotiation of meaning. By doing so, Shiori determined that I made "good interactive decisions; decisions that are appropriate to the moment" (Walsh, 2011, p. 41), which in turn encouraged Yuria to make her own sentences utilizing the target grammar. This realization stimulated me to reflect on a new question: What if I asked them the simpler question from the beginning? There is a possibility everybody would have answered with more ease, and the discourse may have flowed more smoothly. With Shiori, I realized that one of my tendencies might be that I over-estimate students' ability at times.

Furthermore, Shiori also analyzed my demonstration in a more quantitative fashion. According to her analysis, these are the classroom modes that appeared and the percentage they were utilized in the demonstration class:

a.   Managerial (17%)
b.   Materials (13%)
c.   Skills and systems (60%)
d.   Classroom context (10%)

I was honestly surprised to see this when Shiori presented it to me. It is true that I was in skills and systems for a long time, introducing new grammar. Even so, I was under the impression that I was in Classroom Context mode for much longer. For example, the modified "What do you like to do?" question is an example of *bridging* (Walqui, 2006, cited in Gonulal et al., 2018), where teachers build up skills by activating learners' prior knowledge. Pritchard and Woollard (2010) also indicated that this type of "ad hoc" intervention is "to redirect the individual learner's thinking or providing alternative, possibly simpler, language" (p. 39). Considering these could certainly be considered as scaffolding techniques, a basic interactional feature of classroom context, the blurring of the boundaries between two or more modes - "mode convergence" (Walsh, 2011, p. 128) - was likely occurring on this occasion.

2. Mode convergence

In fact, mode convergence is also observable in the following excerpt (Figure 3) where Noriko made the amusing statement, "I don't know how to sleep." All the class (both students (Noriko (N), Yuria (Y), Robert (R), and Amy (A)) and myself as teacher (T)) continued to inquire Noriko about what she meant by this comment:

Figure 3
[6:40]
132   N: I: do:n't kno:w ho:w to: slee:p
133   Ss: =↑え一[::
              {e::, *huh*}
134   Y: [↑you kn<u>o</u>:w
135   N: I (.) don't (.) know (.) how to slee:p
136   Y: you know because you are good at-
137   N: I don't know (.) I fo:rgot
138   Y: =↑liar
139   R: you said
140   A: = ↑you can でしょ
                  {de:sho:, *can't you*}
141   R: = you said
142   A: = ↑you can でしょ
                  {de:sho:, *can't you*}

143 R: you said

144 N: いじめ: いじめ

  {i:ji:me: i:ji:me:, *bully bully*}

145 R: you said y-

146 T: =そうじゃなーい?

  {so:ja:na::i:?, *Right, isn't it?*}

147 N: hhhh

148 A: ↑受験でしょ

  {ju:ke:n:de:sho:, *An entrance exam, isn't it*}

149 R: she said I know- I good- I (.) forget

150 A: she sleeps at school

151 R: = yeah

152 T: = Ahh (.) Liar.

153 Ss: ↑Hahaha

154 T: >↑come on Noriko<

155 N: I (.) ↑know (.) ↑how to: (.) sleep?

156 Y: =↑ya:y

157 Ss: ((applause))

158 T: $alright$ very good ↑$so good$

159   so (.) can you give the (.) yeah cards back to me so please come up?

As can be seen from this sequence, I am primarily taking a backseat role in the interaction, only giving content feedback in line 152 and 158, and also seeking clarification in line 146 and 154. The students' extended turn continues until the laughter in line 153, followed by "Ahh. Liar.", my joke which "function[ed] as a change of state token" (Walsh, 2011, p. 131) and signaled a switch back to managerial mode in line 159. Thus, in this sequence I found that I switched back and forth between Managerial and Classroom Context modes. Furthermore, considering the class was also arguably in skills and systems mode as we focused on the specific target grammar of "I know how to (v)", this supports Walsh's (2011) assertion that "more often than not modes occur in combination with other modes, rather than in isolation" (p. 130).

