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Introduction

**Michel Alexandre Cabot¹, Sissel Margrethe Høisæter¹
and Vigdis Vangsnes¹**

¹ Western Norway University of Applied Sciences

Objective and background of the anthology

The main purpose of the present anthology is to promote teacher education in which preservice teachers (PSTs) are given opportunities to rehearse the complex work of professional teaching. There is a need for PSTs to *rehearse for teaching* (see the title of the present anthology) by using knowledge in action (McDonald et al., 2013, p. 378).

Several studies give voice to PSTs' perceptions of a lack of coherence between on-campus teaching and what they experience in practicum schools (e.g. Norwegian Agency for Quality Assurance in Education, 2024; Pedagogstudentene [Pedagogy students], 2021; Resch et al., 2022; White & Forgasz, 2016). PSTs often express a strong desire for practical experience in teacher education, which requires teacher educators to consider novel, and meaningful, approaches. In fact, teacher educators must seek to help PSTs develop their skills at *doing* teaching, not only analysing it. A strengthened and systematic approach to rehearsing in teacher education, which is under scrutiny in the present anthology, may be a way to bridge this theory–practice divide (Hammerness et al., 2020).

This anthology investigates various aspects of rehearsing in different subjects, how rehearsing teaching can be included as a central factor in teacher education both in practicum schools and on campus, and what consequences this has for the teaching of subjects, subject didactics, and general didactics.

More specifically, the anthology examines rehearsals, critical observations, and analyses of rehearsals in which the goal is to develop teaching competence through actual reflective teaching practices that were developed in innovative ways. The various articles show the importance of alternating between rehearsing, practising, and reflecting on PSTs' own and others' teaching to develop rich and reflective professional teaching repertoires. This takes place in collaboration with campus teachers, practicum teachers, fellow PSTs, and students in the classroom.

The background of the initiative to the present anthology is the educational design research projects *Improvisation in Teacher Education* (Engelsen, 2012–2016) and *Rehearsing Teaching Professionally* (Vangsnes, 2021–2026), both of which were conducted at Western Norway University of Applied Sciences and funded by the Norwegian Research Council. The first research project points towards a view of teaching as dialogic performance (Sawyer,

2011, p. 8). Important questions for this research project were, inter alia, how to plan for the unexpected, and how to transform unforeseen events into productive moments. A central finding of this research (Holdhus et al., 2016) was that PSTs require more practice with ‘reflection in action,’ not merely ‘reflection on action’ (Schön, 1987).

Similarly, the present anthology investigates how teacher education can provide opportunities for PSTs to reflect on *rehearsing for teaching* and, thus, build a professional repertoire of actions for teaching. Such a repertoire of actions may help PSTs make decisions in their future professional lives when they, as teachers, must find a balance between structure and improvisation (Sawyer, 2004, p. 13).

The second research project is a collaborative project between Western Norway University of Applied Sciences, the municipalities Stord and Hauge-sund, three schools (two in Stord and one in Hauge-sund), and the international advisory board including Ruth Leitch (Queen’s University Belfast), Anna Sfard (University of Haifa), Gert Biesta (Maynooth University; University of Edinburgh), Joanne O’Flaherty (University of Limerick), Colin Christie (University of Aberdeen), Elaine Munthe (Norwegian Knowledge Centre for Education), and Kari Smith (Norwegian University of Science and Technology). The entire international advisory board provided important contributions to the anthology in the form of prologues, epilogues, and one empirical article.

Furthermore, the researchers involved in ReTPro organised a digital conference entitled *Rehearsals as means of building repertoires towards improvisational teaching in teacher education* on 18 October 2023. All participants were invited to contribute to the present research anthology.

What are rehearsals and what can we rehearse?

Rehearsal is the noun form of the verb ‘rehearse’. According to the Cambridge Dictionary (2024), it means to ‘practise a play, a piece of music, etc. in order to prepare it for public performance’ or to ‘repeat it [a story or an argument] with all the details’. According to Lampert (2010), ‘both practising and rehearsing are often done in the context of getting feedback’ (p. 27). Indeed, rehearsal is

something that is done in preparation for performance, and rehearsers may expect an evaluation of their *pre*performance. We understand this evaluation as a dialogic, analytic, and formative conversation between the participants, that is, a form of formative, not summative, assessment.

