

Information for the May 10, 2013 TeachingWorks Journal Club Meeting

We will discuss the following two articles in this meeting: , each of which is summarized at the end of this document:

1. Lampert, Magdalene, Franke, Megan Loef, Kazemi, Elham, Ghouseini, Hala, Turrou, Angela Chan, Beasley, Heather, Crowe, Kathleen. (2013). Keeping It Complex: Using Rehearsals to Support Novice Teacher Learning of Ambitious Teaching. *Journal of Teacher Education*, 64(3), 226-243.

This article is summarized at the end of this document.

2. McDonald, Morva, Bowman, Michael, & Brayko, Kate. (2013). Learning to See Students: Opportunities to Develop Relational Practices of Teaching through Community-Based Placements in Teacher Education. *Teachers College Record*, 115(4).

Please see expanded abstract below for more detail about this article.

In addition, bibliographic information is below for other relevant articles published since the March 2013 meeting.¹

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Anderson, Lauren, & Stillman, Jamy. (2013). Making Learning the Object: Using Cultural Historical Activity Theory to Analyze and Organize Student Teaching in Urban High-Needs Schools. *Teachers College Record*, 115(3).

Background/Context: Student teaching represents a critical component of most teacher education programs. However, there is significant variation both in the contextual factors that preservice teachers (PSTs) encounter in their field placements and in the ways that teacher educators mediate PSTs' learning in relation to those placements. In this article, Cultural Historical Activity Theory (CHAT) provides the theoretical framework for considering this complex endeavor.

Purpose/Objective: This article unpacks a salient excerpt from an interview that was conducted as part of a larger qualitative study focused on situating student teaching in urban high-needs schools. The authors use one participant's description of her student teaching experience as a starting point for mapping the contextual factors that appeared to mediate her practice—and her learning about practice—in her placement. The authors then consider how teacher educators might have better supported the student teacher, thereby enhancing her own and her students' learning.

Conclusions/Recommendations: The authors conclude that conceptualizing student teaching through an activity system lens affords teacher educators the opportunity to think about student teaching in more contextualized ways, to set clearer, context-specific learning goals, and to strategically re-mediate PSTs' learning in relation to those goals. Implications include recommendations for deepening collaboration with cooperating teachers and otherwise working to build coherence across university-based and field-based settings in an era of high-stakes accountability.

¹ For the May 10, 2013 TeachingWorks journal club we considered the following journals: *Journal of Teacher Education* (May/June 2013; 64(3)), *American Educational Research Journal* (April 2013; 50(2)), *Elementary School Journal* (Vol. 113, No. 3, March 2013), *Journal of Curriculum Studies* (Volume 45, Issue 2), *Teachers College Record* (Volume 115, Number 3), (Volume 115, Number 4), *Educational Evaluation and Policy Analysis* (March 2013; 35(1) was included in March journal club. June issue not available yet), *Teaching and Teacher Education* (Volume 32, 33), *Journal of Education for Teaching: International Research and Pedagogy* (Volume 39, Issue 2 was included in the March journal club. Volume 39, Issue 3 was not yet available for inclusion in this journal club meeting).



Bronkhorst, Larika H., Meijer, Paulien C., Koster, Bob, Akkerman, Sanne F., & Vermunt, Jan D. (2013). Consequential research designs in research on teacher education. *Teaching and Teacher Education, 33(0)*, 90-99.

Collaboration between researchers and educators in conducting intervention research is increasingly common, as such collaboration is assumed to benefit educational practice. Alternatively, in this study, we explore the consequences of such collaboration on research quality. Based on our analysis of a year-long collaboration in formative intervention research, we find that educators experienced their own position as agent, the researcher's position as learner and the research itself as integrated, as being different from previous experiences in research. The educators indicate that these differences are consequential for their engagement in the research. We discuss how this, in turn, might benefit research quality.

Ding, Meixia, & Carlson, Mary Alice. (2013). Elementary Teachers' Learning to Construct High-Quality Mathematics Lesson Plans: A Use of the IES Recommendations. *The Elementary School Journal, 113(3)*, 359-385.