What I learned the most from the SETT session is that who reflects on whose demonstration does not necessarily matter. By this, I mean that even when I analyzed Shiori's lesson, I recalled what happened in my classroom at the same time. Furthermore, data from just one demonstration is, of course, too limited to tell us a great deal about our teaching as a whole. Rather, the talk with Shiori about our teaching within the SETT framework mediated my understanding of my own professional practice and made me more "SETT-sensitive" or more aware of how scientific concepts appeared in my teaching. One concrete example of this from the two excerpts was how I gradually led Yuria and Noriko to produce appropriate expressions. Through the SETT session and my growing knowledge of interactional features, I came to know that this can be called scaffolding in the classroom mode. That is the moment a concept I used to know intuitively became concrete, specifically a "true" concept.

Noriko

My demo class in this SCT course was to elaborate my instruction of literature circles to promote extensive reading in the first-year English course at a private university in Japan. Although I was not sure what to begin with without any previous experience in instructing literature circles, one thing I wanted to focus on in the instruction was eliciting students' various perspectives in creating questions to ask in the circles. On the other hand, my mind was preoccupied with the principles of what good comprehension questions should be, which I had learned from a book on how to instruct literature circles. This indecisive feeling was reflected in my demo interaction with peer-teacher students through conversation analysis, which provided me with a clear reason why I was not satisfied with the outcome of the students in the demo class.

According to Walsh (2011), language use and teaching purpose are interrelated. The interrelatedness is exemplified in a "classroom mode" - defined as "an L2 classroom microcontext which has a clearly defined pedagogic goal and distinctive interactional features determined largely by a teacher's use of language" (Walsh, 2006, p. 62). Through the microteaching I experienced with peer teachers in this SCT course, I learned how a mismatch between the teacher's intended microcontext (i.e., classroom modes) and the actual interactional features (i.e., interactures) being utilized may yield unsatisfactory learning results. I noticed this in practice with the assistance of Roberto, my peer advisor, who analyzed my dialogic data by applying each microcontext of Walsh's (2006a) modes (Table 1). We both dealt with similar introductory lessons on a new topic while introducing some instructional materials. However, while Rob effectively elicited the idea of the material using fitting interactional features to attain his goal, I felt my approach was subconsciously split into two microcontexts due to inappropriate use of interactures. This observation exemplified Walsh's (2011) suggestion for teachers that "[the] combined analysis, first focusing on modes, then on interactures, will give you a detailed profile of the interactions taking place in your classes and permit you to make adjustments" (pp. 126-127).

Roberto planned his lesson to introduce the concept of 'idioms' while in Materials mode by asking stepwise questions prepared on a handout. In the following excerpt (Figure 4), his interaction can be seen to exhibit the pattern of IRF - teacher initiation, students' response, teacher's feedback, and display questions, which are both predominant interactional features for the Materials mode. After showing an animated video, Roberto began asking one of the questions on the activity sheet (line 16). Responding to the students' replies (lines 29, 31, 33, 37, 39-42 & 44), he asked further questions - mostly display questions, to gradually develop their understanding (lines 30, 34, 36, 38, & 43) before reaching his feedback in line 45. The rapid turn-taking with latching and overlapping utterances demonstrated the teacher's and students' active involvement in co-constructing instruction of the lesson focus.

Figure 4

16 T: did you understand everything he said.
…
29 S1: weird!
30 T: why do you think the picture was weird
31 S2: he was carrying on
32 T: so=
33 S2: =carrying on I understand but the picture I don't=
34 T: so what was the problem
35 S2: he was <carrying on>
36 T: so but- what does it mean carry on.
37 S2: it's like: keep doing something
38 T: what- what was HE doing.
39 S2: walking=
40 S1: =walking=
41 S2: =carry [on]
42 S1:   [ca]rry on [right]?
43 T: [what] was the problem
44 S2: the picture was the problem
45 T: the picture was the problem
46   so- there was a <disconnection> between the <WORDS> and image.