The most common understanding and definitions of rehearsals include the use of repeated practice to learn information. For example, when a student is presented with specific information to be learned, such as a poem, they will often attempt to memorise the poem by repeating it. Many readers of the present anthology may thus have negative associations with rehearsals, because repeated practices are often linked to rote memorisation.

In contrast to this example of memorisation, here, the aim of rehearsal is understood as providing opportunities for PSTs and teacher educators to discuss and reflect on their own, and others', decisions in the classroom. In other words, the present anthology understands rehearsals as specific, repeated pedagogical actions and learning experiences in teacher education that come close to the field of practice (Grossman et al., 2009b; Lampert et al., 2013).

During rehearsals, a PST or, sometimes, a pair or trio of PSTs will lead a teaching session with fellow PSTs on campus or students at the practicum schools. The PSTs take on the roles of both teacher or mentor, and student, which enables them to familiarise themselves with decision-making and many issues related to students and various subjects (e.g. mathematics, English, pedagogy). According to Kazemi et al. (2016), rehearsals simulate many relationships between students and content that may appear in real-life teaching and require that PSTs make both routine and improvisational decisions in practice.

Lampert et al. (2013, p. 226) define rehearsals as a specific pedagogy used to learn how to interact productively with each student and the subject matter at hand. The aim of rehearsals is to specify how teacher educators and PSTs can interact with teaching in a way that is rooted in practice and can also be analysed.

A question often arises in the discussion of rehearsing in teacher education: What should PSTs rehearse? In this context, the terms 'core practice', 'high-leverage practices', and/or 'ambitious practices' (henceforth called 'core practices') seem to be of particular importance, because they can link rehearsing to teachers' professional pedagogical skills.

Grossman et al. (2009a) list the following characteristics of core practices:

- Practices that occur frequently in teaching,

- Practices that novices can enact in classrooms across curricula and instructional approaches,
- Practices that novices can begin to master,
- Practices that allow novices to learn more about students and teaching,
- Practices that preserve the integrity and complexity of teaching, and
- Practices that are research-based and have the potential to improve student achievement (p. 277).

Many researchers have attempted to describe core practices. Examples of core practices in teacher education may include ‘elicit students’ thinking’ at the macrolevel and ‘leading a guided-reading lesson in elementary reading’ at the microlevel (Grossman et al., 2009b, p. 277).

As shown in the research project ReTPro (Advisory Council for Teacher Education, 2024), other examples can include dialogic teaching and performative teaching in general, or input and context-building activities using the teacher-in-role drama convention in particular.

Concerning English as a Foreign or Second Language (EFL/ESL), Pang (2019) proposes ‘a three-level framework of core practices’ (p. 266) that includes five subject practices (i.e. input, explicit teaching, interaction, output, and feedback) at level 1, diverse learning tasks and instructional activities at level 2 (e.g. focused rehearsing of forms, skills, or routines as the pre-task; interactive task engagement in target communication area as the task; feedback as the post-task), and discursive moves at level 3 (i.e. the enactment of structured instructional activities or learning tasks through classroom communication).

In contrast to Pang (2019), it is possible to describe core practices without any reference to specific subject areas, even though most practices are taught and enacted in subject-specific ways. In this regard, one example is Davis and Boerst’s (2014) research, which mentions ‘choosing and using representations, examples, and models of content; engaging students in rehearsing an organisational or managerial routine; choosing and modifying lesson plans for a specific learning goal; and conducting a meeting about a student with a parent or guardian’ (p. 7).

In the present anthology, the concept of core practices forms a productive analytical unit via which *rehearsing for teaching* can be examined. Indeed, core practices constitute a set of strategies, routines, and activities that can be

unpacked as objects of rehearsal in teacher education (cf. Matsumoto-Royo & Ramirez-Montoya, 2021).

The frequency and characteristics of core practices can vary between subjects and student groups. The main principle in practice-based teacher education is that PSTs should be given the opportunity to develop competence in core practices through guided participation and joint reflection, so that they can try these out both on campus and in practicum schools.

However, the concept of core practices is still hotly debated (e.g. Dutro & Cartun, 2016; Philip, 2019; Philip et al., 2019; O’Flaherty in Prologue 5 of the present anthology; Souto-Manning, 2019). A significant challenge for teacher education is to select and agree on the core practices that must be included in teacher preparation, and avoid reductionist approaches (O’Flaherty et al., 2024).

