

Original Research

This can be made more student-centred: Asynchronous mediation in in-service teacher professional development

by Victoria Kareva, Tatiana Rasskazova and Dmitri Leontjev

Victoria Kareva University of Jyväskylä, Finland v.iu.aksenova@urfu.ru

Tatiana Rasskazova Ural Federal University, Russia tatiana.rasskazova@urfu.ru

Dmitri Leontjev University of Jyväskylä, Finland dmitri.leontjev@jyu.fi

Article history Received August 26, 2022 | November 28, 2022 | Accepted December 1, 2022

Conflicts of interest The authors declared no conflicts of interest

Research funding No funding was reported for this research

doi [10.22363/2521-442X-2022-6-4-73-90](https://doi.org/10.22363/2521-442X-2022-6-4-73-90)

For citation Kareva, V., Rasskazova, T., & Leontjev, D. (2022). This can be made more student-centred: Asynchronous mediation in in-service teacher professional development. *Training, Language and Culture*, 6(4), 73-90.

Vygotskian Sociocultural Theory is a powerful foundation for research into teacher professional development. However, while this research has been growing, it has largely been focused on pre-service second/foreign language. Furthermore, there is a lack of research on how the instructional process informed by the principles of Sociocultural Theory, including assessment of candidates' mediated performance, can be orchestrated to promote teachers' conceptual development and induce changes in their classroom practices. The present study explores how asynchronous assessment of in-service teachers' portfolios (with the focus on lesson planning) informed by dynamic assessment framework shaped the tutor's mediation in synchronous online interaction with two teacher candidates. Theoretically, the study was informed by Vygotskian notion of true concepts. Focusing on two candidates in the training, we traced their trajectories regarding their conceptual development and the development of their practices. We will namely, illustrate how the information received in assessment guided the tutor's mediation, and how the synchronous interactions in the course shaped and helped to interpret the assessment of candidates' unassisted and mediated performance on portfolios. We will discuss implications of our study and will argue for shifting the focus beyond single classroom activities in Sociocultural Theory research.

KEYWORDS: *in-service teacher training, sociocultural theory, mediation, Zone of Proximal Development, true concepts, praxis*



This is an open access article distributed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/) (CC BY-NC 4.0), which allows its unrestricted use for non-commercial purposes, subject to attribution. The material can be shared/adapted for non-commercial purposes if you give appropriate credit, provide a link to the license, and indicate if changes were made.

1. INTRODUCTION

The interest towards Vygotskian sociocultural theory (SCT) in research in second/foreign language (L2) teaching and learning in the classroom has only been growing. It has had different foci, including organisation of pedagogical activities leading learner development (see Poehner & Leontjev, 2022; Van Compernolle & Williams, 2013), dynamic assessment (DA) (Poehner,

2008), and dialectical collaboration with L2 pre- and in-service teachers (Donato & Davin, 2018; Johnson & Golombok, 2016).

What also unites these strands of research is their commitment to *praxis*, a dialectical unity of theory and practice fundamental to SCT research. In *praxis*, theoretical principles and concepts are used to change practice while themselves are validated in it. Veresov (2014,

p. 133) argues that praxis is predicated on the understanding that '*theory without an experiment is a voluntary play of mind; an experiment without a theory is a knife without a handle*'.

One line of research informed by praxis that has recently been gaining prominence is pre-service and in-service teacher professional development, even though the latter is less frequent (Johnson & Golombok, 2018; Lantolf et. al., 2021). In this line of research, theoretical concepts and principles are actively used to transform teacher practices, dialectically coming together with teachers' everyday understandings stemming from their experiences (Johnson & Golombok, 2018). We will elaborate on this research below. Here we mention that the sociocultural notion of *mediation* becomes important in teacher development in praxis.

Vygotsky (1978, 1987; see also Wertsch, 1985) argued that human higher mental functions are mediated by cultural and psychological tools. When acting independently, the resources individuals use to regulate the activity are limited to those they have fully internalised. By participating in an activity with others, individuals have access to joint resources available on the interpersonal plane. Vygotsky (1978) discussed this with regard to *Zone of Proximal Development* (ZPD), emerging once others intervene in the psychological activity, allowing the individual to perform beyond their unassisted capabilities (Vygotsky, 1978). For education, this understanding of development is important for several reasons. First, observations of independent performance only reveal matured abilities. A fuller picture emerges when the learner's mediated performance is considered. Second, the teaching-learning process or activity leads development, that is, what the learner can do with support now, this learner will be able to do independently in future. Indeed, novel abilities emerge in collaboration with a more knowledgeable teacher educator in praxis with teachers.

Reports on praxis with teachers have different foci, including developing pre-service teachers' ability to guide their learners' development (see Johnson & Golombok, 2016; Lantolf & Poehner, 2011), merging summative and formative assessment in their classroom practices (Leontjev & Pollari, 2022; Poehner & Inbar-Lourie, 2020), and developing equitable teaching practices building on empathy and theoretical concepts (Smagorinsky & Johnson, 2021). There has been a growing body of research on dynamic assessment (DA), a dialectical unity of teaching and assessment (Poehner, 2008), in L2 (second/foreign language). However, there

is rarely a focus on assessment in teacher development SCT research, and that which exists focuses on single assessment activities rather than on how assessment informs the instructional process. The present study addresses this gap.

2. THEORETICAL BACKGROUND AND LITERATURE REVIEW

2.1. Sociocultural theory in teacher education

SCT research on teacher development is strongly informed by Vygotsky's (1998) work on concepts arguing that the major reason for the development of school children is the introduction of scientific concepts in formal education. These are contrasted with everyday (spontaneous) concepts grounded in day-to-day life experiences. Spontaneous concepts are not replaced with scientific concepts but enter into a dialectical relationship with them. In other words, neither an intuitive understanding of how things work nor the decontextualised and systematic scientific concepts alone create optimal opportunities for development. Instruction can truly be called properly organised when a scientific concept '*gradually comes down to concrete phenomena*' and a spontaneous concept '*goes from the phenomenon upward toward generalisations*' (Vygotsky, 1987, p. 148), forming what is called a true concept.

Teachers enter their profession with everyday concepts or understanding based on their experiences and preconceptions, which develop with teaching experience, and which should be transformed into true concepts as academic concepts are introduced through mediated support (Johnson & Golombok, 2018). In SCT research on teacher development, the terms *academic concepts* (see Johnson & Golombok, 2011; 2018) and *pedagogical concepts* (Johnson et. al., 2020) are also used. The former is used interchangeably with *scientific concepts* (Johnson & Golombok, 2018). Unlike academic concepts, pedagogical concepts focus on '*how to teach, rather than what to teach*' (Johnson et. al., 2020, p. 4). They are defined operationally and are '*modelled in the activity of actual teaching*' (Johnson et. al., 2020, p. 6). Johnson et al. (2020) focused on pedagogical concepts, exploring how concepts of *Teach off Your Students, Not at Them* (building on learners' contributions in instructional conversation), *Be Direct, Not Directive* (helping learners construct knowledge, not taking agency away from them), and *Teaching as Connecting* (shaping learners' development while responding to institutional and curricular goals) helped novice teachers move from being teacher-centred.

'Reports on praxis with teachers have different foci, including developing pre-service teachers' ability to guide their learners' development, merging summative and formative assessment in their classroom practices, and developing equitable teaching practices building on empathy and theoretical concepts'

When internalised, concepts become a powerful means for transforming teachers' practices. Reis (2011), for example, in a narrative inquiry, studied the development of the L1 Russian participant's identity as she restructured her everyday conceptualisation of a native speaker, building her understanding of self as a teaching professional. Nauman (2011) focused on one in-service L1 Chinese teacher's development mediated by the literacy concept (*literacy involves communication*) for two terms. The author argued that classrooms are an important context for teacher development, as it is there that teachers can connect academic concepts with their practice.

The emergence of true concepts and, as a result, changes in teacher practices have been studied with different foci, using different data, in different timeframes, and with various numbers of participants. These include focusing on developing teaching materials allowing pre-service teachers to make sense of their experiences and theoretical knowledge together (Augusto-Navarro, 2015), development of pedagogical content knowledge (Worden, 2015), development of equitable teaching resulting from the internalisation – incorporation of cultural tools to mental processes and their reconstruction to mediate psychological functioning in novel situations and activities – of the *emphatic framing* concept that pre-service four teachers discussed in a reading circle (Smagorinsky & Johnson, 2021), and teachers moving away from teacher-centred practices (Amory, 2020).