This study explored a group of elementary teachers' (n = 35) learning to construct high-quality lesson plans that foster student understanding of fundamental mathematical ideas. The conceptual framework for this study was gleaned from the recently released Institute of Education Sciences (IES) recommendations, including (a) interweaving worked examples and practice problems, (b) connecting concrete and abstract representations, and (c) asking deep questions to elicit student self-explanations. Comparisons between teachers' pre- and postsurveys, and among teachers' initial, revised, and end-of-course lesson plans, indicated teachers' growth in using worked examples, representations, and deep questions during their lesson planning. Issues related to teachers' learning as they constructed lesson plans that aligned with the IES recommendations were also revealed.

Heineke, Sally F. (2013). Coaching Discourse: Supporting Teachers' Professional Learning. *The Elementary School Journal, 113(3)*, 409-433.

Although coaching is used in many schools to facilitate teachers' professional learning, few studies look closely at coaching discourse. Exploring how coaching facilitates teachers' professional development, this study used tape-recorded coaching sessions and individual post interviews to examine the one-on-one coaching interactions of 4 elementary coach/teacher dyads. An interpretive analysis was conducted on all data followed by a structural discourse analysis of coaching episodes. Coaching roles, relationships, and mandated testing emerged as influential contextual factors. These coaches affirmed teachers, but tended to dominate the talk. Two coaches were aware of different coaching models and varied their coaching to fit each situation. Three teachers ascribed changes in their instruction to their literacy coaches, suggesting that coaching can lead to teacher learning. However, coaches need to become more knowledgeable about and skillful in their use of verbal moves and coaching stances.

Kleinknecht, Marc, & Schneider, Jürgen. (2013). What do teachers think and feel when analyzing videos of themselves and other teachers teaching? *Teaching and Teacher Education, 33(0)*, 13-23.

Despite the widespread use of classroom videos in teacher professional development, little is known about the specific effects of various types of videos on teachers' cognitive, emotional, and motivational processes. This study investigates the processes experienced by 10 eighth-grade mathematics teachers while they analyzed videos of their own or other teachers' classroom instruction. Findings indicate that teachers viewing videos of other teachers are more deeply engaged in analysis of problematic events. Counterintuitively, observing videos of others corresponds to higher emotional–motivational involvement. Results support the conclusion that observing one's own videos requires more prearrangement and scaffolding than observing others' videos.

Kumazawa, Masako. (2013). Gaps too large: Four novice EFL teachers' self-concept and motivation. *Teaching and Teacher Education, 33(0), 45-55.*

This study employed possible selves theory (Markus & Nurius, 1986) to conduct an interpretive inquiry into the teaching motivation of four novice secondary school EFL teachers in Japan. The narrative analysis of the interview data revealed that the conflicts between the young teachers' different possible selves negatively affected their motivation in their early days of teaching. However, such conflicts gradually induced self-reflection in the minds of the novices, which eventually helped them reshape their self-concepts and regain their motivation. The author concludes by suggesting to related parties some measures to assist novice teachers' entry into secondary school teaching.

Lampert, Magdalene, Franke, Megan Loef, Kazemi, Elham, Ghouseini, Hala, Turrou, Angela Chan, Beasley, Heather, Crowe, Kathleen. (2013). Keeping It Complex: Using Rehearsals to Support Novice Teacher Learning of Ambitious Teaching. *Journal of Teacher Education, 64(3), 226-243.*

We analyze a particular pedagogy for learning to interact productively with students and subject matter, which we call "rehearsal." Our goal is to specify a way in which teacher educators (TEs) and novice teachers (NTs) can interact around teaching that is both embedded in practice and amenable to analysis. We address two main research questions: (a) What do TEs and NTs do together during the kind of rehearsals we have developed to prepare novices for the complex, interactive work of teaching? and (b) Where, in what they do, are there opportunities for NTs to learn to enact the principles, practices, and knowledge entailed in ambitious teaching? We detail what happens in rehearsals using quantitative and qualitative methods. We begin with the results of our quantitative analyses to characterize how typical rehearsals were structured and what was worked on. We then show how NTs and TEs worked together to enable novices to study principled practice through qualitative analyses of a particularly salient aspect of ambitious teaching, namely, eliciting and responding to students' performance.

