Munthe, E. & Smith, K. (2025). Epilogue. In M. A. Cabot, S. M. Høisæter & V. Vangsnes (Eds.), *Rehearsing for teaching: Theoretical and empirical approaches to a practice-based teacher education* (pp. 467–475). Fagbokforlaget. DOI: https://doi.org/10.55669/oa6005E

Epilogue

Elaine Munthe[1] and Kari Smith[2]

[1] Norwegian Knowledge Center for Education

[2] Norwegian University of Science and Technology

Introduction

If you were to search academic databases for studies related to the topic of this book, you might use terms such as 'micro-teaching', 'simulation', or 'role-play'. However, the central concept underlying this book and the research project from which it originates is 'rehearsal'.

Rehearsal is the overarching concept that explains why we engage in simulations, role-playing, or micro-teaching. It is fundamental to all professional education, offering students the opportunity to practise in a safe environment without the risk of making critical mistakes or causing unnecessary disruptions. Rehearsal acknowledges that teaching – like other professions – is not just theoretical but also practical, emotional, and relational, and that there are certain practices that relate to teaching in general and to teaching specific subject matter. In this anthology, the authors present research and practices which contribute to a richer understanding of the importance of rehearsal.

Yet, the various articles reveal certain tensions surrounding the concept of rehearsal, and variations in its interpretation. In this concluding epilogue, we highlight some of these tensions and conceptual variations, followed by perspectives that deepen our understanding of rehearsal and reflection in teacher education. Finally, we discuss how the knowledge gathered in this anthology can inform future research and practice in teacher education.

Complexity, contingency, uncertainty – and the rehearsal of routine behaviours

A key takeaway from this anthology is that because teaching is inherently complex, contingent, and uncertain, teacher education must create opportunities for preservice teachers to practise and rehearse essential behaviours and skills. This helps prepare newly qualified teachers to navigate their professional roles, and continue their learning throughout their careers.

However, there is an inherent tension within this idea. Teaching is not technical; it is always situational, raising several important questions:

- Which core practices should be prioritised?
- To what extent are core practices contextual or subject-dependent?
- Is there a danger that we make teaching more instrumental if we emphasise core practices, routines, and rehearsal – that we deprofessionalise teaching and make it more scripted?

Sfard highlights the importance of developing a broad repertoire of routines during teacher preparation. Teaching routines expand throughout a teacher's career, forming a lifelong process of professional development. However, no set of routines can fully prepare teachers for every unexpected event. Sfard suggests that alongside a rich variety of teaching techniques, teachers must develop situational sensitivity. The more established their routines, the more cognitive space is freed to engage with students and adapt to unforeseen circumstances.

Another tension, raised by Biesta, concerns different perspectives on teaching. Is teaching a set of techniques that can be rehearsed, a craft learned through apprenticeship, or a performative art? Biesta states that 'entering practice is done through practising the practice'. This can be interpreted as the process of becoming a fully qualified teacher through continuous, guided practice in safe environments, such as rehearsal rooms and classrooms.

Every time a teacher steps into a classroom, they engage in a live performance that may differ from class to class, even if the lesson content remains the same. Sensitivity to the audience – the students – is crucial. Teaching cannot be reduced to a rigid script; it requires interaction and responsiveness. As Sawyer (2011) argues, the essence of teaching lies in balancing structure and improvisation. He cautions that excessive external directives can diminish teaching quality by limiting opportunities for improvisation.

When a profession is strongly influenced by external directives, it is characterised by what Sachs (2016) calls political professionalism. Practice is subject to standards, external accountability, and control. This is likely to harm practitioners' enactment of the profession, or to diminish the teaching quality, as Sawyer (2011) says.

The studies presented in this anthology reflect a different kind of professionalism, namely what Sachs (2016) has called democratic professionalism. This is the kind of professionalism that is researched and developed within the professional community itself. Research is needed and used to continually improve practice, and to identify practices that are valuable for teaching and

learning. These are practices that might be rehearsed to make PSTs better prepared for practice by strengthening their professional teaching repertoire. Democratic professionalism comes from inside the profession and is negotiated within a community of practice.

Yet, there is a kind of professionalism which we have chosen to call personal professionalism. This is the kind of professionalism that the practitioner, in our case the teacher, enacts when responding to the context, situation, and the students, when improvisation is needed. This kind of professionalism is more difficult to rehearse; however, a rich and internalised set of routines is likely to support the PSTs in strengthening their personal professionalism when meeting unexpected situations in and outside the classroom.