Moving away from teacher-centred practices is particularly important in contexts where such practices have long been prevalent. Cirocki and Farely (2016), for example, investigated to what extent Armenian EFL teachers ($n = 80$) engaged in classroom research, arguing for further exploration of Armenian teachers' understanding of research and reflection. Feryok (2008) discussed divergences of cognition and practices of an in-service English teacher in Armenia who received her

tertiary education in the Soviet times and, by the time of the data collection, had had ten years of teaching experience. The author illustrated that while, for the teacher, encouraging student participation was important, the assistance the teacher gave her students was explicit and limiting.

More recent examples of praxis-informed research include Leontjev and Pollari (2022), focusing on merging formative and summative assessment in the classroom, Johnson (2022) who explored mentoring as mediation leading to a novice teacher creating opportunities for learner engagement and participation, as well as Poehner and Leontjev (2022), and Leontjev and deBoer (2022), who explored how different classroom activities created learner development together.

Informed by these studies, we together with the tutor understand the development of the candidates in the course as their conceptual development which led to changes in their classroom management. In other words, this development implied the candidates' understanding of academic concepts through their practices as well as the interpretation and changes in their practices through and due to the academic concepts.

The guidance, particularly in the formal training environment, requires knowing how to guide. In the SCT research, this guidance depends on the degree of responsibility learners are able to take for their performance, that is, their ZPD. Yet, few studies have explored the use of principles of dynamic assessment (DA) to diagnose teacher professional development. In the following section, we elaborate on the DA framework and on how it can inform teacher development programmes.

2.2. Dynamic assessment

The dynamic assessment (DA) framework emerged from Vygotsky's (1998) discussion of ZPD as a diagnostic tool. The basis for the DA is the understanding that the full picture of learner abilities is revealed when learner performance with various forms of mediation is taken into account (Poehner, 2008). In DA, therefore, teaching and assessment are dialectically related; that is, assessment requires teaching to identify learners' maturing abilities, whereas teaching needs assessment to optimally promote learner development (Poehner & Infante, 2015).

Mediation in DA is informed by the work of Aljaafreh and Lantolf (1994), who argue that mediation should be provided when needed and withdrawn as learners assume responsibility for their performance

(contingency principle), be implicit enough to give the learner the most responsibility for their performance and explicit enough to create novel ways of thinking and acting (graduated principle) and emerge in a joint activity with the learner (dialogic principle). DA is also informed by the notion of reciprocity stemming from the work of Feuerstein (see Feuerstein et al., 2010). Reciprocity emerges from the understanding that mediation both limits and creates opportunities for the learner to react. That is, the mediator's intention to promote the learner's development shapes the way the learner responds to it, which guides the following mediation (see Lidz, 1991; Poehner, 2005).

In interventionist DA, a standardised list of prompts is used, following from implicit to explicit mediational moves rigorously for all learners for greater objectivity of results (Lantolf & Poehner, 2004). As Lantolf and Poehner (2011) state, '*interactionist DA places no restrictions on mediation but instead demands that the mediator do everything possible to help the learner stretch beyond his/her current independent performance*' (Lantolf & Poehner, 2011, p. 15). In other words, in interactionist DA, mediation is flexible and has a greater focus on learner development than on assessment, even though both foci are present.

In the field of L2, DA has been applied, for example, to assess learners' writing (see Rahimi et al., 2015), listening (see Rasskazova & Glukhanyuk, 2018), reading (see Teo, 2012), grammar and vocabulary (Leontjev, 2016), and several competences together. Dynamic assessment has also been used to teach L2 concepts (García, 2019). These implementations of DA, however, have largely focused on L2 learners.

Reports on DA in L2 teacher development have been scarce and focused on synchronous DA implementation. Golombek (2011) reported on a synchronous DA session using Dynamic Video Protocol with an MA student. García (2019) reported on a case study where synchronous DA was employed to assess and promote an in-service language teacher's conceptual development. García (2019) argued for the inclusion of DA in language teachers' in-service training for assessing and promoting their conceptual knowledge about language.

This is not to say that asynchronous mediation has not been employed in teacher development. Reis' (2011) study, for example, exploring the internalisation of the concept of native-speaker vs non-native speaker, involved asynchronous mediation. However, it was not focused on diagnosing teachers' ZPD.

Still, asynchronous DA implementations have been discussed in the field of L2 learner development. Shrestha (2020) described an implementation of asynchronous DA in a university academic writing course in detail. Four undergraduate business studies students participated in two DA sessions with the tutor/author, submitting four drafts in the first DA session and three in the second DA. The author provided their mediation asynchronously via emails. Analysing mediational and reciprocity moves, the author traced how the participants' academic writing developed as they internalised the mediation. Importantly, Shrestha (2020) provided a detailed typology of mediation and reciprocity moves, some of them specific to asynchronous interaction (for other mediation and reciprocity typologies, see Poehner, 2005).

Our paper addresses the lack of studies exploring how assessment informed by SCT can become a part of teacher development programmes. The assessment activity informed by the DA principle of reciprocity was developed in praxis between the tutor (the first author) and the researchers (Authors 2 and 3). We explored what integrating this assessment into the training allowed for, studying how the tutor built her asynchronous mediation to learners in portfolio assignments based on what she learned about her learners by the time of the portfolio activity and how the information obtained from the portfolio assignment activity informed the tutor's classroom interactions. We will refrain from labelling this assessment activity as DA due to the challenges of integrating full DA interactions into separate portfolio assessments. We will, however, demonstrate how the portfolio assessments in the course taken together allowed for tracing the teacher candidates' growing self-regulation as the course progressed and allowed for, together with other course activities, developing their conceptual understanding of learner-centeredness.

Seen this way, the tutor's mediation in the course, as we will elaborate on, differed in that in the portfolio assessments, it focused on assessing, i.e., diagnosing the candidates' ZPD, whereas in the other course activities on the development of the candidates.

3. MATERIAL AND METHODS

3.1. Research questions

In this study, we seek to answer the following research questions: (1) What information about L2 English teachers' conceptual and methodological knowledge and ability to apply it does asynchronous mediation

'We explored what integrating this assessment into the training allowed for, studying how the tutor built her asynchronous mediation to learners in portfolio assignments based on what she learned about her learners by the time of the portfolio activity and how the information obtained from the portfolio assignment activity informed the tutor's classroom interactions'

provide? (2) How does building on the activity whose goal was assessing teachers' ZPD promote the development of in-service teachers' true concepts?

3.2. Context and assignments

The data were collected in a CELT-S course (Certificate of English Language Teaching – Secondary, by Cambridge Assessment English), a six-months in-service teacher training. The purpose of the training was to help L2 English teachers develop their classroom management skills and expand their knowledge of teaching methodology.

Learner-centredness was one of the course foci. The goal was to help teachers '*give learners more say in areas that are traditionally considered the domain of the teacher*' (Thornbury, 2006, p. 115). That is, promoting learner autonomy, including negotiation of a curriculum and classroom activities giving learners agency in pair and group work, was elicited. The focus was on methodologies and discussions of how teachers could involve learners in classroom activities, giving them ownership of their learning (Harmer, 2007). The academic and pedagogical concepts studied under the umbrella of learner-centredness included: (1) learner motivation and engagement – linking the materials to learner experiences and interests and asking open and higher-order questions; (2) personalisation – techniques for making the materials relevant for the learners, including connecting the materials to the joint histories with the learners and the local contexts; (3) form-meaning-pronunciation concept, eliciting the need for teachers to focus on all three aspects of the studied linguistics phenomena. Particularly the *meaning* part of the latter concept is relevant, as the teachers tended to focus on form (e.g., of tenses), the meaning conveyed almost exclusively as a formulaic set of rules, void of contextualisation and use.

The assessment introduced into the course whose goal was diagnosing the candidates' ZPDs emerged in the praxis of the tutor and the two researchers and was based on the principles of DA. The challenges of integrating DA into the course largely emerged (1) from the educational and assessment culture the candidates came from and (2) the course constraints. The candidates came from an educational culture where a unidirectional grammar-translation approach taught by an authoritative teacher was common. Hence, as elaborated, the true concepts on which the assessment activity focused had to do with learner-centeredness. There were several constraints associated with the format of the training. First, it had to follow the syllabus. The course was mainly asynchronous, with some Zoom interactions in which the course instructor focused on deepening the candidates' knowledge. Hence, asynchronous assignments were deemed more suitable for the assessment activity, and we decided not to attempt to implement DA in the same way as Shrestha (2020), for example, did, but rather stretch the mediation across the portfolio assessments in the course, commenting on each only once.