In other words, it is not possible to draw a sharp dividing line between core practices and other practices. In addition, the definition of certain practices as core ones is sometimes questionable because teaching occurs in both micro and macro contexts. This inevitably creates categories that position individuals and groups of teachers within or outside of what is recognised as the norm (e.g. Dutro & Cartun, 2016).

Core practices are difficult to define because there is no shared understanding of the term. According to Grossman (2024), we must distinguish between domains of practice (e.g. classroom management), practice (e.g. creating and reinforcing norms regarding positive participation), and components of practice or teacher moves (e.g. narrating positive student behaviours). Most importantly, there is a Goldilocks problem because research struggles to define the appropriate grain size for core practices (Grossman & Fraefel, 2024, p. 142). For example, creating a positive classroom environment would be too large a grain size for core practices, while the use of wait time would be too small a grain size.

In this context, different views on teaching may lead to different definitions of core practices. In fact, core practices seem to exist in various sizes, and debates over whether teachers should focus more clearly on pedagogy (e.g. classroom management), or content (e.g. inductive grammar teaching, or vocabulary instruction using morphology in EFL/ESL), may be reignited (Shulman, 1986).

Against this backdrop, the aim of the present anthology is not to define and discuss what grain size various core practices should have, but, rather,

to examine how, and the degree to which, PSTs can rehearse the practices of professional teachers.

How can we rehearse?

To answer the question of how PSTs can rehearse, it may be important to distinguish between tightly and loosely constrained approximations (Kavanagh et al., 2020, p. 100), or open and pre-designed approaches to rehearsing (Grosser-Clarkson & Neel, 2020, p. 468). Grosser-Clarkson and Neel (2020, p. 468) mention *conversation rebuilding* in Italian foreign language schools as a pre-designed enactment approach because an activity is introduced by the teacher educator, the PSTs rehearse the activity, and the same or a very similar activity is then enacted and analysed. In contrast, rehearsals conducted with an open-designed approach do not necessarily involve an exact replication of a common activity or particular content. Some researchers (e.g. Sawyer, 2004) hold that open-designed approaches make it easier to promote PSTs' creativity, flexibility, and improvisational skills.

For example, PSTs must rehearse whole-class discussions and learn to spontaneously answer pupils' questions, for example, in relation to pedagogical issues (e.g. Why do we have to come to class?) or content (e.g. Why do we have to use an -ing form here?). The choice between pre-designed and open-designed approaches depends on the context and focus of rehearsing. Within either approach, rehearsing will not prevent PSTs from improvising. It can, instead, help them build a teaching repertoire they can have recourse to when they must improvise. In doing so, PSTs can gain self-confidence and self-reliance in the classroom.

To answer the question of how teacher educators can make PSTs rehearse, Grossman (2021) offers three essential concepts: representations (e.g. modelling a dialogic classroom discussion), decompositions (e.g. asking the students to code talk moves in a transcription of a classroom discussion), and approximations (e.g. asking PSTs to carry out a dialogic classroom discussion on campus before enactment at practicum schools). Focusing on representations means providing PSTs with opportunities to engage with various modes of practice and discuss choice, decision-making, and the resulting consequences. Engaging in decompositions provides PSTs with opportunities to *deconstruct* practices into their constituent parts and

examine and analyse the building blocks that serve as the foundations of these practices. Approximations refer to opportunities for PSTs to engage in practices that are more or less authentic or ‘proximal to the practices of a profession’ (Grossman et al., 2009b, p. 2058).

More specifically, teacher educators may be inspired by McDonald et al.’s (2013) ‘cycle for collectively learning’ (p. 382), which may facilitate the implementation of Grossman’s concept in four phases: (1) introducing and learning about the activity, (2) preparing for and rehearsing the activity, (3) enacting the activity with students, and (4) analysing enactment and moving forward. The ReTPro research project, which is based on McDonald et al.’s cycle and presented in prologue 2 of this anthology, draws on these various phases, both on campus and during practicums.

However, one question, perhaps the most important one, remains: Why do we rehearse?

Why do we rehearse?

Some practitioners argue against rehearsing because they believe it will not help PSTs become professional teachers. Indeed, it is difficult to become a professional teacher. In addition, it seems obvious that not everything can be rehearsed. In this anthology, we want to emphasise that rehearsing is not a panacea for all problems regarding teacher education. Teachers will always have to cope with unexpected events in the classroom.