Our understanding of the goal of the RetPro project is to enhance PSTs' professional knowledge for teaching. Teaching as a profession is a 'practice', and all teachers who 'open their practice' when starting out as newly qualified teachers need to be aware of the professional knowledge base that teachers have access to, develop, and use.

Learning some of the key practices in a way that involves modelling, planning, rehearsing, practising, and reflection can also be regarded as a learning strategy for continued professional learning in the workplace.

Reflection and its role in rehearsal

Reflection is a central theme in this anthology. As Leitch discusses in her prologue, reflection is regarded as a meaningful learning tool rather than a mere academic exercise. The two kinds of reflection that are mainly addressed are (see Schön, 1983):

- **Reflection-on-action** occurs after a teaching experience, during discussions with educators, or through written reflections.
- **Reflection-in-action** happens in real time, as teachers make adjustments while teaching.

There is another reflection type that is evident, although not as pronounced in the articles, namely '**reflection-for-action**'. Reflection-for-action is essential in the first phase of the rehearsal model used in RetPro. The first phase is described as 'introducing and learning about the activity', 'studying and modelling', and 'modelling' in the articles. These three descriptions can imply different foci, not least whether or not PSTs are engaged in critical discussions of research on the topic, theories about the topic, or just modelling. Our impression is that this varies in the included studies.

For instance, in one study the teacher educators involved first expressed their concern about using research in the project because it could interfere with the 'magic', but later they realised that introducing and using research would contribute to PSTs' understanding (see Vangsnes, article 3). Arnesen et al. (see article 16) find that they need to strengthen the planning phase.

Thinking seriously about how reflection-for-action can be integrated as a proper 'study phase' is one way to introduce professional literature and relevant research to PSTs, enhancing their understanding of *why* certain practices can be worth learning and using, *when* they might be favourable, and, in some cases, *for whom* they might be especially valuable.

The study phase is essential for later reflection as well. John Dewey (1910) describes reflective thinking as suspending judgement and postponing conclusions. Learning to maintain this state of uncertainty while engaging in systematic inquiry is a crucial skill developed through teacher education. A study phase which includes reading, discussing, observing, and discussing practices that are modelled provides a rich knowledge base and vocabulary for later reflection-in-action and reflection-on-action. It is a way to build professional knowledge and shared language.

Reflection-in-action is the difficult one. Brezinski (2018) describes six characteristics of reflection-in-action:

1. Actions influence the situation, sometimes unpredictably.
2. Teachers cannot pause to reflect; they must rely on intuition.
3. The outcomes of actions are often unforeseeable.
4. The situation is fluid and can be interpreted in multiple ways.
5. No single interpretation is definitively correct or incorrect.
6. Language itself shapes the situation, making complete detachment impossible.

Because reflection-in-action is so immediate, can it be rehearsed? Biesta suggests that teachers should reflect not only on what they have learned, but also on how they have been in particular situations. Some of the articles in this book have used video recordings to help PSTs do just that: to analyse and reflect on practices, decisions, interpretations, and feelings.

In many ways, reflection-in-action boils down to what a teacher notices, or how sensitive the teacher is to the surroundings and contexts. Noticing has been an area of growing interest in educational research.

However, a review of the literature suggests that few studies demonstrate direct improvements in teaching practices due to noticing interventions (König et al., 2022). We also believe that noticing is related to teacher sensitivity, but both of these concepts are still quite 'fuzzy'.

It would be interesting to learn more about how or when rehearsal might influence sensitivity in learning situations, or whether rehearsal influences PSTs' noticing in ways that also lead to constructive changes in teaching practices.

Where do we go from here?

The articles in this anthology demonstrate how rehearsal has enabled learning for PSTs. They provide insight into the kinds of reflections that PSTs engage in related to what they observe, and what they experience through simulation, role play, teacher-in-role, and other essential approaches to learning in teacher education.

Rehearsal helps reduce complexity by building a repertoire of well-considered behaviours. It allows teachers to manage some of the inherent uncertainties of the profession. Rehearsal must be meaningful. This is emphasised throughout the anthology. Rehearsal must emphasise understanding rather than rote technical application. A main reason for this is that teaching is a continuous process of rehearsal. There is no singular 'opening night' where everything falls perfectly into place. Teachers constantly encounter new and unpredictable situations, requiring them to adapt and refine their practice over

time. Teachers need to continually explore new ways of teaching to meet the learning needs of the children, and adolescents, in schools.