The course included online modules completed by the participants, portfolio assignments, where portfolios 4 to 7 were mediated by the tutor and used as data, several teaching practices, of which we focus on the final, third practice, and Zoom interactions. Prior to the study, formative feedback in the course focused on (1) learner agency (including building on the prior knowledge of learner abilities), (2) making the learning manageable (focusing on learner development rather than on covering as much material as possible), (3) ensuring the development of *all* learners, (4) connecting the covered material to learners' experiences and focusing on language use more than form. This feedback had been, generally, explicit and unidirectional. Our goal was to design and implement asynchronous mediation whose goal was to diagnose and develop learners' ZPD.

Due to administrative and time constraints, we were able to start our study in the middle of the course. This, however, benefitted the mediation in the study, as the tutor had an idea of the candidates' abilities. That is, instead of starting from the most implicit mediation, allowing the candidates' struggles to emerge and assessing the candidates' degree of self-regulation (the responsibility for their own performance as opposed to other-regulation), the tutor had an idea of what the focus of the mediation ought to be by the time the portfolio assessment activities started.

While the early portfolios focused on single comprehensively defined tasks, such as introducing a grammar point, in the later portfolios, the candidates were expected to build on the conceptual understanding of strategies, methods, and materials promoting L2 learning (Appendix 1). The last teaching practice assignment focused on candidates writing their own lesson plans and executing them. Teaching practice 3 was considered the transfer assignment.

3.3. Participants

The course participants were L2 English university teachers in Tajikistan, 11 female and one male. Their teaching experience varied from three years to over twenty. The subjects they taught included practical English, phonetics, and home reading. The most commonly cited reasons for joining the course were to learn current teaching methods, improve one's teaching in general, the prestige of the course, and an opportunity to use this qualification to get teaching experience abroad.

In this study, we focus on two candidates in the course who both gave their informed consent – Candidate 1 and Candidate 4. The reason for focusing on these two candidates in this study is that they were the only two who submitted all their portfolio assignments. Both candidates have had over 18 years of teaching experience and taught similar courses as outlined above. Other candidates were present in Zoom interactions and when relevant, we will refer to their contributions in Zoom interactions.

3.4. Data and procedures

The data was collected from four portfolio assignments (Appendix 1), audio-recorded interactions with all the candidates together conducted on Zoom (hereinafter, Zoom interactions), and the final course assignment, Teaching practice 3.

The timeline of the course activities with classroom interactions and teaching practice is presented below in Figure 1.

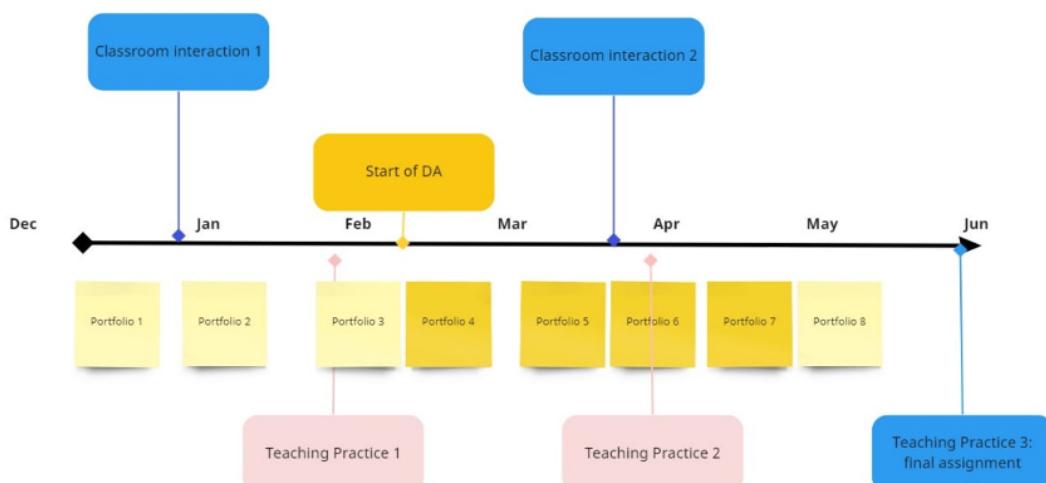


Figure 1. Timeline of the course

As detailed in Appendix 1, the general focus of the portfolio assignments was developing lesson plans, though the specific focus varied. For each portfolio, two versions were submitted, one before the mediation and one after it. The portfolio drafts, mediation and the portfolios modified in response to mediation serve as the data. Upon the anonymisation of the portfolios, mediation in the form of written comments on Google docs was given to the candidates. The anonymisation was conducted by the tutor, who could, therefore, connect various data pieces systematically together. The two researchers only had access to the anonymised data,

where the candidates were referred to by pseudonyms. Once the candidates reacted to the comments by introducing modifications to their portfolios, they submitted the final versions to the tutor.

We adhered to the flexible approach to mediation. That is, upon a discussion, we used the mediational moves we deemed the most appropriate to guide the candidates' development, based on what we, and above all the tutor, knew about each candidate, the previous mediation, and the candidates' reciprocity. As we elaborated, we did not start from the most implicit mediation on the first submitted portfolio in the study

'There were two reasons for the tutor to focus on the teachers' classroom practice during the DA: (a) the portfolio assignments elicited the candidates' practical experience; (b) our intention was to build on this experience while transforming it. Still, the mediation implicitly built on how the academic (including methodological) concepts were discussed in Zoom interactions, creating a bridge between theory and practice'

due to the limited number of portfolio assignments in the course and only one resubmission per assignment allowed in the syllabus. Hence, starting with the most implicit mediation would not create ample opportunities for the candidates' development. Furthermore, by the time of the study, the tutor had a rather clear picture of the candidates' recurrent challenges and an idea about their self-regulation. The following principles guided our mediation: (1) it was based on the learners' reciprocity in the previous sessions; (2) it was linked to the methodological points covered in the training, as we elaborated in Section 3.2; (3) it elicited the teachers' practices, that is, their everyday concepts; (4) it guided the candidates to build on learner's histories and experiences when presenting and practising the L2 features; (5) it elicited social interaction among learners.

Therefore, the focus of the mediation was learner-centeredness, though the specific focus, including the concepts forming learner-centeredness, emerged based on the challenges the tutor and the two researchers identified. There were two reasons for the tutor to focus on the teachers' classroom practice during the DA: (a) the portfolio assignments elicited the candidates' practical experience; (b) our intention was to build on this experience while transforming it. Still, the mediation implicitly built on how the academic (including methodological) concepts were discussed in Zoom interactions, creating a bridge between theory and practice.

The other data in the study were Zoom interactions prior to and during the portfolio assessment activities and the candidates' final course assignments. These will be used to illustrate how academic concepts emerged in interactions and connected to the mediation of portfolio assignments and how the true concepts emerged for the two focal candidates in the study. We note that

while concepts were approached differently in the portfolio and Zoom interaction activities, the intention was that these activities form a coherent whole. The tutor, furthermore, used the information from the asynchronous mediation (informed by the DA framework) of the candidates' performance on the portfolio assignments, adjusting, as we will illustrate, course activities informing and informed by the portfolio assessment.

3.5. Analysis

As the first step of our analysis, for each candidate, we singled out the points we commented on in their portfolios and how the candidates responded to them. We then coded these informed by Aljaafreh and Lantolf's (1994), Poehner's (2005), and Shrestha's (2020) typologies for mediational and reciprocal moves. However, we did not adhere strictly to existing typologies but studied mediational moves that emerged in the data, coding them together and discussing any inconsistencies in our interpretation of the mediational moves. Appendices 2 and 3 briefly describe the mediational and reciprocity moves in the study. This coding allowed us to establish differences among our candidates in terms of their mediated performance and to trace their individual developmental trajectories across the portfolio assignments.

The Zoom interactions were studied as a reciprocity-mediation cycle. We analysed how the tutor used the information obtained in the portfolio assessment to guide the candidates and how the candidates responded to the tutor's guidance. In the final assignments, we studied how the candidates connected academic concepts to their everyday concepts, discussing their practice using these concepts.