However, there are various arguments for rehearsing that are under scrutiny in this anthology. Some arguments for rehearsing consist of defining rehearsals as (1) critical thinking-promoting, (2) reflection-stimulating, or (3) routines- and improvisation-stimulating *rehearsing spaces* (in Norwegian: *Øvingsrom*) in which PSTs practise coordinating the complexities of classroom teaching, attending to the interactions between campus and practicum teachers, students in the classroom, and the disciplinary content to be learned.

First, rehearsals can be an efficient method for preparing PSTs to engage in critical thinking about the disciplinary content to be learned. For example, PSTs can rehearse debates on the pros and cons of a certain position or argument. Indeed, in many educational contexts, dilemmas are used to promote students’ critical thinking (Spencer-Oatey, 2013). We often talk about ‘critical incidents’ (Butterfield et al., 2005; Dypedahl, 2018) that are incorporated into lesson plans to promote critical thinking via exploring an argument from var-

ious perspectives. Several studies (e.g. Kılıç & Cinkara, 2020; Megawati et al., 2020; Serçu, 2004) recommend using dilemmas as a teaching method. In other words, PSTs must carry out difficult discussions that stimulate critical thinking, which may require some rehearsing in a safe space during teacher training.

Second, rehearsals can be perceived as a reflection-stimulating space in teacher education that can promote reflection-in-action and reflection-on-action (Schön, 1983). This is nicely described by Ruth Leitch in prologue 3 of the present anthology. Indeed, rapid thinking, decision making, and adjustments during an event may be of particular importance in rehearsals, but the capacity to benefit from reflection-in-action requires extensive rehearsal over time.

In contrast to this spontaneous thinking and acting on the go, reflection-on-action occurs retrospectively after a practicum, which allows PSTs to evaluate their actions and the outcomes of the practicum, and plan for future improvements. This reflective form encourages learning from experience and is commonly perceived as easier than reflection-in-action. For example, reflection-on-action in teacher education can mean that teacher educators ask PSTs to notice important moments in their video-recordings of their enactments after rehearsing. In fact, research (e.g. Van Es et al., 2017; Santagata et al., 2021) emphasises the importance of teacher noticing and teachers' reflection-on-action, which may be facilitated by rehearsal-based activities in teacher education. In sum, reflection-in-action suggests that PSTs improvise and adjust in the moment, whereas reflection-on-action may lead to adjustments in future learning and actions, which may be of particular importance in teacher education. The present anthology advocates that both forms of reflection, reflection-in-action and reflection-on-action, can be fostered through rehearsals in teacher education.

Third, rehearsals can be perceived as a routine- and improvisation-stimulating space in teacher education (e.g. Sfard in Part 4, Prologue 4 of the present anthology; Sawyer, 2011). Rehearsals are specific, repeated pedagogical actions. Repetitions create patterns of action, which can be called routines. Kazemi and Hubbard (2008) argue for the rehearsal of 'routine instructional activities' (p. 438) in teacher education, pointing out that rehearsing, and becoming proficient at, the routine aspects of teaching can help PSTs learn how to become professional teachers. Examples from mathematics include 'doing a mental math activity', 'posing, solving, and sharing solutions to word problems', or 'counting collections' (p. 438).

Similarly, in an early research article, Berliner (1985) advocated that ‘if we want someone to have a repertoire of behaviours for running a small cooperative group, we must provide them with practice opportunities, perhaps on a small scale, perhaps through simulations’ (p. 121). As stated by Sfard (see Part 4, Prologue 4 in the present anthology), ‘rehearsing may be the best way to introduce a new routine to a future teacher who does not yet have fully-fledged access to the school classroom.’ For example, to help teachers carry out productive classroom discussions, Michaels and O’Connor (2015) recommend focusing on talk moves because such utterance-level tools ‘can be easy to remember and easy to pull out with a bit of practice’ (p. 336).

At the same time, it is important to emphasise, once again, that teachers will always have to improvise. The rehearsing of routines will not solve all problems. While rehearsing a core practice may help PSTs become proficient in the performance of routines, it is not at all evident that it will make PSTs fully prepared to use these routines whenever necessary. Experienced teachers use routines more often than novice teachers do. According to Sawyer (2011), expert teachers ‘are able to invoke and apply these routines in a creative, improvisational fashion’ (p. 2).