Lyon, Edward G. (2013). What about language while equitably assessing science?: Case studies of preservice teachers' evolving expertise. *Teaching and Teacher Education, 32(0), 1-11.*

The three case studies, drawing on qualitative analysis of surveys, interviews, program artifacts, and classroom observation, describe secondary science preservice teachers' evolving expertise at providing opportunities for linguistically diverse students to learn and demonstrate what they have learned (i.e., equitable assessment). The teachers became more knowledgeable about the role of language in assessment and incorporated scientific discourse while assessing in their teaching practicum. Yet, two tensions emerged, which inform the preparation of future science teachers: (a) should language demands of science assessment be reduced or scaffolded and (b) should language use in science as well as scientific understanding be assessed?

MacPhail, Ann, Tannehill, Deborah, & Goc Karp, Grace. (2013). Preparing physical education preservice teachers to design instructionally aligned lessons through constructivist pedagogical practices. *Teaching and Teacher Education, 33(0), 100-112.*

Examining how teacher education influences preservice teachers' (PSTs) application of content knowledge, decision making when planning for teaching, creation of innovative teaching practices and design of aligned instruction, has significant implications for understanding learning to teach. The purpose of this study was to explore the extent to which the constructivist pedagogies (e.g., interactive community discussions, problem solving, group challenges) employed by teacher educators through the implementation of a rich task (Macdonald, Hunter, & Tinning, 2007) assisted PSTs in their understanding and construction of knowledge about instructional alignment. Data collection employed rich tasks and focus-group interviews with a sample of 31 physical education teacher education (PETE) PSTs enrolled on a one-year Graduate Diploma Physical Education program. Data were analysed inductively (Patton, 1990) using the constant comparative method (Rubin & Rubin, 1995). Results revealed that PSTs varied in their articulation of the various elements of instructional alignment that were captured in the rich task. Through the use of such constructivist strategies as problem solving, group discussions, and

critical friends, PSTs understood and valued the process of instructional alignment as they moved from feelings of fear and apprehension to being confident in their own development. Areas of strength and deficiency that were noted in the PSTs' attempts to design instructionally aligned lessons will guide the teacher educators in revising program components and their own practice.

Malinen, Olli-Pekka, Savolainen, Hannu, Engelbrecht, Petra, Xu, Jiacheng, Nel, Mirna, Nel, Norma, & Tlale, Dan. (2013). Exploring teacher self-efficacy for inclusive practices in three diverse countries. *Teaching and Teacher Education, 33(0), 34-44.*

The purpose of this study was to explain teachers' perceived efficacy for teaching in inclusive classrooms by using a sample of 1911 in-service teachers from China, Finland, and South Africa. Bandura's theory of self-efficacy was used as a starting point to develop distinct models for each country. We found that in all countries, experience in teaching students with disabilities was the strongest predictor of self-efficacy, while the predictive power of other variables differed from country to country. Our findings illustrate ways to improve teacher education to respond better to the challenges set by the global inclusive education movement.

McDonald, Morva, Bowman, Michael, & Brayko, Kate. (2013). Learning to See Students: Opportunities to Develop Relational Practices of Teaching through Community-Based Placements in Teacher Education. *Teachers College Record, 115(4).*

Background: For decades, scholars have argued that teaching and learning depend fundamentally on the quality of relationships between teachers and students, yet there is little research about how teachers develop relationships with students or how teacher education prepares teachers to do this work. Arguably, articulating the relational practices of teaching is critical for those aiming to prepare teachers to reach across differences, educate from a social justice perspective, and teach an increasingly diverse population of students. Noting the emphasis on relationships in community-based organizations (CBOs), the authors investigated preservice field placements in CBOs as potentially strategic contexts for learning about relational aspects of teaching.

Objective: The authors engaged the questions: What do candidates learn in CBO field placements? What are sources of variation between candidates' learning outcomes? What are individual and contextual factors that shaped candidates' opportunities to learn in CBOs? Specifically, which factors influenced candidates' inclination and capacity to enact relational teaching practices (e.g., the methods and skills associated with learning about and connecting with students, families, and communities)?

Research Design: This study was a 3-year longitudinal investigation. Authors followed two cohorts of candidates from their first quarter of preparation into their first year of teaching. Qualitative methods, such as interviews, observations, and document review were employed in this inquiry of 12 case study candidates. To examine questions of variation, authors also conducted an in-depth comparative case analysis of a subset of two candidates and their CBO placement contexts.