In the following section, we discuss the two candidates' unassisted and mediation performance across the four portfolios, as well as how tutor-candidate Zoom interactions (with the focus on development) informed the portfolio assessment whose goal was to diagnose the candidates' ZPD (with the focus on assessment) and vice versa. In fact, the candidates' development was understood taking into account *both* of these parts of the course. The portfolio assessment allowed us to trace the changes in the candidates' reliance on the tutor in lesson planning (the focus of the portfolios) operationalised in the changes in explicitness of mediation and the candidates' reciprocity. The Zoom interactions allowed us to see that the changes that the candidates made to the portfolios were not mechanistic – candidates simply figuring out what the tutor expected them

to do without understanding why – but were the result of the development of their conceptual understanding. Hence while we present the findings in separate sections, these should be considered *together*.

4. STUDY AND RESULTS

4.1. Portfolio assessment to diagnose ZPD

Here we will discuss the developmental trajectories of the two candidates emerging in the portfolio assessment, tracing changes in the mediation given in each portfolio and the ways that the two candidates responded to it.

What made the tutor's assistance mediation, we argue, was that it was informed by (a) the candidates' reciprocity, that is, the changes they made in response to the mediation on the previous portfolios. When the two candidates' unassisted performance was considered (the first draft of each portfolio), it was very similar. Both candidates, from the outset, tended to overestimate the learners' cognitive load, not give their learners much agency, and not connect to learners' histories and experiences. The two candidates' mediated performance, however, was rather different.

We note that while the rest of the participants did not manage to submit all the assignments on time (and hence we did not include them in the portfolio assignment data set), the challenges that C1 and C4 faced were similar for the rest of the group, as will also emerge in Zoom interactions which we will elaborate on later. In addition, as Candidate 1 and Candidate 4 did, as we will illustrate next, the rest of the participants continued to struggle with the concept of learner-centeredness applied to their practice, as their unassisted performance on the portfolio assessment (their lesson plans) showed, but by and large, exhibited growing self-regulation as far as their changes in response to the tutor's mediation are concerned. As we will demonstrate with the performance of the two focal candidates, this general upward trend does not imply that the tutor simply always used a growingly implicit mediation in the subsequent portfolios and neither that the candidates always corrected their portfolios in a satisfactory manner in response to the tutor's mediation. To repeat, the goal of the portfolio assessment was to diagnose the candidates' ZPD based on the principle of reciprocity. We next illustrate this with the common challenges that the two candidates had.

The most common problem for Candidate 1 was that they did not connect to learners' experiences, including example sentences they provided in their les-

son plans. They, thus, elicited mechanistic application of the covered structure. This candidate also tended to provide complex metalinguistic explanations with extensive use of terminology. To illustrate, in Portfolio 4, Candidate 1 provided the following sentences to exemplify the use of present perfect simple tense: *I've known Karen since 1994; She's lived in London for three years.*

Based on the tutor's history with the two candidates, Candidate 1 received the following comment: *I wonder if basing on the learners' experiences or your joint one with them can help them understand the use of the tense better* (Mediation Move 7; Appendix 2). This candidate was also invited to think in terms of their learners' cognitive load and asked to simplify their explanations. Candidate 1 incorporated this mediation (Reciprocity Move 2; Appendix 3), making their example sentences personalised, e.g., *I've taught you since 2019.*

However, in the following Portfolio 5, Candidate 1, introducing the present continuous tense, returned to their old practice, e.g., *What are you writing? – A letter to Jane*. This time, the tutor's mediation is more implicit: *Look back on Portfolio 4 and think how these examples can be made more memorable for your learners* (Mediation Move 6). This time, the tutor opted for more implicit mediation as this candidate had successfully developed their lesson plan in the previous portfolio. This candidate, again, replaced the sentences, e.g., *I am teaching the present continuous right now*, which implies their growing responsibility for performance.

In Portfolio 6, Candidate 1 expected their learners to practice requests and offers using a predefined script. This was not personalised – did not involve techniques relating the materials to the learners' experiences – or engaging; in other words, it was not learner-centred. That is, Candidate 1 continued to focus on morphosyntactic features of a language mechanistically. The tutor's guidance on the framework of Mediation Move 5 was, *Do you think ss might benefit more if they are allowed to change the context and use the target language in a more personalised dialogue?* As the candidate developed their Portfolio 5 following the tutor's mediation, this mediation was less explicit than previously. As a result, the candidate again changed their script, changing, for example, *food and money* into *local money and food* once the learners have practised the initial role plays.

In Portfolio 7, Candidate 1 built an activity around local fast-food restaurants, its lead-in being *I will put the picture of some fast-food restaurants in Dushanbe*

and the learners will guess the location of these restaurants. That is, the candidate was now able to plan classroom activities such that learners could connect their

experiences to language use, attaching personal meaning to them. For Candidate 4, we focus on two challenges, one similar to Candidate 1 (Table 1).

Table 1
Failing to make it learner-centred

PORTFOLIO	FIRST DRAFT	MEDIATION	RECIPROCITY
Portfolio 4	This structure was my scientific research work	Well, it is a good reason, but you need to think why it is relevant for your students? Why do they need to know this tense?	Reason for choosing these tenses is being relevant to the course book and programme of the course.
Portfolio 5	Was the topic of the programme for intermediate level?	Think about the reasons why you chose the Present Perfect Simple tense in the previous portfolio (in addition to it being a part of the course).	Reason for choosing these grammar structures is being relevant to the coursebook and program of the course.

As illustrated, in Portfolio 4, Candidate 4 indicated that their reason for selecting the grammatical structure (present perfect tense) as the grammar focus of the lesson was that it is a part of their research work. However, the concept of learner engagement was a part of learner-centeredness discussed in the training by that time. Hence, the tutor invited the candidate to think about their rationale with reference to their learners, creating an opportunity for the candidate to connect their everyday experience to the methodological and conceptual points covered in the training (Mediations Move 4). However, the candidate, instead, based their rationale on the coursebook and course programme (Reciprocity Move 5), which led the tutor to understand that the candidate still required considerable guidance from the tutor. That is, there is no effort to apply the academic concepts in the course to their lesson plan, showing that this candidate did not even try to think in terms of the theoretical concepts. Thus, in Portfolio 5, the mediation was more explicit, the tutor inviting the candidate to stretch their rationale beyond the coursebook (Mediations Move 6). Nevertheless, the candidate copied their modification from the previous portfolio (Reciprocity Move 5). That is, the candidate attended to the first part of the mediation from the tutor but completely ignored the tutor's invitation to think beyond the coursebook. This again showed the tutor that the candidate did not apply the concepts to plan their lesson in the portfolio.

By Portfolio 6, however, Candidate 4 was more self-regulated with regard to this issue, marking the following as their rationale for selecting the focus *Some learners will find it difficult to use modals in deduction for judging people by appearance*. Furthermore, in the post-listening part of the listening activity in the same lesson plan, the candidate focused on the learners' experiences with regard to the listening topic, building it around group work and adding the two questions to guide the group discussion: *How important is appearance in your country? Do people in your country judge by appearance?* This candidate, thus, both linked the grammatical topic with the listening and built the post-listening activity on practising the structure in a context relevant to their students (the concept of *personalisation* but focusing on the everyday concept of it in the classroom). We will suggest how this development occurred in Section 4.2.

Candidate 4 also tended to present a large volume of material in their lesson plans, focusing on covering the syllabus material, thus creating unnecessary cognitive load for their learners rather than beneficial conditions for learning. This also becomes apparent in Portfolio 4, where the grammatical topic was marked as *Present Perfect tense*, but this candidate also referred to other perfect tenses. Candidate 4 was guided in the following way in the framework of Mediations Move 8: *I got an impression that you are mainly focusing on the Present Perfect Simple, however, you have some exam-*

ples of the Present Perfect Continuous... which tense are you focusing on? The candidate responded by limiting the grammar to Present Perfect Simple tense. In Portfolio 5, Candidate 4 decided to cover modal verbs and the first conditional, both novel structures to their learners, to teach them speculation about the future. They, further, did not elicit the meaning part of the *meaning-form-pronunciation* concept, focusing on the

formation of the structure only. Mediation to Candidate 4 read: *This can be made more student-centred. Think how you achieved this in your previous portfolio* (Mediation Move 6). The candidate's reciprocity was different this time, as they did not focus their portfolio on one grammar point, instead structuring this part differently. Table 2, the original extract from the portfolio as it was written by the Candidate, illustrates the change.