We should mention that Sawyer (2004) introduced the concept of *disciplined improvisation* – that is, improvisation within the activity structures and routines of the classroom that involves a combination of lesson planning and actual teaching. Beghetto and Kaufman (2011) elaborated on this concept and defined it as teaching for creativity involving ‘reworking the curriculum-as-planned... under the special conditions of the curriculum-as-lived’ (p. 96). More specifically, the adjective ‘disciplined’, within the concept of *disciplined improvisation*, refers to determining what aspects of teaching and learning will be more or less fixed, and the noun ‘improvisation’ refers to identifying what aspects will be more or less fluid (p. 96).

According to Philip (2019), proponents of core practices (e.g. Ball & Forzani, 2009; Ball et al., 2009) assume that successful improvisation presupposes proficiency with core practices. This ‘skills first’ approach – the subject of a relentless debate throughout teacher education – may appear to be commonly accepted, but this is not so. The ‘skills first’ approach is rather questionable. The editors of the present anthology support Sawyer (2000) in his claim that ‘there is no sharp dividing line between “improvisation” and

“not improvisation”; rather, there is a continuum, from more improvised to less improvised’ (p. 182).

Ultimately, the present anthology urges readers to pay greater attention to the above-mentioned three dimensions of teaching, that is, (1) critical-thinking-promoting, (2) reflection-stimulating, and (3) routines- and improvisation-stimulating spaces. These should not be undervalued in practice-based teacher education. This leads us to the question: What is the role of rehearsing in practice-based teaching?

Rehearsing and practice-based teacher education

During the last decade, we have seen a shift in teacher education, which has turned away from a focus on the knowledge needed for teaching to a focus on the use and enactment of that knowledge in practice (Grossman et al., 2018). PSTs require arenas in which they can experiment, improvise, make mistakes, and deal with the unexpected (Kaldahl et al., 2023). PSTs also criticise the fact that campus education and the field of practice are largely two separate arenas.

Rehearsing teaching, on campus and in practicum schools, can help promote integrity and coherence within teacher education by expanding the experience-based repertoire of PSTs. This goal is in line with the Norwegian *Teacher Education 2025* strategy (Norwegian Ministry of Education and Research, 2024). This strategy points out that one of the remaining challenges for teacher education is ensuring practice relevance. The Advisory Council for Teacher Education (2024) points to the same dilemmas in their report to the Ministry of Education and Research. They argue for what they call ‘expanded practice’ and promote expanded access to practice arenas, and the expanded use of learning forms, as potential answers to this challenge. Using ‘expanded practice’, the gap between theory (e.g. on campus) and practice (e.g. in practicum schools) will be more bridged throughout teacher education programmes.

In line with this, the editors believe that *rehearsing for teaching* represents a potential answer to the above-mentioned dilemma because such rehearsals can function as simulations of practice and help our PSTs develop teaching

repertoires in a constrained setting. The rehearsals thus allow PSTs to approximate a teaching practice combining disciplinary topics with the unforeseen. This involves, among other things, being able to read, debrief, identify, and exploit critical moments that arise in a teaching setting, in which the teacher must confront and manoeuvre between the tensions created by the various purposes of academic, relational, and value-based topics, as Biesta highlights in the concepts of qualification, subjectification, and socialisation.

We therefore rely on both Sawyer (2004) and Philip (2019) when claiming that a fundamental prerequisite for professional and improvisational teaching competence is a strong value-based foundation, academically, pedagogically, and ethically.

The editors of the present anthology advocate that rehearsing practices must affect the core building blocks of teacher education, that is, teacher education's 'learning ecologies' (Van Lier, 2010). This could imply integrating rehearsing practices into course descriptions and assessment procedures systematically. This also presupposes, as Anna Sfard so wisely points out, creating sufficiently strong connections between training on campus, authentic practice, and critical reflection. Indeed, to come full circle and return to the title of the present anthology, *rehearsing for teaching* can make teacher education practice-based.

Presentation of the anthology's contributions

Part 1 of our anthology deals with theoretical aspects of rehearsing. It is introduced by a prologue written by Gert Biesta.

In the first article, SIGRID HAUKANES examines the role of critical and reflective rehearsals in teacher education as a means to foster the democratic formation of preservice teachers. She emphasises the necessity of integrating critical reflection with practical action to prepare preservice teachers to participate in the school's democratic societal mandate.

