

Your full name: Inga Staal Jensen

Affiliated authors with institutions:

Berglind Gísladóttir, School of Education, University of Iceland, Iceland

Marte Blikstad-Balas, Department of teacher education and school research, University of Oslo, Norway

Inga Staal Jensen, Department of teacher education and school research, University of Oslo, Norway

Hanne Fie Rasmussen, UCL University College, Denmark

Affiliation: Department of teacher education and school research, University of Oslo, Norway

Current position: Associate professor

Title of your symposium: **Strategic documentation of practice: Approaches to practice-based teacher education in the Nordics**

Teaching is among the most crucial professions in any society - not uncommonly described as a noble profession (Brouwer, 2022). While acknowledging the value and importance of teachers, we also know that teaching is a very complex and demanding profession (Grossman, Compton, et al., 2009; Lortie, 1975). Still, in teacher education, candidates often learn *about* teaching rather than *how* to teach (Grossman, Hammerness et al., 2009; Hammerness et al., 2020) and studies from across the world show that candidates do not consider themselves fully prepared to function as a teacher (Feiman-Nemser, 2001; Organization for Economic Co-operation and Development [OECD], 2019). Over two decades ago, Ball and Cohen (1999) claimed that teacher learning is often seen simply as a result of teaching experience, and opposing this view they proposed a paradigmatic shift in teacher education pedagogy to systematically ground teacher education and teacher candidate learning in the practice of teachers. The following decades, scholars and policymakers have increasingly argued for such emphasis, and as practice-based teacher education has gained ground in the field (Hauser & Kavanagh, 2019), a variety of approaches has been proposed.

Approaches include increasing the amount of time candidates spend in schools, or what Ball and Cohen (1999, p. 14) refer to as «situations in school classrooms in real time». Still, research indicates that the quality of their practical training is not always of high quality, and the connections between their practical training and their coursework at campus are weak (Darling-Hammond et al., 2017; Goldhaber et al., 2017; OECD, 2005). However, scholars working within the field of practice-based teacher education have also take a broader approach to practice and have taken «strategic documentation of practice» (Ball and Cohen, 1999, p. 14) as a starting point for how to work practice-based with teacher candidates. This has resulted in approaches focusing on core practices of teaching (Grossman, Hammerness, et al., 2009; McDonald et al., 2013) or high leverage practices (Ball & Forzani, 2009) – and lead to pedagogies of teacher education including learning cycles (Lampert et al., 2013; McDonald et al., 2013), simulations (Cohen et al., 2020), rehearsals (Kazemi et al., 2016; Kelley-Petersen et al., 2018; Wæge & Fauskanger, 2020), and the use of video (Gaudin & Chaliès, 2015) and other artefacts of teaching, or approximations to practice (Grossman, Compton, et al., 2009).

In this symposium we adopt such a broad perspective to practice-based teacher education, as we investigate *different ways that Nordic teacher educators have approximated practice in their programs*. We share experiences from three Nordic countries, and the symposium is composed by four (attached) papers:

Paper 1: Teacher candidates' opportunity to study and enact teaching practices during coursework at campus

Paper 2: Alternative ways to approach "practice" in teacher education

Paper 3: Video as a pedagogy of teacher education: relationship between choice of video clips, support provided and teacher candidate reasoning

Paper 4: First-year student teachers experiences, knowledge and values when noticing teaching praxis in a video-based learning to notice course