Table 2

Sample of Candidate 4's actual and mediated performance in Portfolio 5

PERFORMANCE BEFORE MEDIATION	RESPONSIVENESS TO MEDIATION
<p>1. We use modal verbs for speculating the future with the base form of the verb. May, might, could + verb Ex: Students might understand the new topic. The teacher might not introduce the new student.</p> <p>Note: In negative sentences we use may not /might not. We do not use could not.</p> <p>...</p> <p>3. We use first Conditional to predict the result of a future action. Ex: If students study well, they will take the exam. Note: the modal verbs may, might, can can be used instead of will or will not.</p> <p>...</p>	<p>a. Modal verbs may/might/could/may Ex: She might leave school next year.</p> <p>1. Are there modal verbs in the sentence? Yes. What are they? may/might/could</p> <p>2. Are the modal verbs before or after the main verb? before the main verb ...</p> <p>3. Do they show prediction? Yes they do speculate or predict the future: to talk about the possibility of something happening in the future by a base form. May/might/could + leave (about her leaving school)</p> <p>b. First conditional Ex: If the hotel has WI- FI, I will check my emails. 1. How many clauses are there in the sentence? Two clauses; If- clause Will- clause ...</p>

When interpreting Candidate 4's reciprocity, it should be considered that there were two areas for development that the mediation targeted: (a) focusing on one grammar point and (b) making the covered material easier to process for learners. As a response, this candidate wrote more about the use of modal verbs and conditionals for predicting and speculating about the future. Therefore, this candidate partially incorporated the mediation, addressing the second point (Reciprocity Move 3). Certainly, the candidate did not connect to their learners' experiences, failing thus to make the use of structure meaningful to learners. By Portfolio 6, Candidate 4 could focus the lesson, linking it also to the previous Portfolio 5. Namely, they included the formation of the structure, the meaning modals convey in de-

ducing, e.g., *When we are sure something is true: must*. The candidate followed this up by asking learners to speculate based on the information presented in a recording about an individual, using such prompts as *What is his job?* This culminated in a discussion with the learners about the importance of appearance and judgements made based on it in the learners' home country. This candidate, therefore, demonstrated growing self-regulation, adapting and reconstructing understandings that emerged previously in a novel context. In Candidate's 4 final Portfolio 7, there were no issues marked by the tutor. This candidate thought about their learners throughout the lesson plan, starting from the lead-in: *Do you argue with your brothers and sisters? What is the usual reason for arguing?*

4.2. Tutor-candidate Zoom interactions

In this section, we will report on how the assessment was informed by the preceding interaction and elaborate on how the tutor used the information that emerged in the portfolio assessment activity in Zoom interactions with the candidates. We will illustrate these using several excerpts from these interactions. Due to the lack of space, we will focus on two episodes where Candidate 4 participated, one prior to the mediated portfolio assessment activities (i.e., before Portfolio 4) and one, in the Zoom meeting happening between Portfolios 5 and 6. We note, however, that Candidate 1, and other non-focal candidates participated in these interactions.

Before the portfolio assessment activities, the candidates could not connect the academic concepts introduced in the course to their classroom practice or, indeed, revealed that the approaches and strategies discussed in the training were not possible to use in their classrooms. To illustrate, Candidate 4, when discussing learner engagement and individual approach, reported the following (Excerpt 1). This interaction occurred right before the Portfolio 4 assignment was due.

Excerpt 1

C4: We have to find an individual approach to the students [...] So, what is the best way for them to learn English? [...] If they choose the profession and they think that English is not needed there so they even don't try [...] at the time they're very sure that there is no need for English, so they don't study. So, in reality it is impossible [...].

T: OK, [...] indeed a more individual approach, finding out what is kind of interesting for them [...] even if they don't really need English, I feel like you can engage them in the activity.

Candidate 4, while using the academic concept of the individual approach and its connection to learner engagement, sees a discrepancy between these and their teaching experience, stating that applying it in the classroom would be impossible. That is, this candidate is knowledgeable of the pedagogical concept of personalisation covered in the course as a part of learner-centeredness, defining it in this interaction as *individual approach* (that is, a set of assumptions about teaching and learning). However, this candidate reveals there was a tension between these assumptions and the reality of the classroom. The tutor, as a reaction to this, (a) builds on the candidate's formulation, *individual approach*, (b) moves the focus to the operationalisation of assumptions in the classroom, proposing how this and other

candidates can make sure that they personalise the activity by first asking their learners what is interesting *for them*, and (c) emphasises that the tension Candidate 4 has brought is not unresolvable. The tutor, furthermore, connects personalisation with engagement within the specific teaching-learning situation under discussion.

Later in the same session, when an example lesson where the teacher enabled learner engagement in a reading comprehension task through questions was discussed, the tutor decided to guide the candidates' understanding of how they can engage learners (Excerpt 2).

Excerpt 2

T: Why is it important for us to ask questions? How can it affect students' motivation and engagement? [...]

C4: [...] so they help teachers understand the understanding of students.

T: Sure, definitely what else?

C4: [...] So like their understanding of the, I mean, grammar [...] To understand [...] whether they were involved in reading. So did they read the whole text and did they discuss the [...].

T: So, well, [...] actually this [...] would be lead-in in the second activity.

C4: So, I didn't pay attention to that, so she's [...] involved them to reading, so to understand whether they like fast food. So do they like the reading [...].

T: Yeah, what was the topic? [...] So a lead-in is supposed to set the mood to get learners' thinking about the topic. So here the teacher elicited a lot of answers about fast food, whether they like it why it's bad, whether they know it.

C4: Let's see questions asked in lead-in. So probably maybe they can find answers in the reading, so sometimes they can ask exact questions from the reading.

T: So, to motivate them to read.

C4: So, they're prepared, right?

T: Yeah, right, so exactly why to find out the answer if you don't know, that's great, right? [...] So if you see a person who is a bit shy, who's always like I'd rather be silent so you can ask them some questions to help them build up confidence [...].

C4: To ask, to make open questions. Nominating.

CC: Nominating, engaging quieter learners.

The tutor first asks why asking questions is important, linking it to learner motivation (Turn 1). The function of these questions is not simply to inquire from the candidates but to guide them using the academic concept of *learner engagement*. We note that as mediation

this is rather implicit (Mediation Move 4, Appendix 2), though we emphasise that the tutor, at this point, did not mediate the candidates consciously and systematically. However, the posthoc analysis of the explicitness of mediational moves and reciprocity we undertook becomes important for the subsequent portfolio assessment. Despite the tutor's effort, the candidate focuses on learners' comprehension of the text (Turn 2) and then on the understanding of grammatical constructions (Turn 4). This demonstrates that the candidate does not think in terms of learner engagement. As the tutor draws the candidate's attention to the questions being asked during a lead-in (while this is somewhat more explicit, we classified this as another Mediation Move 4), Candidate 4 finally focuses on learner engagement (Turn 6). However, this is not the end of the interaction. The tutor wishes the candidates better connect the academic concept to their teaching experiences (their everyday concept of learner engagement). The tutor focuses, therefore, on the parameters of the task at hand – the particular questions asked in the lead-in. At this point (Turn 8), Candidate 4 recognises that this can simplify the tasks for some learners. The tutor builds on this, connecting this statement, probably coming from the candidate's teaching experience to the academic concept in Turn 9. In Turn 10, the candidate, being unsure, asks for the tutor's confirmation. This reciprocity move was not a part of the typology we created for the portfolio assessment (due to the difference in the task parameters). However, based on Poehner' (2005) typology (requesting additional assistance), this indicates that the candidate is still reliant on the tutor in connecting the academic concept of engagement (and personalisation) with their everyday experiences. The tutor, therefore, reacts more explicitly, giving an explanation (Mediation Move 7). This finally leads this and other candidates towards merging of the two concepts in their verbalisations (Turns 12 and 13).

We note that the degree of explicitness of guidance in this episode required for successful resolution of the challenge is illustrative of the effort that the tutor made at this point of the course with other candidates. The Zoom interactions before the portfolio assessment led the tutor to opt for the particular mediational moves in Portfolio 4 for Candidates 1 and 4. Specifically, for Candidate 4, the tutor started with Mediation Move 4, as this was the most common move to help this candidate to start thinking about their classroom practices through the lens of academic and pedagogical concepts.