Rehearsals in teacher education must surpass the mere dissemination and adoption of 'best practices'. Instead, they should serve as platforms for preservice teachers to engage in critical scrutiny of practice, purpose, and context.

The second article, written by SISSEL MARGRETHE HØISÆTER, explores the turn to practice-based teacher education (Grossman et al. 2018, p. 2) and different approaches to understand how teacher educators' modelling of teaching works. She examines in what ways theories can inform us about the relationship between modelling and rehearsals. The use of modelling in the research project *Rehearsing Teaching Professionally* (ReTPro) is presented as an example. One antique and two modern theoretical approaches are introduced. Differences between the ancient and the modern approaches, and relevance of the ReTPro case, are discussed.

VIGDIS VANGSNES examines, in article 3, the use of modelling as a didactic approach for teaching about teaching when campus teachers use modelling to exemplify process drama methods, including teacher-in-role, in teaching English as a Foreign Language. Lunenberg et al.'s (2007) four modelling types provide the framework for conceptualising these didactic situations. Her findings suggest that implicit performativity is as important as explicit talk in developing a teaching repertoire. Her insights lead to introducing a new category: Performative Modelling, characterised by its aesthetic approach to teaching.

Article 4 presents performativity as a theoretical framework and a practical approach for designing exercises and teaching that can link action and reflection in teacher education. FRIDE LINDSTØL identifies and explores two contrasting perspectives of performativity. One perspective originates from performative education, and the other from performative teaching. The former prioritises methods, rituals, routines, and the use of specific techniques, whilst the latter emphasises dynamic, aesthetic, and relational actions. The study is a contribution to a performative pedagogy that has significance for how we teach practical actions and skills.

The second part of the anthology is introduced by HEGE MYKLEBUST, SISSEL MARGRETHE HØISÆTER, MICHEL ALEXANDRE CABOT, and VIGDIS VANGSNES. It consists of five articles written by in-service (i.e. practicum) or preservice teachers (PSTs) who have been involved in the research project *Rehearsing Teaching Professionally*. The examples highlight how the practicum teachers and PSTs have worked to build professional teaching repertoires of embodied, reflective, and purposeful actions.

In article 5, INGEBORG GLETTE ÅSLAND has observed PSTs as they enact their prepared and rehearsed activities in the subject mathematics.

Article 6, written by LENA KIRK VOLL TRAA, reports on the enactment of teacher-in-role and talk moves in the subject English as a Foreign or Second Language.

In article 7, KRISTIN KOLØY illustrates how the principles of the ReTPro rehearsal cycle can be used in mentoring, while article 8, by LILLY-ANNE LITLABØ, examines how a focus on modelling and reflection can be utilised to carry out learning conversations about classroom management and group dynamics in each class.

In article 9, ISABELLE GRUDE CHRISTIANSEN and THEA KAROLINE SØMME present their experiences with, and reflections on, participating in the ReTPro project as preservice teachers.

In part 3 of the anthology, empirical aspects of rehearsing in the project *Rehearsing Teaching Professionally* are under scrutiny. This part of the anthology is introduced by Ruth Leitch. It consists of four articles which touch upon similar concepts, that is, teachable moments (Hyun & Marshall, 2003), critical moments (Myhill & Warren, 2005), golden opportunities (Walshaw & Anthony, 2008), or noteworthy moments (van Es et al., 2017). These moments represent meaningful decision-making moments during instruction that can further PSTs' professional development by providing them with an opportunity to reflect on both more successful (used), or less successful (lost), moments of students' learning.

In article 10, MICHEL ALEXANDRE CABOT and JON BRODAL examine PSTs' video-stimulated reflections on whole-class discussions that can be useful for vocabulary learning at elementary school. The case study highlights the PSTs' use of various talk moves and reflections in relation to used or lost moments of vocabulary learning. The study identified that using basic talk moves can lead to noticing vocabulary gaps, whilst advanced moves facilitate hypothesis-testing and metalinguistic reflection. The study emphasises the importance of dialogic whole-class discussions as a method to strengthen vocabulary learning in EFL/ESL teacher education.