While Roberto's lesson was performed with congruence between modes and interactures, I felt my lesson was ambiguous with mixed interactures that matched both Classroom Context and Skills and Systems modes. My pedagogic goal was to have the students become aware of what good reading comprehension questions were by eliciting various possibilities from them. In the next excerpt (Figure 5), although the teacher's feedback (line 6) on students' actions in their group activity (i.e., content feedback) and referential questions (lines 7, 10, & 20) created an atmosphere for Classroom Context, the subsequent frequent teacher echo (lines 19, 23, 25, & 27) was more in line with Skills and Systems mode, where they pursued only one

right answer. As a consequence, contrary to my intention, all the students agreed on one single question as an acceptable response.

Figure 5
((Students spontaneously ask each other to decipher their hand-written words in their peer editing activity.))
6 T: you are thinking. that's great. okay.
7   are you done? good. take a look at another one. do the same
8   okay so now you will take yours back right, right.
9   so take a look at check marks you got.
10   did you create a good question?
11 Ss: mmm
…
17 S2: what is the moral of the story? ((reading out one of the questions written))
18 S1: yeah
19 T: what is the moral of the story?
20 why is it just good, good question. why do you think it's a good question?
21 S3: I have to think about a lot.
22 Ss: hahaha
23 T: to think about a lot? yes.
24 S3: you have to really understand the story.
25 T: oh, you really have to understand the story.
26 Ss: I need the imagination.
27 T: you need the imagination to answer the question. okay.
28   so why don't we try to answer the question?

Although my intention for microteaching was to create a lesson conducted primarily in Classroom Context mode, where students discuss many reading points based on the questions they made, my goal actually came to pivot around the perspectives on the handout students should know for good reading questions. My pendular state of mind unintentionally manifested itself in interactional features that aligned with mixed classroom modes. This in turn confused the students and meant that, from my perspective, the instruction could not yield a satisfactory effect. In future lessons, I would separate this type of class into two distinct microcontexts (modes) where students could focus first on principles for good reading questions (Skills and Systems) and then later proceed to freer discussion (Classroom Context) to evaluate their reading points. I believe this step-by-step, structured progression of microcontexts and appropriate use of interactures for each classroom mode would eventually lead students to a space where they scaffold each other and co-construct new reading perspectives in a similar way as Roberto and I did.

Roberto

I currently teach at an international elementary school that follows the International Baccalaureate Primary Years Program (IB PYP), a framework that integrates academic subjects into transdisciplinary themes, fostering critical thinking, creativity, and global awareness. It aims for students to develop skills in communication, research, and self-management. As such, there is a lot of emphasis on students' reflection and discussion skills, so I thought I could engage well with my students by introducing the topic of idioms. Introducing the concept by means of a video, students were asked to identify different idioms and then try to interpret said idioms correctly. The main goal of the session, besides engaging the students in discussion, was for them to be able to define idioms, correctly identify some idioms, and to be able to interpret them correctly. I was not aware at the time, but by choosing the topic of idioms, I was able to get real reactions to the microteaching session, as even though my "students" were proficient English speakers, the topic and the phrases chosen were not necessarily familiar, and that provided honest reactions that related well to the goal of the real lesson that I did at my school. I began the lesson by asking students if they knew the word "idiom." We then watched "Symphony in Slang" by Tex Avery. Afterward, I asked if they understood the story; they were confused. I pointed out that the video was in English, so they should have understood it. We re-watched specific parts of the video to focus on particular idioms I wanted them to learn and practice. In a worksheet, students matched images with idioms and then matched idioms with their possible meanings,

arriving at the definition of idioms. I then asked everyone to try other idioms from the video, create their own, or share any idioms they knew in Japanese, their native tongue. Each step included discussion moments where students talked with each other to make sense of everything. Noriko, my partner, noted that I used Materials mode to refer the students back to the video, while making use of scaffolding to guide them to an answer in relation to the difficulties they had encountered, as can be seen in the next excerpt (Figure 6):

Figure 6

32	S2: [the picture was] weird
33	S1: weird!
34	T: why do you think the picture was weird
35	S2: he was carrying on
36	T: so=
37	S2: =carrying on I understand °but the picture I don't°=
38	T: so what was the problem
39	S2: he was <carrying on>
40	T: so but- what does it mean carry on.
41	S2: it's like: keep doing something
42	T: what- what was HE doing.
43	S2: walking=
44	S1: =walking=
45	S2: =carry [on]
46	S1: [ca]rry on [right]?
47	T: [what] was the problem
48:	S2: the picture was the problem.