Findings: CBO placements facilitated opportunities for candidates to "see students": candidates developed deeper understandings about children and more nuanced conceptions of diversity; experienced and examined school from an out-of-school perspective; and demonstrated greater attentiveness to the role of context in learning. The more detailed comparative analysis of two cases revealed variation in candidates' experiences and their enactment of practices involved in building relationships with children and families. This analysis identified individual and situational factors (in coursework and CBOs) that facilitated and impeded candidate learning in CBOs.

Conclusions: Findings from this study highlight the types of learning outcomes that preservice community-based placements potentially afford, as well as factors that make some placements more educative than others. The authors offer a theoretical lens that attends to variation in learning, which could be leveraged in future empirical work. This research contributes to the

field's developing efforts to identify key social justice teaching practices and to conceptualize pedagogies of enactment for such practices.

Polikoff, Morgan S. (2013). Teacher Education, Experience, and the Practice of Aligned Instruction. *Journal of Teacher Education, 64(3), 212-225.*

Research over the past two decades has shown the alignment of teachers' instruction with state standards is generally weak. Proposing that alignment is a useful measure of teachers' curricular knowledge (Shulman, 1986), this study uses a large database of teacher reports of their content coverage to understand the relationship of teacher educational and career experience variables with instructional alignment. The results of the fixed effects models indicate significant, positive associations, though they are generally modest in magnitude. Implications for research and policy are discussed.

Seban, Demet. (2013). The impact of the type of projects on preservice teachers' conceptualization of service learning. *Teaching and Teacher Education, 32(0), 87-97.*

This paper discusses the effects of the type of project undertaken for a community practice course on preservice teachers' conceptualization of service learning. The goal of the projects is to enable participants to engage with service practice in a reflective manner. Through the examination of the reflective logs kept by students using Butin's framework and by comparing the themes that emerged, it was found that differences in the experiences of students, which reflected the project content and the characteristics of the children being served, created different learning outcomes for each group of students.

Shapira-Lishchinsky, Orly. (2013). Team-based simulations: Learning ethical conduct in teacher trainee programs. *Teaching and Teacher Education, 33(0), 1-12.*

This study aimed to identify the learning aspects of team-based simulations (TBS) through the analysis of ethical incidents experienced by 50 teacher trainees. A four-dimensional model emerged: learning to make decisions in a "supportive-forgiving" environment; learning to develop standards of care; learning to reduce misconduct; and learning to develop an integrative approach. Most of the simulations differed from the original incidents. The reason for these discrepancies may be due to the fact that trainees' decision making depends greatly on the context and people involved. Findings suggest that teacher training programs should incorporate TBS as an integral part of their curriculum.

Trent, John. (2013). Becoming a Teacher Educator: The Multiple Boundary-Crossing Experiences of Beginning Teacher Educators. *Journal of Teacher Education, 64(3), 262-275.*

This article reports on a qualitative study that investigated the identity construction experiences of one group of beginning English language teacher educators in Hong Kong. Drawing upon a theoretical framework that incorporates both identity- in-practice and identity-in-discourse, and using in-depth interviews, a narrative approach was adopted to examine participants' identity trajectory as they crossed multiple boundaries from language learners, to language teachers, to language teacher educators. The study suggests that the challenges teacher educators faced at different stages of their professional identity construction reflected the negotiation of past experiences, future ideals, competency, agency, and marginalization. Implications for schoolteachers, teacher educators, and educational authorities, as well as for both future applied research and for understandings of identity, are discussed.

Wang, Dan, & Gao, Manman. (2013). Educational equality or social mobility: The value conflict between preservice teachers and the Free Teacher Education Program in China. *Teaching and Teacher Education, 32(0), 66-74.*

In 2007, the Chinese government piloted the Free Teacher Education (FTE) program in the top normal universities with the aim to enlist high-quality young graduates to join the teaching profession and to improve education in underdeveloped rural regions. However, a conflict has arisen as FTE students enrolled in the program are reluctant to work in rural schools. Drawing on in-depth interviews with 19 FTE students, this study argues that the curriculum of the FTE

program needs to be reformed to combat the social mobility discourse and to include social equity and justice as essential components.