References

- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In G. Sykes & L. Darling-Hammond (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3–32). Jossey Bass.
- Ball, D. L., & Forzani, F. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education, 60*(5), 497–511. <https://doi.org/10.1177/0022487109348479>
- Brouwer, N. (2022). *Using Video to Develop Teaching*. Routledge.
- Cohen, J., Wong, V., Krishnamachari, A., & Berlin, R. (2020). Teacher Coaching in a Simulated Environment. *Educational Evaluation and Policy Analysis, 42*(2), 208-231. <https://doi.org/10.3102/0162373720906217>
- Darling-Hammond, L., Burns, D., Campbell, C., Goodwin, L., Hammerness, K., Low, E. L., McIntyre, A., Rothman, R., Sato, M., & Zeichner, K. M. (2017). *Empowered Educators: How high performing systems shape teaching quality around the world*. Jossey-Bass.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers college record, 103*(6), 1013-1055.
- Gaudin, C., & Chaliès, S. (2015). Video viewing in teacher education and professional development: A literature review. *Educational Research Review, 16*, 41-67. <https://doi.org/https://doi.org/10.1016/j.edurev.2015.06.001>
- Goldhaber, D., Krieg, J. M., & Theobald, R. (2017). Does the Match Matter? Exploring Whether Student Teaching Experiences Affect Teacher Effectiveness. *American Educational Research Journal, 54*(2), 325-359. <https://doi.org/10.3102/0002831217690516>
- Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. (2009). Teaching practice: A cross-professional perspective. *Teachers College Record, 111*(9), 2055–2100. <https://cset.stanford.edu/sites/default/files/files/documents/publications/Grossman-TeachingPracticeACross-ProfessionalPerspective.pdf>
- Grossman, P., Hammerness, K., & McDonald, M. A. (2009). Redefining teaching, re-imagining teacher education. *Teachers and teaching: Theory and practice, 15*(2), 273–290. <https://doi.org/10.1080/13540600902875340>
- Hammerness, K., Klette, K., Jensen, I. S., & Canrinus, E. T. (2020). Opportunities to Study, Practice, and Rehearse Teaching in Teacher Preparation: An International Perspective. *Teachers College Record, 122*(11), 1-46. <https://doi.org/10.1177/016146812012201108>
- Hauser, M., & Kavanagh, S. S. (2019). Practice-Based Teacher Education. In: Oxford University Press.

- Kazemi, E., Ghouseini, H., Cunard, A., & Turrou, A. C. (2016). Getting inside rehearsals: Insights from teacher educators to support work on complex practice. *Journal of Teacher Education*, 67(1), 18–31. <https://doi.org/10.1177/0022487115615191>
- Kelley-Petersen, M., Davis, E. B., Ghouseini, H., Kloser, M., & Monte-Sano, C. (2018). Rehearsals as examples of approximations. *Teaching core practices in teacher education*, 85-101.
- Lampert, M., Franke, M. L., Kazemi, E., Ghouseini, H., Turrou, A. C., Beasley, H., Cunard, A., & Crowe, K. (2013). Keeping it complex: Using rehearsals to support novice teacher learning of ambitious teaching. *Journal of Teacher Education*, 64(3), 226–243. <https://doi.org/10.1177/0022487112473837>
- Lortie, D. (1975). *Schoolteacher: A sociological study*. The University of Chicago Press.
- McDonald, M. A., Kazemi, E., & Kavanagh, S. S. (2013). Core practices and pedagogies of teacher education: A call for a common language and collective activity. *Journal of Teacher Education*, 64(5), 378–386. <https://doi.org/10.1177/0022487113493807>
- OECD (2019). *Flying Start: Improving Initial Teacher Preparation Systems*. OECD Publishing. <https://www.oecd-ilibrary.org/docserver/cf74e549-en.pdf?expires=1661073153&id=id&accname=ocid195785&checksum=48FDB5B65D078812103F0210192545D3>
- OECD (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. <http://www.oecd.org/education/school/34990905.pdf>
- Wæge, K., & Fauskanger, J. (2020). Teacher time outs in rehearsals: in-service teachers learning ambitious mathematics teaching practices. *Journal of Mathematics Teacher Education*. <https://doi.org/10.1007/s10857-020-09474-0>

Individual papers:**Paper 1:**

Your full name: Berglind Gísladóttir

Affiliation: School of Education, University of Iceland, Iceland

Current position: Associate professor

Title of your paper: **Teacher candidates' opportunity to study and enact teaching practices during coursework at campus**

Internationally, research on teacher education reveals a divide between coursework and the reality of practice in schools, sometimes referred to as the "practice shock" (Caspersen & Raaen, 2014; Meijer et al., 2011). This challenge is by no means new (Schuck et al., 2018), and research in the past decades indicate that a key feature in good teacher preparation is to provide candidates with the opportunities to learn and practice things that are grounded in the actual work of teaching (Grossman et al., 2009).