In lines 34, 38, 40, 42 and 47, the use of scaffolding and referential questions can be seen functioning to support the student and their thought process, thus representing the Skills and Systems mode in action. However, as Walsh (2011) mentions, "modes can be difficult to distinguish and there are times when several modes seem to occur simultaneously" (p. 130). Consequently, the Classroom Context mode is also arguably present as, during that interaction, the goal was to promote self-expression and dialogue, marked by the use of scaffolding and short teacher turns.

Noriko also identified, in different moments of the microteaching session, quick changes from Managerial mode to Materials mode. Furthermore, she described how through repeating my questions and giving the students opportunities to think, I created an environment in which we could co-construct the meaning of the word, "idiom." It was clear that the students were confused by how the lesson material clashed with their schematic knowledge as a disconnect occurred between their existing understanding of certain phrases and the images being displayed in the video. As one of my pedagogical goals was to promote student discussion, this disconnect worked perfectly to get the students talking about their incomplete understanding. This is also why I think there is a mix of classroom modes present in the above excerpt, with distinct modes in other moments of the session were clearer and easier to identify.

Though I have had my lessons observed in the past, this was the first time that the observer was a member of my professional CoP in which we had a shared goal - to develop our awareness and proficiency as teachers. Awareness of both classroom modes and detailed interactional features allowed us to give and receive comments that were specific, informed and appropriate to the context and to the lesson itself - something that had never happened to me before in my professional development. Being able to concretely identify the different classroom modes and the interactional features that inform each mode helped me see my teaching from a perspective I had not seen before, and helped me understand better my choices as a teacher during the session. It also benefited me as I am now able to explain why I feel that my lesson worked, no longer solely by means of sharing my everyday knowledge via personal views or opinions, but by relating the observation and the analysis of a recorded excerpt to scientific concepts from the SETT framework. By basing my reflections on both scientific concepts and everyday concepts, I have come to a deeper and structured understanding of my classroom practices, while still being able to share my

experiences in a non-scientific manner to other non-academic colleagues and peers. As such, having both kinds of concepts at my disposal gives me more opportunities to share my experiences, and comment on my experiences and those of my colleagues in a constructive, positive and informed way.

Yuria

My professional context is teaching second graders in senior high school and I am in charge of English instruction for a grammar course. As a result, in my microteaching, I wanted to simulate teaching students to communicate using a target grammar structure. The specific goal for my microteaching session was to have students talk about their best memories of a trip in pairs by using infinitives. After setting up controlled practice in pairs, students would have time to talk more freely about their best memories. I used Focus on Form Instruction (FFI). FFI which "entails a focus on meaning with attention to form arising out of the communicative activity" (Ellis, 2006, p. 100). So, FFI aims to foster communication rather than solely having students listen to a teacher's explanation. Furthermore, since I selected topics that were familiar to students, I hoped that they could connect scientific concepts (grammar rules) to daily life (a story about the best memory). The following excerpt (Figure 7) shows interactional data of a timed conversation carried out by two pairs in my lesson.

Figure 7

1   S1: Let's talk about our memory. What is your best memory about a trip?
2   S2: (1.0) my:: best memory(0.5) is a trip to Tokyo.
3   S1: ee!? Taiwan. ((pointing toward the worksheet))
4   S2: >>no.<< Tokyo. Tokyo.
5   T: her best memory. it's an example.
6   S1: ↑oh:: oh::. >>ok. ok. ok. ok. ok.<<
7   S3: your best memory is a trip to Kagoshima! ↑what did you do?
8   S4: I eated >>kurobuta.<<
9   S3: you eated KUROBUTA! you ate kurobuta.
10   T: nice reaction.
11   S2: I:: went to:: Tokyo Disneyland.
12   S1: ee!? ↑really? >>Tokyo Disneyland!<< >>tanoshikatta?<<
13   S2: [°so. mecha tanoshikatta°]
14   S1: [he:: °sugoi. °(1.0) ↑nice!]
15   S2: (2.0) >>a!<< how about you?