The following interaction occurred between Portfolios 5 and 6. The candidates, together with the tutor, focused on a post-listening task of a listening activity (Excerpt 3). As in Zoom meetings, the tutor interacted with the learners as a group, there were other candidates in the interaction besides Candidate 4. However, this interaction, we argue, is important for understanding Candidate's 4 performance on Portfolio 6 and performance following it.

Excerpt 3

T: Have a look, what is the point? What is the purpose of this task?

C5: The post-listening.

T: No, no, it's post-listening. Yeah, post-listening. What is the aim? Why do we need it?

[Candidate 4 suggests via the chat that it is to understand the listening better.]

T: [...] look at this. These are the things that students have to talk about. Well, this one is not about understanding the listening.

C2: This is this is speaking parts.

T: Part speaking part, and this is connected to the listening?

CC: Yes.

C5: Of course, work. Yes, they [discuss] everything that they had previously.

T: Yeah, so it's an opportunity to personalise this thing, right? So, they talk, they discuss and practice. Yeah, develop their fluency. You see they have to discuss these questions like have you ever not something dramatically different to your appearance? Would you do a parachute jump or a bungee jump? [...] So for learners to discuss something right to reflect, so that's it.

C2: Means that we should also include the Speaking part, yes?

T: OK

C2: After all these things with [...] OK.

We enter the exchange as the tutor inquires from the candidates what the purpose of the task was. Candidate 5 responds to the tutor's query, recognising that it was post-listening. As the tutor's intentionality was to elicit not what the task is by why it is used, that is its function, she starts by telling Candidate 5 that they are incorrect but quickly modifies her own formulation, as knowing what kind of activity is being analysed is important for determining its function. She follows up the partial acceptance of Candidate's 5 response by reformulating her questions, focusing now on the aim of the task (Turn 2). At this moment, Candidate 4 enters the exchange, albeit via chat. This candidate's response is

notable, as just like in the portfolio assessment, this candidate does not think in terms of learner-centeredness despite the tutor's effort so far, unable to think of the task through the lens of this concept just as they were unable to apply their concept to planning their lesson in Portfolio 5 even after the tutor's rather explicit mediation. Building on the information the tutor received about Candidate 4 (but also other candidates who submitted their Portfolio 5 assignments by that time), the tutor opts for suggesting a solution (Mediations Move 5), drawing the candidate's attention first to the fact that this task is no longer about listening proper. This is somewhat more implicit than the mediation given to Candidate 4 (and, generally, other candidates who have submitted their Portfolio 5 assignment). However, the tutor accounts for (a) the potential development that may have happened and (b) that there are other learners in the interaction, above all Candidate 5 as the main interactant, so creating their ZPD, that is, their development together with them, should be the focus.

A different candidate, Candidate 2, takes the lead at this point, indicating that they recognised the change of focus on speaking, which was implied by the tutor (Turn 6). The tutor accepts the response, immediately building on it, instructing the candidates that it should be connected to the listening activity, albeit in the form of a question (Mediations Move 5). The candidates confirm that they recognise this connection, and Candidate 5 strongly shows understanding, adding that this is the opportunity for the learners to discuss the themes that emerged in the listening activity with reference to the questions in the post-listening task (incorporating thus the tutor's mediation, Reciprocity Move 2). The tutor confirms, finally explicitly linking the task with the concept of personalisation. The tutor, namely, connects the task to how it should be orchestrated by the teachers, creating an opportunity for learners to reflect on the questions with reference to their experiences. The exchange ends when Candidate 2 checks the confirmation and accepts the tutor's explanation. While Candidate 4's contribution to the exchange was minimal, it nevertheless helped the tutor to guide the candidates' understanding of the function of the post-listening, linking the academic concept of personalisation with how it can be operationalised in the activity. This, we argue, shaped the way that Candidate 4 approached the assignment in Portfolio 6, finally using the academic concepts of personalisation and learner engagement in planning a lesson without the tutor's guidance.

'When the two candidates' performance on the initial versions of portfolios was considered, it was rather similar in that they tended to be teacher-centred. However, their mediated performance showed a vastly different picture. To be sure, the candidates' modifications of their portfolios in response to mediation were expected'

4.3. Final assignments

The candidates' development manifests particularly clearly in the final assignment – a plan of and reflection on a teaching practice. Candidate 1 wrote the following in their lesson plan, for example:

The topic relates to students' own lives. Students will talk about their own towns and things they can do in the town. It should be interesting for them, because students are eager to talk about something that concerns them [...] Post-listening activity will help to personalise the vocabulary in a meaningful way.

In their reflection, this candidate wrote:

[...] they [the learners] were very active during the lesson [...] the students were engaged.

Candidate 1, therefore, recognised how they could make their lesson more learner-centred and reported on this using the academic concept of *engagement*. This candidate was also able to explain the operational decision – design of the *personalised* post-listening activity with reference to making it meaningful to the candidates. They, hence, designed the activity informed by the conceptual understanding, which was nurtured both in the portfolio assessment and Zoom interactions.

Candidate 4, too, seemed to be able to apply the understanding and knowledge that emerged in the course in their classroom practice. Namely, in their lesson plan, they strongly focused on making the lesson learner-centred, for example: '*Students talk about a house which became a museum in their country [the teacher's role being] monitoring and giving feedback.*'

Candidate 4 also reflected on how they minimised cognitive load and succeeded in making the lesson learner-centred. Among the strengths of the lesson, the candidate indicated '*giving students an opportunity to be free and express their thoughts as there wasn't any grammar controlling.*' Still, they noted that they could have used shorter explanations (*cognitive load*) and made the lesson even more learner-centred, though they did not elaborate how.

There is, therefore, evidence for at least a degree of internalisation of the concept leading to changes in the candidates' practice. However, the two candidates' developmental paths in the internalisation of the concept of learner-centeredness were different.

5. DISCUSSION AND CONCLUSION

In this paper, we reported on an exploration of (a) L2 in-service teachers' conceptual and methodological knowledge development emerging in the portfolio assessment and (b) how information obtained in this assessment can be used to promote the development of true concepts and L2 English teaching practice. We next discuss the results with reference to the two research questions.

When the two candidates' performance on the initial versions of portfolios was considered, it was rather similar in that they tended to be teacher-centred. However, their mediated performance showed a vastly different picture. To be sure, the candidates' modifications of their portfolios in response to mediation were expected. However, our interest was not in the modifications proper but in (a) specific areas of struggle the candidates had, (b) how much responsibility for their performance the candidates assumed as well as how they solved the challenges the tutor identified, and (c) how reliance on the tutor changed across the portfolios, Zoom interactions, and the final assignment.

We repeat that while the unassisted performance of the two focal candidates was largely similar across the portfolios, their mediated performance was somewhat different. The portfolio assessment also revealed that by Portfolio 7, both candidates demonstrated more responsibility for their performance, recognising the value of giving agency to their learners, making the covered material relevant to them. Still, Candidate 4 considered the tutor's asking for clarifications as an indication that there were points to correct in their portfolio. That is, they were still more dependent on the mediator than Candidate 1. The candidates' growing self-regulation (less reliance on the tutor's mediation), that is in using academic concepts covered in the course to mediate their practice is particularly evident in the final course assignment, where both candidates demonstrated that learner-centeredness strongly informed their lesson planning, as well as its implementation and their reflection on it.

We would like to highlight at this point that, as Vygotsky (1978) argued, ZPD is not a static 'zone' but emerges in dialectics between the individual and the

social. In this study, it, too, was the mediation-reciprocity cycle that led the candidates' development. Similarly to Shrestha (2020), we opted for flexible mediation, nurturing different developmental trajectories. The mediation in the portfolio assessment did not just disclose the candidates' different ZPDs—it created them. However, and more importantly, the portfolio assessment helped the tutor to mediate the candidates' during Zoom interactions.

To be sure, as outlined, both asynchronous mediation (see Reis, 2011) and the development of academic concepts (as outlined in Section 2.1) have been the foci of praxis with pre- and in-service teachers. Similarly, DA has, too, been implemented in teacher training (Golombek, 2011; García, 2019). Our research extends from these and other research on teacher development (Amory, 2020; Johnson & Golombek, 2016; Johnson et. al., 2020), exploring, similarly to García (2019), but using a different arrangement, how the principles of DA can inform assessment and instruction teacher training, focusing on this assessment not as a separate activity, but as a part of this training.