In this paper we explore to what extent teacher candidates perceive they have opportunities to study and enact practice in their teacher education programs in Norway and in Iceland and whether these experiences differ between countries. Participants in the study were teacher candidates at the University of Iceland (N = 139) and at the University of Oslo (N = 112). Data was collected with a candidate survey designed to evaluate their perceptions of their opportunity to study and enact actual teaching practices, for example opportunities to examine actual teaching materials or watch or analyse videos of classroom teaching. This construct was assessed with 10 statements ($\alpha=.79$), answered on a four-point ordinal scale (1 = "no opportunities" – 4 = "many opportunities").

Preliminary findings indicate that candidates in both programs had some opportunities to practice teaching methods and examine samples of K-12 students work in their programs. The Icelandic teacher candidates reported greater opportunities to discuss their experience from student teaching and plan for teaching, but the Icelandic candidates reported fewer opportunities to see and work with real examples from lessons, like watch or analyse videos of classroom teaching. Such opportunities can make a difference in teacher preparation because it gives teacher candidates the opportunity to envision good teaching and to adopt such practices (Jenset et al., 2018).

References

- Caspersen, J., & Raaen, F. D. (2014). Novice teachers and how they cope. *Teachers and Teaching, 20*, 189–211. doi:10.1080/13540602.2013.848570
- Grossman, P., Hammerness, K., & McDonald, M. A. (2009). Redefining teaching, re-imagining teacher education. *Teachers and teaching: Theory and practice, 15*(2), 273–290. <https://doi.org/10.1080/13540600902875340>
- Jenset, I. S., Klette, K., Hammerness, K. (2018). Grounding Teacher Education in Practice Around the World: An Examination of Teacher Education Coursework in Teacher Education Programs in Finland, Norway, and the United States. *Journal of Teacher Education, 69*(2), pp. 184–197. <https://doi.org/10.1177/002248711772824>
- Meijer, P. C., de Graaf, G., & Meirink, J. (2011). Key experiences in student teachers' development. *Teachers and Teaching: Theory and Practice, 17*(1), 115–129

Schuck, S., Aubusson, P., Buchanan, J., Varadharajan, M., & Burke, P. F. (2018). The experiences of early career teachers: New initiatives and old problems. *Professional Development in Education*, 44(2), 209–221. doi:10.1080/19415257.2016.1274268

Paper 2:

Your full name: Marte Blikstad-Balas

Affiliation: Department of teacher education and school research, University of Oslo

Current position: Professor

Title of your paper: **Alternative ways to approach “practice” in teacher education**

The second paper examines the experiences of Norwegian teacher candidates participating in a week-long intensive course centered in a variety of artefacts of practice (Ball & Cohen, 1999), aiming to develop not only their noticing skills (König et al., 2022; Santagata et al., 2021; Weyers et al., 2023) and understanding of what counts as practice, but also their research literacy and understanding of systematic research processes (Cochran-Smith & Lytle, 2009). The “analytical practice” course is a campus-based form of practice where all teaching activities are grounded in an empirical authentic classroom case selected for this purpose, where one class is followed over four consecutive lessons. The case includes videos of the lessons, interviews with the teacher and some students, documents from the lessons and a survey with students in the class. During the weeklong practice period, the teacher candidates engage with all the different data sets and a range of different analytical tasks.

In this paper, we investigate *the degree to which “analytical practice” has contributed to teacher candidates’ professional understanding – both of teaching and of educational research that can inform teacher practices*. We draw on survey data (n=37) and focus group interviews (n=4) with teacher candidates who have taken part in the alternative practice form.