For one minute, students continued their conversation which featured numerous extended learner turns. When examining this excerpt, I was confident that this type of interacture was in line with my teaching goal which was to have students talk about their best memories of their trips. Students also made some referential reactions in both English and Japanese. In line 9, student 3 gave a genuine reaction and showed her surprise at the story that her partner ate *kurobuta* (a type of pork) in Kyushu. Also, in line 12, student 1 gave a genuine reaction and a question when he said "*ee*!? Really? Tokyo Disneyland! *tanoshikatta*? (Was it fun?)" It is good for students to have a genuine interest in what other students say as this forms the basis for realistic information exchange or negotiation where "the purpose of language use is to accomplish some tasks rather than to practice any particular language forms" (Lee, 2000, p. 9). One type of activity that promotes negotiation is an information gap task. Asking about a classmate's best memories is one information gap activity based on a familiar topic to my students that will also engage their natural curiosity about their partner's information. By asking such questions to their partners, their purpose of this activity became to accomplish the tasks and that was the purpose of language use. Furthermore, in line 10, I found my reaction acted as teacher modeling. By commenting on students' conversation content rather than grammatical form in the timed-conversation, students could learn how to react to others and were encouraged to talk more due to my positive reactions.

In conclusion, there were three key points that stood out for me from this analysis. First, I could notice what kinds of reactions students made in the conversation. Students could ask referential questions and use conversation strategies (CSs). Students asked genuine questions (opposed to display questions

Hooper, D., Braun, A., Kako, M., Kurashita, N., Soto Prado, R., Tajima, Y., & Watashima, S. (2024). Interactional analysis using scientific and everyday concepts in teacher development. *Accents Asia. 18*(1),15-24.

where they already know the answer) to gather information about their partners' trips. Genuine questions imply that they have interests in their partners' experiences. To stimulate students to ask more genuine questions, I realized that it was important to choose a topic that promotes students' "real" interaction. Second, familiar topics help students become engaged in the conversation and remember the expressions used in the talk. When students ask, "What is your best memory about a trip?", they can learn superlatives as well as infinitives. By talking in pairs, they can naturally work out the meanings of unfamiliar expressions through context. Therefore, students can connect daily topics (talking about their best memories) to scientific theories (grammar rules). Thirdly, I found my reactions to my students in the timed-conversation represented one potentially important teacher role. This is because students can imitate such natural English reactions from the teacher as a near-peer role model (Murphey & Arao, 2001) while at the same time being encouraged to engage in more conversation. For those three reasons, I believe having the balance of scientific knowledge (in the form of the target grammar rules) and daily life concepts (timed conversation based on real-life experiences) helps my students develop their second language ability.

Shiori

I teach at a private English conversation school. At this school, we normally hold classes once a week, with each class time lasting 50 minutes. This means that time and efficiency are two valuable considerations for both students and teachers. In addition, having a bachelor's degree in music and an interest in language acquisition and teaching, I am currently conducting research on the effectiveness of language teaching combining both Communicative Language Teaching (CLT) and music. According to Savignon (2002), "the essence of CLT is the engagement of learners in communication to allow them to develop their communicative competence" (p. 22). Therefore, creating as many opportunities as possible for students to be in Classroom Context mode and engaging in interaction is important. Also, I always keep in mind that the instruction should be simple and short, especially when given in the target language, to avoid wasting time or leading to unnecessary confusion. The SETT session helped me realize that in order to achieve more time and opportunities for student language use, effective use of Managerial and Materials modes is one of the most important points I should focus on when teaching.