We concur that the understanding of the ZPD in interactionist DA is still more of a tool for uncovering the proximal development of an individual (albeit in collaboration with an expert other). However, a broader understanding of ZPD as an activity where development is mediated by means emerging on the interpersonal plane (see Holzman, 2018) is a more useful ZPD interpretation.

This understanding was adopted in this study. In fact, we are of the opinion that this broader interpretation of ZPD favours designs stretching beyond individual ZPD activities, such as Zoom interactions or assessment informed by the DA framework, towards how these activities create development together (see also Leontjev & deBoer, 2022; Poehner & Leontjev, 2022). That is, the course was designed so that the portfolio assignments, focusing on assessment and using largely everyday concepts in mediation, complemented the Zoom interaction focusing on the development and academic concepts collectively guided the candidate's formation of a true concept of learner-centred teaching. Thus, the portfolio assessments with the focus on assessing the candidates' unmediated and mediated performance with regard to applying the academic and pedagogical concepts in lesson planning and the Zoom interactions, with the focus on helping the candidates merge academic and pedagogical concepts and their everyday concepts, were considered together.

'SCT compels us to appreciate the revolutionary character of development, and we argue that the approach explored in this study enables such development. That is, the course design in the study can make both individual developmental trajectories (portfolio assessment) and that of the groups (classroom interaction) of in-service teachers visible and, in fact, create them'

To elaborate, just as portfolio assessment informed the Zoom interactions, Zoom interactions informed the mediation in the portfolio assignments, which, in turn, provided information for the tutor, which informed the subsequent classroom interaction. We demonstrated this with reference to the interactional episode to which Candidate 4 contributed. It allowed us to trace the development of the two focal candidates' understanding of learner-centeredness as a concept which included giving learners' agency and learner engagement and how it can be applied and operationalised in their practices. Both eventually manifested themselves in their final assignments. In fact, without the classroom interaction, we argue, the changes in the candidates' performance on portfolio assignments would be difficult to interpret. Indeed, these could be seen as candidates following the tutor's advice without thinking why it is important.

Hence, the interactional episode we analysed both explained the notable change in Candidate's 4 reliance on the tutor in Portfolio 6 and helped to recognise that there was understanding behind this change.

Lantolf et al. (2021) argued that development is not a linear process but is characterised by shifts in learners' reliance on the mediator, even if the general

trend is towards more self-regulated performance. SCT compels us to appreciate the revolutionary character of development, and we argue that the approach explored in this study enables such development. That is, the course design in the study can make both individual developmental trajectories (portfolio assessment) and that of the groups (classroom interaction) of in-service teachers visible and, in fact, create them. Hence, we suggest a similar approach can be used in other in-service teacher training.

In this regard, considering the context where teacher-centred approach has been prevalent (see Cirocki & Farely, 2016; Feryok, 2008), promoting candidates' understanding of the purpose of guidance can be important. In the current study, some candidates took the mere fact that comments were coming from the tutor as a sign that there was a problem that needed rectifying. It should be made clear to candidates that the purpose of comments is to guide the development of their understanding as well as eventually give them responsibility for their performance.

Limitations of the study need to be mentioned. To start with, partially due to our study design and partially due to some candidates not submitting all their assignments or submitting them late, we focused only on the development of two candidates. Hence our results should not be generalised, and further research could be conducted to show whether our design is feasible and whether and how development occurs in similar designs with a larger number of participants and in other contexts. Furthermore, the course structure was such that there were only a few opportunities for Zoom interactions with the candidates, so most of the mediation was in the written format.

Overall, due to its context – in-service teaching training – and the asynchronous modality of mediation, the study has something to offer both to practice and further research.

Appendix 1. Portfolio sections

A standard portfolio template contained the following sections:

- general information on the learners and lesson focus;
- description of the teaching material, rationale and language analysis, anticipated problems and solutions, assumptions about the learners and material;
- a step-by-step lesson procedure (in later portfolios);
- self-evaluation, further steps for developing the lesson/analysis;
- tutor's checklist of assessment criteria.

The completed assignments were assessed by the tutor, who suggested areas for improvement. The portfolio assignments under discussion had the following foci:

- Portfolio 4: researching a grammar construction that participants feel they might have trouble with;
- Portfolio 5: planning a language focus stage to teach grammar by using questions to clarify the meaning;
- Portfolio 6: planning and teaching a listening lesson;
- Portfolio 7: adapting a coursebook activity for the needs of one's learners.

Appendix 2. Mediational moves

Mediational moves:

(1) accepting the candidate's response and praising: this mediational move occurred when a candidate overcame their problem in the subsequent portfolio following the mediation; accepting the response in our data coincided with praise, e.g., '*You managed to involve the students in the process more, good!*'

(2) asking for clarifications/elaborations: this mediational move occurred when we were unsure of the candidates' intention or understanding of having a particular activity, aim, approach, etc., in their portfolio, e.g., '*Can you elaborate, keeping the aims you identified in mind?*'

(3) identifying the problems in the text: similarly to Shrestha (2020), we considered this mediational move to be less explicit than the following, as while suggesting a change in a particular place in the portfolio, we left the agency with the candidates as to how this change could be made and why, e.g., '*describe the procedure here.*'

(4) introducing guiding questions and prompts: this mediational move involved implicitly referring candidates, in an interrogative form, to teaching methodologies and other content covered previously in the course, without naming them, e.g., '*Which task is more controlled? Which gives freer practice?*'

(5) suggesting solutions: with this mediational move, we directed the candidates to direct solutions without naming them, e.g., '*You need to talk about aims for the learners here.*'

(6) referring to the previous portfolio: we considered this mediational move to be more explicit, as even though we did not name the solution for the candidate, we suggested they consider how they addressed a similar point in the previous portfolio; we considered that a degree of self-regulation was required, as the solution had to be adapted in the new portfolio, e.g., '*Look back on Portfolio 4 and think how these examples can be made more memorable for your learners.*'

(7) explaining issues: this move explained what the candidates were expected to do and why, e.g., '*I wonder if basing on the learners' experiences or your joint one with them can help them understand the use of the tense better.*'

(8) providing a choice: as the name suggests, this involved providing the candidate with (usually two) alternatives, e.g., '*These tenses ... are quite complex, so dig deeper here ... If you choose one tense only, describe it in detail.*'

(9) providing correct solutions: the most explicit mediational move, where the tutor suggested the change in the portfolio overtly, even if with some hedging, e.g., '*Would graphically presenting it differently, e.g., strike-through formatting, help the learners see that they cannot use this form.*'

Appendix 3. Reciprocity moves

Reciprocity moves:

(1) overcoming problems: this related to the candidate resolving their challenges with no support from the mediator;

(2) incorporating mediation: as in Shrestha (2020), this was the commonest reciprocity move; the candidates, guided by the mediation, built on their knowledge and experience to develop their portfolio;

(3) partially incorporating mediation: this indicated a change in response to mediation which was a step in the right direction, but the challenge was not fully resolved;

(4) accepting mediation: this move occurred in response

to explicit mediation, the candidates accepting the change that the tutor suggested;

(5) responding incorrectly: sometimes the candidates attempted to address the comments but misinterpreted what the issues were that the comments targeted;

(6) avoiding the issue targeted by the mediation: the candidates, rather than addressing the elicited issue, removed some text from their portfolio;

(7) unresponsive: this code was used when candidates did not introduce any change in response to a comment given on their draft portfolio.

References

- Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the Zone of Proximal Development. *The Modern Language Journal*, 78, 465-483. <https://dx.doi.org/10.1111/j.1540-4781.1994.tb02064.x>
- Amory, M. D. (2020). Teach off your students: A longitudinal analysis of an ESL pre-service teacher's twisting process of conceptual development. *European Journal of Applied Linguistics and TEFL*, 9(2), 105-129.

- Augusto-Navarro, E. H. (2015). The design of teaching materials as a tool in EFL teacher education: Experiences of a Brazilian teacher education program. *Ilha Do Desterro a Journal of English Language, Literatures in English and Cultural Studies*, 68(1), 121-137.
- Cirocki, A., & Farrelly, R. (2016). Research and reflective practice in the EFL classroom: Voices from Armenia. *Eurasian Journal of Applied Linguistics*, 2(1), 31-56.