Findings show that the teacher candidates are positive towards alternative practice forms like “analytical practice”, and they express that this form of practice is a progression from earlier practicum periods. They also find it highly relevant for their own master thesis. In the discussion we address how teacher candidates can be challenged on the issue of relevance – and on why research methods and analytical approaches are not something that only concern researchers and master students, but all professional teachers who actively engage in research throughout their careers.

References

- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession*. Jossey-Bass.
- Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. Teachers College Press.
- 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/https://doi.org/10.1016/j.edurev.2022.100453>

Santagata, R., König, J., Scheiner, T., Nguyen, H., Adleff, A.-K., Yang, X., & Kaiser, G. (2021).

Mathematics teacher learning to notice: a systematic review of studies of video-based programs. *ZDM – Mathematics Education*, 53(1), 119-134. <https://doi.org/10.1007/s11858-020-01216-z>

Weyers, J., König, J., Santagata, R., Scheiner, T., & Kaiser, G. (2023). Measuring teacher noticing: A scoping review of standardized instruments. *Teaching and Teacher Education*, 122, 103970. <https://doi.org/https://doi.org/10.1016/j.tate.2022.103970>

Paper 3:

Your full name: Inga Staal Jensen

Affiliation: Department of teacher education and school research, University of Oslo

Current position: Associate Professor

Title of your paper: Video as a pedagogy of teacher education: relationship between choice of video clips, support provided and teacher candidate reasoning

Abstract

The use of video as an instructional tool might contribute to teacher candidates' (TC) learning (Gaudin & Chaliès, 2015). Still, successful use of video demands a conscious pedagogy of teacher education (Santagata et al., 2021). The third paper focuses on one teacher educator's pedagogy for using video across two years of instruction and examines the research questions: *What relationship is there between the quality of the support provided and the quality of TCs' talk around videos of teaching? And how does this evolve over time?*

The course was in Norwegian language arts, focused on practices for instructional scaffolding (cf. the PLATO observation protocol, Grossman, 2015), and used video to represent and decompose those practices. Based on research in the field, we developed three analytical frameworks to analyze the quality of: (i) the videos, according to how well they represented the practice in focus (Sherin et al., 2009); (ii) the support provided (i.e., the observation task and supporting materials); and (iii) TCs' reasoning, combining research on qualitative aspects of reasoning (König et al., 2022; Santagata et al., 2021; van Es, 2011; Weyers et al., 2023), on generative talk (Horn & Kane, 2019; Horn & Little, 2010; Little & Horn, 2007), and on practices for instructional scaffolding (Grossman, 2015).

The study follows two cohort across the years 2019 and 2020, and one teacher educator and 60 TCs participated. The paper reports on 10 lessons (n=900 minutes), five each year. All data are transcribed, analysed using the software NVivo12.

Initial findings indicate that there is indeed some association between the quality of videoclips, the quality off the support provided and the quality of candidates' talk – and that the quality increases over time. There are, however, some variation and a few interesting events of exceptions to this overall pattern.

References

- Gaudin, C., & Chaliès, S. (2015). Video viewing in teacher education and professional development: A literature review. *Educational Research Review*, 16, 41-67.
<https://doi.org/https://doi.org/10.1016/j.edurev.2015.06.001>
- Grossman, P. (2015). *Protocol for Language Arts Teaching Observations (PLATO 5.0)*. Stanford University.
- Horn, I. S., & Kane, B. D. (2019). What we mean when we talk about teaching: The limits of professional language and possibilities for professionalizing discourse in teachers' conversations [Review]. *Teachers College Record*, 121(6), Article A9.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071294726&partnerID=40&md5=44ece4f587949a9e348284477266b907>

- Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, 47(1), 181–217. <https://doi.org/10.3102/0002831209345158>
- 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/https://doi.org/10.1016/j.edurev.2022.100453>
- Little, J. W., & Horn, I. S. (2007). "Normalizing" problems of practice: Converting routine conversation into a resource for learning in professional communities. In L. Stoll & K. S. Louis (Eds.), *Professional learning communities: Divergence, depth, and dilemmas* (pp. 79–92). Open University Press.
- Santagata, R., König, J., Scheiner, T., Nguyen, H., Adleff, A.-K., Yang, X., & Kaiser, G. (2021). Mathematics teacher learning to notice: a systematic review of studies of video-based programs. *ZDM – Mathematics Education*, 53(1), 119-134. <https://doi.org/10.1007/s11858-020-01216-z>
- Sherin, M. G., Linsenmeier, K. A., & van Es, E. A. (2009). Selecting Video Clips to Promote Mathematics Teachers' Discussion of Student Thinking. *Journal of Teacher Education*, 60(3), 213-230. <https://doi.org/10.1177/0022487109336967>
- van Es, E. A. (2011). A framework for learning to notice student thinking. In M. Sherin, V. Jacobs, & R. Phillipp (Eds.), *Mathematics teacher noticing: Seeing through teachers' eyes* (pp. 164-181). Routledge.
- Weyers, J., König, J., Santagata, R., Scheiner, T., & Kaiser, G. (2023). Measuring teacher noticing: A scoping review of standardized instruments. *Teaching and Teacher Education*, 122, 103970. <https://doi.org/https://doi.org/10.1016/j.tate.2022.103970>

Paper 4:

Your full name: *Hanne Fie Rasmussen*

Affiliation: *UCL University College, Denmark*

Current position

Title of your paper: **First-year teacher candidates' experiences, knowledge and values when noticing teaching praxis in a video-based learning to notice course**

Research on teacher education acknowledges that first-year teacher candidates' prior educational experiences form their conceptions of teaching and learning and that they consecutively develop their attitudes and values (Amundsen et al, 2021). The use of classroom videos has shown a range of advantages for candidates' (Blomberg et al. 2014) and noticing is emphasized as a crucial part of teachers' classroom practice (Dindyal 2021). UCL University College has launched a research and development project on the use of classroom videos and the Learning to notice framework (van Es & Sherin 2002).

Our study explores what first-year teacher candidates identify as important and how they describe and reason on classroom events by pursuing this research question: *Which quality criteria can be identified in first-year teacher candidates' descriptions of classroom events, and what signifies the practical theories they draw on when reasoning?* With practical theory (Lauvås & Handal, 2015) we distinguish between experience, knowledge and values as significant factors when reasoning in group dialogues. The four elements in PLATO (Grossman et al. 2015) are used to designate quality criteria.

The empirical data consists of: Individual descriptions (n=69), group descriptions (n=19), group dialogues (n=19) and interviews (n=13). Initially the descriptions are analyzed by focusing on quality criteria then group dialogues are analyzed for reasoning by distinguishing between experience, knowledge and values, i.e., practical theories.

The study concludes that candidates primarily focus on classroom environment and instructional scaffolding while disciplinary demand and content is indistinct. When it comes to their reasoning, they tend to relate to their experiences and values prior to knowledge. This contributes to existing understandings on the importance of teacher candidates' practical theories as a point of departure for teacher education.

References

- Amundsen, D. L., Ballam, N., & McChesney, K. (2021). Students' transitions into initial teacher education: Understanding barriers and enablers through an ecological lens. *Australian Journal of Teacher Education (Online)*, 46(3), 91-111. <http://dx.doi.org/10.14221/ajte.2021v46n3.6>
- Blomberg, G., Sherin, M. G., Renkl, A., Glogger, I., & Seidel, T. (2014). Understanding video as a tool for teacher education: investigating instructional strategies to promote reflection. *Instructional Science*, 42(3), 443-463. <https://doi.org/10.1007/s11251-013-9281-6>

Dindyal, J., Schack, E. O., Choy, B. H., & Sherin, M. G. (2021). Exploring the terrains of mathematics teacher noticing. *ZDM—Mathematics Education*, 53(1), 1-16. <https://doi.org/10.1007/s11858-021-01249-y>

Grossman, P. (2015). *PLATO 5.0: Training and Observation Protocol*. CSET. Stanford.

Handal, G. (2015). *Vejledning og praksisteori*. Klim.