Because of my interest in CLT, I teach English grammar with a Focus on Form Instruction (FFI) to enhance students' communicative competence, which also influenced the material that I chose for my lesson. According to Lee and VanPatten (2003), "learners who are engaged in meaningful or meaning-based approaches to grammar (called focus on form) do as well as or better than those who are engaged in activities that are non-meaningful or not part of some communicative intent" (p. 123). FFI usually consists of four steps: oral input, visual input, grammar noticing, and output activity. Since it has multiple steps that require instruction before starting each step, it is essential to utilize Managerial and Materials modes effectively while applying FFI so as not to unduly confuse students or take away precious time that could be spent on output practice. However, when Managerial and Materials modes are not appropriate, even when the instructions are simple and short, it could lead to some confusion for the students. During the second step of FFI, the same dialog from the first step is repeated to enhance the acquisition of the target grammar. The intent for this step was for students to listen to the dialogue once more and to write down what they had heard on their worksheet (Figure 8) so that they could directly observe and notice (Schmidt, 1990) the target grammar. The excerpt below shows what happened during the second step of the activity (see Figure 9).

Figure 8

Step 1: Please guess which country I am talking about. Work with your partner.

Your guess:

Step 2: Listen carefully and fill in the blanks.

(1)   Portuguese is (   ) in this country.

(2)   Maxixe is (   ) in this country.

(3)   27 starts (   ) drawn on the national flag.

Figure 9
[02:34]
1   T: but this one, can you <f:ill> (.) in the blanks, (.)
                can you fill words, in the blanks ((S does a writing gesture))
                you have your [pencils (   ) (1.0)
2   S1:   [oh, this is what you said,
3   Ss: ((Ss starts to fill the blanks))=
3   T: =OH HOLD ON I'LL- listen carefully=
4   S1:   =oh,
5   T: and fill in the blanks [okay?=
6   S2:   [oh::
7   S3: =oh oka[y
8   T: [NUMBER ONE [02:50]

In line 1, when the students were told to fill in the blanks, they immediately started writing because it was something that they had already heard during the first step. When I noticed that the students had already started writing, I realized that my instruction was not clear and said "Oh hold on" loudly as shown in line 3. Only after I told them that I wanted them to listen to me once more, they all understood what I intended them to do as Rob, Yuria, and Noriko all said "oh" or "okay" in line 4 to line 8. It clearly shows that although my instructions were simple and short, they still caused some confusion as to how to conduct the activity. In other words, I became strongly aware of how the right order of instruction is crucial in Materials mode. To be clearer about what I wanted them to do, I should have given instructions to fill in the blanks as follows; "Now I will repeat three hints that I have given you one more time. Please listen carefully and try to fill in those blanks".

Through the SETT session, I learned that it is important to be aware of what kinds of interactional modes I am using and how effectively I am using them in class. This can be said not only with Managerial and Materials modes (as illustrated in the excerpt above) but also with other interactional modes. I should

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also be focusing on how I can implement as many communicative activities as possible in class as my critical friend Mayumi helped me reflect deeper with these comments:

> When we think about the meaning side, maybe as you saw a difference between your presentation and my presentation, I didn't use a lot of material. I just used it a little. But without materials, it was easy for me to pursue what the students said. But with materials and a model dialog, maybe following what you have planned is the priority. So maybe moving a little bit away from materials could help the modes, like the four skills, be more balanced and will be better.

As Mayumi discussed, I should not forget to incorporate the Classroom Context mode as it focuses on opportunities for the students to express themselves in their target language. As I discussed above, utilizing Managerial and Materials modes more efficiently is certainly worth focusing on, but what is perhaps more important is for teachers to understand and be able to move between all four interactional modes–Managerial, Materials, Skills and Systems, and Classroom Context–throughout a given class because flexible use of these modes is directly connected to "teachers' and learners' interactional decisions and subsequent actions [to] enhance learning and learning opportunities" (Walsh, 2012, p. 5). Looking at the Managerial and Materials modes, which I often use in class, through the SETT session helped me realize that even with time constraints, I could create more space for the Classroom Context mode to increase actual language use among students to help enhance their English skills.

DISCUSSION AND CONCLUSIONS

In what ways were everyday and scientific concepts integrated through in-service teachers' use of SETT as a RP tool in a teacher training program and what impact did this have on their continuing professional development?