- Donato, R., & Davin, K. (2018). History-in-Person: Ontogenesis and the professional formation of language teachers. In J. P. Lantolf, M. E. Poehner, & M. Swain (Eds.), *Handbook of sociocultural theory and second language learning* (pp. 457-471). Routledge. <https://doi.org/10.4324/9781315624747>
- Feryok, A. (2008). An Armenian English language teacher's practical theory of communicative language teaching. *System*, 36(2), 227-240. <https://doi.org/10.1016/J.SYSTEM.2007.09.004>
- Feuerstein, R., Feuerstein, R. S., & Falik, L. H. (2010). *Beyond smarter: Mediated learning and the brain's capacity for change*. Teachers College, Columbia University.
- García, P. N. (2019). Dynamic assessment: Promoting in-service teachers' conceptual development and pedagogical beliefs in the L2 classroom. *Language and Sociocultural Theory*, 6(1), 32-62. <https://doi.org/10.1558/lst.38915>
- Golombok, P. R. (2011). Dynamic assessment in teacher education: Using dialogic video protocols to intervene in teacher thinking and activity. In K. E. Johnson & P. R. Golombok (Eds.), *Research on second language teacher education* (pp. 135-149). Routledge. <https://doi.org/10.4324/9780203844991>
- Harmer, J. (2007). *The practice of English*. Pearson.
- Johnson, K. E. (2022). Mentoring as mediation: Shifting novice teacher instructional stance. *European Journal of Applied Linguistics and TEFL*, 11(1), 3-21.
- Johnson, K. E., & Golombok, P. R. (2011). A sociocultural theoretical perspective on teacher professional development. In K. E. Johnson & P. R. Golombok (Eds.), *Research on second language teacher education* (pp. 15-26). Routledge.
- Johnson, K. E., & Golombok, P. R. (2016). *Mindful L2 teacher education: A sociocultural perspective on cultivating teachers' professional development*. Routledge.
- Johnson, K. E., & Golombok, P. R. (2018). Making L2 teacher education matter through Vygotskian-inspired pedagogy and research. In J. P. Lantolf, M. E. Poehner, & M. Swain (Eds.), *The Routledge handbook of sociocultural theory and second language development* (pp. 443-456). Taylor and Francis. <https://doi.org/10.4324/9781315624747>
- Johnson, K. E., Verity, D. P., & Childs, S. S. (2020). Praxis-oriented pedagogy and the development of L2 novice teacher expertise. *The European Journal of Applied Linguistics and TEFL*, 9(2), 3-23.
- Lantolf, J. P., & Poehner, M. E. (2011). Dynamic assessment in the classroom: Vygotskian praxis for second language development. *Language Teaching Research*, 15(1), 11-33. <https://doi.org/10.1177/1362168810383328>
- Lantolf, J. P., Xi, J., & Minakova, V. (2021). Sociocultural theory and concept-based language instruction. *Language Teaching*, 54(3), 327-342. <https://doi.org/10.1017/S0261444820000348>
- Leontjev, D. (2016). *ICAnDoiT: The impact of computerised adaptive corrective feedback on L2 English learners* [Doctoral Dissertation, University of Jyväskylä]. JYX Digital Repository. <https://urn.fi/URN:ISBN:978-951-39-6586-0>
- Leontjev, D., & DeBoer, M. (2022). Teacher as creator: Orchestrating the learning environment to promote learner development. *Language Teaching Research*. <https://dx.doi.org/10.1177/13621688221117654>
- Leontjev, D., & Pollari, P. (2022). Resolving tensions caused by high-stakes assessment in an L2 classroom through mediation. *Apples – Journal of Applied Language Studies*, 16(1), 155-174. <https://doi.org/10.47862/APPLES.102950>
- Lidz, C. S. (1991). *Practitioner's guide to dynamic assessment*. Guilford.
- Nauman, G. (2011). Synthesizing the academic and the everyday: A Chinese teacher's developing conceptualization of literacy. In K. E. Johnson & P. R. Golombok (Eds.), *Research on second language teacher education* (pp. 116-132). Routledge. <https://doi.org/10.4324/9780203844991>
- Poehner, M. E. (2005). *Dynamic assessment of oral proficiency among advanced L2 learners of French*. [Unpublished dissertation]. The Pennsylvania State University.
- Poehner, M. E. (2008). *Dynamic assessment: A Vygotskian approach to understanding and promoting second language development*. Springer. <https://doi.org/10.1007/978-0-387-75775-9>
- Poehner, M. E., & Inbar-Lourie, O. (2020). *Toward a reconceptualization of second language classroom assessment*. Springer International Publishing. <https://dx.doi.org/10.1007/978-3-030-35081-9>

- Poehner, M. E., & Infante, P. (2015). Mediated development: Inter-psychological activity for L2 education. *Language and Sociocultural Theory*, 2(2), 161-183. <https://dx.doi.org/10.1558/lst.v2i2.26982>
- Poehner, M. E., & Leontjev, D. (2022). Peer interaction, mediation, and a view of teachers as creators of learner L2 development. *International Journal of Applied Linguistics*. <https://dx.doi.org/10.1111/ijal.12444>
- Rahimi, M., Kushki, A., & Nassaji, H. (2015). Diagnostic and developmental potentials of dynamic assessment for L2 writing. *Language and Sociocultural Theory*, 2(2), 185-208. <https://doi.org/10.1558/lst.v2i2.25956>
- Rasskazova, T., & Glukhanyuk, N. (2018, November 12-14). Dynamic assessment in developing the EFL listening skill in adults. In *Proceedings of 11th Annual International Conference of Education, Research and Innovation ICERI2018* (pp. 1445-1452). IATED. <https://dx.doi.org/10.21125/iceri.2018.1331>
- Reis, D. S. (2011). I'm not alone. Empowering non-native English-speaking teachers to challenge the native speaker myth. In K. E. Johnson & P. R. Golombok (Eds.), *Research on second language teacher education* (pp. 45-63). Routledge. <https://doi.org/10.4324/9780203844991>
- Smagorinsky, P., & Johnson, L. L. (2021). Empathic framing during concept development in book club discussions in a service-learning teacher education class. *Language and Sociocultural Theory*, 8(2), 206-238. <https://doi.org/10.1558/lst.18853>
- Shrestha, P. N. (2020). *Dynamic assessment of students' academic writing*. Springer International Publishing. <https://dx.doi.org/10.1007/978-3-030-55845-1>
- Teo, A. (2012). Promoting EFL students' inferential reading skills through computerized dynamic assessment. *Language Learning & Technology*, 16(3), 10-20. <https://dx.doi.org/10125/44292>
- Thornbury, S. (2006). *An A-Z of ELT. A dictionary of terms and concepts used in English language teaching*. Macmillan. <https://doi.org/10.1093/elt/ccm039>
- Van Compernolle, R. A., & Williams, L. (2013). Sociocultural theory and second language pedagogy. *Language Teaching Research*, 17(3), 277-281. <https://dx.doi.org/10.1177/1362168813482933>
- Veresov, N. (2014). Refocusing the lens on development: Towards genetic research methodology. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children* (pp. 129-149). Springer International Publishing. https://dx.doi.org/10.1007/978-3-319-01469-2_8
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press. <https://dx.doi.org/10.2307/j.ctvjf9vz4>
- Vygotsky, L. S. (1987). *Collected works of L. S. Vygotsky: Problems of general psychology, including the volume thinking and speech*. Plenum.
- Vygotsky, L. S. (1998). Development of thinking and formation of concepts in the adolescent. In R. W. Rieber (Ed.), *Collected works of L. S. Vygotsky: Child psychology* (pp. 29-81). Springer. https://doi.org/10.1007/978-1-4615-5401-1_2
- Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. Harvard University Press.
- Worden, D. (2015). The development of content knowledge through teaching practice. *Ilha Do Desterro*, 68(1), 105-119. <https://dx.doi.org/10.5007/2175-8026.2015V68N1P105>

VICTORIA KAREVA
University of Jyväskylä | Seminaarinkatu 15 (Registry Office and Archive), Jyväskylä, Finland
v.iu.aksenova@urfu.ru

TATIANA RASSKAZOVA
Ural Federal University | 619 Mira Str., 620002 Ekaterinburg, Russia
tatiana.rasskazova@urfu.ru

DMITRI LEONTJEV
University of Jyväskylä | Seminaarinkatu 15 (Registry Office and Archive), Jyväskylä, Finland
dmitri.leontjev@jyu.fi