This requires a learning orientation, and an understanding of teachers as lifelong learners. It is not enough to rehearse specific core practices if teacher education also has to prepare teachers for uncertainty (Munthe, 2007). Uncertainty involves doubt and risk – or 'the incalculable' as Biesta writes in this anthology. But uncertainty is also a necessary aspect of learning – we need to ask questions, to wonder, to be curious, and to want to find out. Can we rehearse this in teacher education, too?

Tauritz (2016) suggests that educators should guide students through three key themes:

- Learning to embrace uncertainty as an opportunity.
- Developing resilience in uncertain situations.
- Reducing uncertainty by building a repertoire of routines.

We wish to add a fourth point to the list above:

- Learning to create uncertainty through questioning the taken for granted or own assumptions

Being curious about one's own teaching practices, and the consequences they might have for others, is a key to professional learning for teachers. Learning to ask questions about teaching and learning, to wonder about students' learning, relationships, and well-being, are also important skills to learn, and to hone.

Bullough (2021) stresses the importance that teachers' reflections go beyond instrumental practice and critically look at the whole person and his/her practice. 'Within higher education questions of self, well-being, and of individual agency often are set aside in favour of more instrumental values, like training and market-measures. By linking "self" to "study," self-study seems to proclaim the importance of the person and the quality of that person's life to the quality of the practice' (p. 258).

This anthology takes 'the practice turn' in teacher education as a starting point, and has provided valuable insight into how teacher educators and PSTs on campus, and in schools, have developed and studied rehearsal in different subjects, and through different pedagogical approaches. The research anthology

demonstrates, through many practical examples, how teaching practices can be modelled and rehearsed both on campus and in schools.

The term 'practice turn' is often used to illustrate a different emphasis than, for instance, an 'academic turn' or a 'theoretical turn'. We have witnessed a call for a practice turn in teacher education for many years (see e.g. Donaldson, 2011; British Educational Research Association, 2014; Conway & Munthe, 2015; Darling-Hammond, 2017).

However, we believe that what is needed is a 'professions turn', which encompasses practice, research, and theory in a comprehensive way to strengthen professional knowledge and skills. Teaching is both academic and practical, and it is vital for teacher education to provide the conditions that combine the academic and practical in meaningful ways.

The model used for rehearsal in the RetPro project is one way to create this coherence, and to provide the content that is necessary for meaningful reflection-for-action, reflection-in-action, and reflection-on-action.

References

Brezinski, B. (2018). The puzzling phenomenon of reflection-in action. Retrieved 10.02.2025 from https://www.linkedin.com/pulse/puzzling-phenomenon-reflection-in-action-bradley-brezinski

British Educational Research Association. (2014). *The role of research in teacher education: Reviewing the evidence. Interim report of the BERA-RSA-Inquiry.* http://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-RSA-Interim-Report.pdf

Bullough, R. V., Jr. (2021). Of what do we testify? A meditation on becoming 'good' and on the nature of 'self' in self-study. *Studying Teacher Education, 17*(3), 256–272.

Conway, P. F. & Munthe, E. (2015). The practice turn: Research-informed clinical teacher education in two countries. In J.-K. Smedby & M. Stutphen (Eds.), *From vocational to professional education: Educating for Social Welfare* (pp. 146–163). Routledge.

Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education, 40*(3), 291–309. https://doi.org/10.1080/02619768.2017.1315399

Donaldson, G. (2011). *Teaching Scotland's future: Report of a review of teacher education in Scotland.* The Scottish Government.

König, J., Santagata, R., Scheiner, T., Adleff, A. K. & Yang, X., Kaiser, G. (2022). Teacher noticing: A systematic literature review of conceptualizations, research designs, and findings on learning to notice. *Educational Research Review, 36*, 100453. https://doi.org/10.1016/j.edurev.2022.100453

Lunenberg, M., Korthagen, F. & Swennen, A. (2007). The teacher educator as a role model. *Teaching and Teacher Education, 23*(5), 586–601.

Munthe, E. (2007). Recognizing uncertainty and risk in the development of teachers' learning communities. In M. Zellermayer & E. Munthe (Eds.), *Teachers learning in communities.* Sense Publications. https://doi.org/10.1163/9789087901783_004

Sachs, J. (2016). Teacher professionalism: Why are we still talking about it? *Teachers and Teaching, 22*(4), 413–425. https://doi.org/10.1080/13540602.2015.1082732

Sawyer, R. K. (2011). What makes good teachers great? The artful balance of structure and improvisation. In R. K. Sawyer (Ed.), *Structure and improvisation in creative teaching* (pp. 1–24). Cambridge University Press.

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Tauritz, R. L. (2016). A pedagogy for uncertain times. *Research and innovation in education for sustainable development*. Environment and School Initiatives.