The six teacher perspectives above highlight how the SCT class represented a structured mediational space in which responsive mediation by both the course instructor (through task and materials design) and their peers (by acting as critical friends within dialogic analysis) scaffolded these teachers' scientific conceptual thinking as regards to their classroom interactional styles. Through the creation of an instrumental development zone between critical friends, teachers dialogically examined points of congruence or incongruence relating to classroom modes and interactures. As Roberto stated, this sometimes led to "something [they] had not experienced before" with these teachers "transcend[ing] their everyday knowledge" (Johnson & Golombek, 2016, p. 5) and, in Mayumi's terms, "becoming more SETT-sensitive" as they came to view their intuitive practices through a new perceptual lens. Furthermore, the tangible data in the form of CA transcriptions that formed the basis of both the solo and dialogic peer analysis acted as an important mediational artifact. Not only did this ensure, at least to some degree, that reflections were tied to some concrete record of what occurred in the class (rather than shaky memory or intuition), but it also served as a shared anchor for dialogue. By this, we mean that the CA transcriptions were concrete artifacts that critical friends could easily refer to to discuss specific phenomena and jointly 'define their terms' while resolving any divergence in interpretation as regards to the SETT concepts. Roberto's comment that it was the first time that he had been observed by a peer from his CoP relates to another key concern about RP raised by Farrell (2013) over it often being conducted from a top-down perspective where "problems" with teachers' practice need to be "fixed" by a manager or consultant. Conversely, this type of SETT-based bottom-up approach allows teachers to be "led by their own curiosity rather than having a topic of interest defined by an external authority" (Gill & Hooper, 2020, p. 3). In addition, SETT's scientific concepts of classroom mode and interacture diverge somewhat from simplistic and overly-subjective notions of "good" or "bad" teaching and instead direct teachers' attention to issues of mode/interacture congruence or incongruence. This means that teachers, just as those in this study, do not feel that they are in a position of deficit (Farrell, 2013) where their "bad" teaching is to be weeded out, but rather an exploration of points of interest where they endeavor to better align their "visible behaviors" (Farrell & Vos, 2018) with their stated teaching beliefs.

At the same time, however, even when presented with concrete data, there is a concern that our interpretation of that data will to some degree be myopic or will exclude points of interest beyond our perception. This is where the importance of social mediation of CPD via dialogic reflection emerges. As Mann and Walsh (2017) argue, "[l]earning is not something we have or own; it is something which entails encounters with others, where participation is central to the process" (p. 202). In our case, we can observe numerous instances (Mayumi, Noriko, Roberto, Shiori) where the collaborative analysis of their and their critical friend's data led to unexpected new discoveries shedding light on facets of their CA data and SETT analysis that they had not been cognizant of during solo reflection. The horizontal accountability between peers that we see in the dialogic CA analysis was further mediated by the presence of a shared "language" in the form of SETT's metalanguage of scientific concepts. In order to ensure that this project did not encourage "empty verbalism" or "a parrot-like repetition" (Vygotsky, 1986, p. 150) of scientific concepts, the microteaching sessions were designed to reflect as closely as possible the actual contexts–the *social situation of development* (Golombek & Johnson, 2019)–that teachers were working in. In this way, it was hoped that by examining the intricate and nuanced realities of their classes through the scientific lens of modes/interactures, teachers would be able to develop their own *true* concepts for professional practice. This, however, meant that we had to encapsulate a wide range of perspectives from diverse teaching contexts (IB school, elementary school, conversation school, high school) into one project. Although this may have been a potentially problematic issue in that a teacher's context was likely to be starkly different from their critical friend's situation, the shared "language" of scientific concepts (modes/interactures) meant that each teacher could analyze each type of lesson in a common way. Consequently, the SETT approach afforded us the best of both worlds as we were simultaneously able to maintain a rich and diverse collection of professional perspectives while also sharing common ground in analytical terms. This was further demonstrated when our teacher group presented our SETT analysis at the ETJ Chubu Expo on February 25, 2024 (https://ltprofessionals.com/expos/). During this presentation, we were able to engage in critical discussion with other teaching professionals from a plethora of different educational contexts about our SETT data and its implications for our teacher development.