In article 11, HEGE MYKLEBUST and GRY TUSET look into PSTs' ability to notice and reason about ambitious teaching practices through a video-based reflection conversation with practicum and campus teachers after practicum. The study identified that PSTs' initial noticing and pedagogical reasoning did not fully grasp the complexity and possible different instructional purposes in the teaching situations. During the conversation, the PSTs

were given the opportunity to engage in a discussion about the pedagogical dilemmas, and how different pedagogical actions might lead to different purposes. Their pedagogical reasoning developed in the direction of ambitious teaching and became more elaborate.

Article 12, written by MICHEL ALEXANDRE CABOT, suggests that focusing clearly on pre-designed (well-planned authentic dilemmas) and open-designed dimensions (improvisations), as well as the formation of a multitude of (used or lost) teachable moments, may develop the PSTs' intercultural citizenship. Indeed, the PSTs questioned attitudes and beliefs, noticed knowledge and comprehension gaps, decentred and adapted communication and behaviour. This study emphasises the importance of video-stimulated reflection after rehearsing as a method to strengthen critical intercultural citizenship in EFL/ESL teacher education.

In article 13, MARIT KULILD, MICHEL ALEXANDRE CABOT, and TONE IVERSEN investigate PSTs' reflections on the use of talk moves when conducting individual student-teacher conversations ('elevsamtaler' in Norwegian) during practicum. Reported talk moves such as saying more, and challenge, were successful and showed the supportive nature of dialogic talk. Reasons behind 'lost moments' related to uncertainty in the use of wait time, and lack of spontaneous follow-up questions, which challenged the cumulative principle of dialogic talk. The PSTs gained an increased awareness of their own dialogic skills, which may help strengthen their professional development.

Part 4 of the anthology presents empirical aspects of rehearsing across various teacher education programmes. It is introduced by ANNA SFARD and JOANNE O'FLAHERTY.

In article 14, COLIN CHRISTIE discusses the use of microteaching as a particular aspect of rehearsal in the preparation for secondary school teachers of modern languages at a university in Scotland. More specifically, this article looks at the history of microteaching, its potential advantages and drawbacks, and the adaptation of a university course for use in its own specific context, and for its own PSTs. PSTs' responses to their experiences of microteaching show a very positive evaluation of their involvement with the microteaching activities.

Article 15, by LENKA GARSHOL and SUSAN ERDMAN, explores the effectiveness of on-campus teaching rehearsals in teacher education, with a focus on grammar instruction in English teaching in Norway. This study

illustrates how rehearsals of explicit grammar instruction enhance preservice teachers' ability to integrate instructional methods. The paper argues that on-campus teaching rehearsals are particularly effective in preparing preservice teachers for grammar instruction, as they highlight the critical transition from understanding instructional methods to enacting them proficiently in the classroom.

In article 16, KRISTIN KROGH ARNESEN, KIRSTI RØ, ANITA VALENTA and REIDUN PERSDATTER ØDEGAARD examine preservice teachers' role-plays of discussions promoting students' mathematical reasoning. They observed different challenges during planning: superficiality, too demanding mathematical complexity, and unequal participation. The planning challenges clearly impacted both the teachers' moves and the structure of arguments in the enactments of the role-plays. Their results indicate a need to find a way to strengthen the planning phase, particularly when working with complex mathematical content as reasoning.

In article 17, ANITA VALENTA and OLE ENGE investigate preservice teachers' development of mathematical knowledge in the context of work on role-plays. Here, preservice teachers work in groups without continuous supervision and enact instructional activities in role-plays, assuming the roles of teachers and students. It seems somewhat arbitrary whether the PSTs discuss the mathematical content during their group work, and how they do that. Their findings suggest that new mathematical content needs to be thoroughly worked on before or during work on role-plays, and that the teacher educator needs to guide that.

In article 18, MORTEN ODDVIK, MAGNUS SANDBERG, CECILIE ENQVIST-JENSEN, and LARS OPDAL explore how groups of novice PSTs rehearse using the simulated learning resource *Breaktime*, which consists of 17 videos featuring digital bullying scenarios and socio-emotional transgressions in a ninth-grade class. This learning resource can serve as a bridge to real-world practice early in teacher education and help form a foundation for the professional development of preservice teachers.

In the epilogue, ELAINE MUNTHE and KARI SMITH highlight some tensions and conceptual variations shown in the various articles of the present anthology. Most importantly, they suggest both a 'practice turn' and a 'professions turn' that encompasses practice, research, and theory in a comprehensive way to strengthen professional knowledge and skills in teacher education.

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Part 1

Theoretical Aspects of Rehearsing