Furthermore, during this intervention there were indeed numerous indications that our group of teachers was not simply going through the motions and parroting the scientific concepts that they had been introduced to. One such sign was new discoveries that the teachers independently and collectively made through their SETT analysis, including the realization that the division between classroom modes can be blurry and may even overlap to a degree. This suggests that the teachers may have started to utilize the scientific concepts of SETT as a tool for "consciousness and deliberate use" in relation to their classroom experiences. Simultaneously, their everyday knowledge carried with them through their language teaching histories provided "body and vitality" (Vygotsky, 1986, p. 194) that encouraged them to interpret SETT in a more nuanced and flexible way. In this way, we can observe the potential of teachers reflecting on their professional practice in order to form *true* concepts that stimulate CPD.

This short exploration of the role of scientific and everyday concepts within a SCT-influenced language teacher education program highlighted not only the importance of data-based and dialogic approaches to RP (Gill & Hooper, 2020; Hale et al., 2018; Mann & Walsh, 2017; Walsh & Mann, 2015), but also the value of CPD interventions that include structured mediational spaces in which teachers can derive *true* concepts by bridging the scientific and the everyday. Introducing a scientific concepts like SETT that teachers can then apply to classroom data is one important step, but teacher trainers need to be equally mindful of how the "coldness" of the scientific can be infused with life and relevance by a teacher's unique social situation of development and the wealth of everyday experience that they bring with them. Moreover, the structure afforded by the scientific can provide teachers working in starkly different teaching contexts with diverse "baggage" and perspectives a conceptual anchor and shared language that consequently allows them to cocreate new understandings and discoveries within a professional CoP.

Due to the highly specific nature of this study, the limited number of participants, and the necessarily-contrived nature of the microteaching sessions themselves, caution is certainly required if seeking to broadly apply any insights to another professional development or teacher training setting. Furthermore, it must be noted that unlike the graduate school teaching course where this study was conducted, in certain institutional contexts such as conversation schools, kindergartens, or elementary schools, teachers may encounter ethical restrictions related to informed consent or stakeholder resistance

that would make a CPD approach like SETT practically impossible. However, despite these caveats, some studies (Hale et al., 2018; Hooper, 2016) have highlighted the potential for such data-based RP approaches outside of formal academia in settings such as private English conversation schools. Furthermore, while there may be obstacles to collecting classroom data, the importance of teacher dialogue within critical friendships (Verla Uchida & Roloff Rothman, 2023) for CPD, as demonstrated in this study, cannot be overstated. Therefore, we argue that both within formal teacher education programs and more grassroots approaches to CPD, collaborative and dialogic interventions grounded in scientific concepts while legitimizing teacher experience can engender PD discoveries that help us to stay curious and stimulated across our teaching lives.

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Appendix A

Conversation analysis transcription symbols

.	(period) Falling intonation.
?	(question mark) Rising intonation.
,	(comma) Continuing intonation.
-	(hyphen) Marks an abrupt cut-off.
::	(colon(s)) Prolonging of sound.
wo:rd	(colon after underlined letter) Falling intonation on word.
wo:rd	(underlined colon) Rising intonation on word.
word	(underlining)
word	The more underlying, the greater the stress.
WORD	(all caps) Loud speech.
°word°	(degree symbols) Quiet speech.
↑word	(upward arrow) raised pitch.
↓word	(downward arrow) lowered pitch
>>word<<	(more than and less than) Quicker speech.
<<word>>	(less than & more than) Slowed speech.
<	(less than) Talk is jump-started—starting with a rush.
hh	(series of h's) Aspiration or laughter.
.hh	(h's preceded by dot) Inhalation.
[ ]	(brackets) simultaneous or overlapping speech.
[ ]	
=	(equal sign) Latch or contiguous utterances of the same speaker.
(2.4)	(number in parentheses) Length of a silence in 10ths of a second.
(.)	(period in parentheses) Micro-pause, 0.2 second or less.
( )	(empty parentheses) Non-transcribable segment of talk.
((gazing toward the ceiling))	(double parentheses) Description of non-speech activity.
(try 1)/(try 2)	(two parentheses separated by a slash) Alternative hearings.
$word$	(dollar signs) Smiley voice.
#word#	(number signs) Squeaky voice.