Wiens, Peter D., Hessberg, Kevin, LoCasale-Crouch, Jennifer, & DeCoster, Jamie. (2013). Using a standardized video-based assessment in a university teacher education program to examine preservice teachers knowledge related to effective teaching. *Teaching and Teacher Education, 33*(0), 24-33.

The Video Assessment of Interactions and Learning (VAIL), a video-based assessment of teacher understanding of effective teaching strategies and behaviors, was administered to preservice teachers. Descriptive and regression analyzes were conducted to examine trends among participants and identify predictors at the individual level and program level. Results from this study demonstrate that a standardized assessment used previously with in-service teachers can be implemented in a teacher education program. Analysis shows variability in preservice abilities to detect effective teaching strategies and behaviors that is partially explained by teacher education program factors.

Youngs, Peter, & Qian, Hong. (2013). The Influence of University Courses and Field Experiences on Chinese Elementary Candidates' Mathematical Knowledge for Teaching. *Journal of Teacher Education, 64*(3), 244-261.

In this article, we draw on survey data to investigate associations between Chinese elementary teaching candidates' mathematical knowledge for teaching (MKT) and their experiences in mathematics courses, mathematics methods courses, and student teaching. In our study, we found that (a) Chinese teaching candidates' completion of courses in number theory and mathematical reasoning, (b) their exposure to certain topics and learning experiences in mathematics methods courses and general pedagogy courses, and (c) the extent to which candidates had full instructional responsibility during student teaching were associated with significantly higher levels of MKT in number and operations (N&O). At the same time, our analyses also revealed that candidates' MKT was not affected by the overall number of university-level mathematics courses that they had completed or the overall length of their student teaching (including weeks when they did not have full responsibility for instruction).

Summary:

Lampert, Magdalene, Franke, Megan Loef, Kazemi, Elham, Ghouseini, Hala, Turrou, Angela Chan, Beasley, Heather, Crowe, Kathleen. (2013). Keeping It Complex: Using Rehearsals to Support Novice Teacher Learning of Ambitious Teaching. *Journal of Teacher Education*, 64(3), 226-243.

Abstract:

We analyze a particular pedagogy for learning to interact productively with students and subject matter, which we call “rehearsal.” Our goal is to specify a way in which teacher educators (TEs) and novice teachers (NTs) can interact around teaching that is both embedded in practice and amenable to analysis. We address two main research questions: (a) What do TEs and NTs do together during the kind of rehearsals we have developed to prepare novices for the complex, interactive work of teaching? and (b) Where, in what they do, are there opportunities for NTs to learn to enact the principles, practices, and knowledge entailed in ambitious teaching? We detail what happens in rehearsals using quantitative and qualitative methods. We begin with the results of our quantitative analyses to characterize how typical rehearsals were structured and what was worked on. We then show how NTs and TEs worked together to enable novices to study principled practice through qualitative analyses of a particularly salient aspect of ambitious teaching, namely, eliciting and responding to students’ performance.

Summary prepared by S. Goldin

Lampert et al. study their efforts to prepare beginning teachers to “do teaching that is more socially and intellectually ambitious than the current norm” even among experienced teachers (p. 240). The authors detail their work on rehearsals with novice teachers (NTs) structured around instructional activities (IAs), which they define as “containers for learning the principles, practices, and knowledge of content that underlie ambitious elementary mathematics teaching, broadly conceived” (240). They work with NTs in university methods classes in the field of elementary mathematics. They ground this work “centrally in clinical practice” (238).

The authors’ design of “rehearsals” is purposefully socially situated: “the motivation to do things differently,” the authors argue, “is as important as knowledge and skill to creating consistently ambitious practice, and that motivation depends on the social circumstances in which one learns and develops an identity as a particular kind of practitioner” (227). The rehearsals they design and study are fundamentally *public* and *deliberative*, aimed at guiding NTs in “practicing how to teach rigorous content to particular students using particular instructional activities (IAs)” (227).

Because these simulations blend what commonly occurs in teacher education coursework and in school-based or clinical placements, the authors argue that they can be considered clinical “because novices engage in doing the work of teaching; it is followed by doing and debriefing teaching in actual classrooms, and the TE draws on what she knows of those classrooms to pose problems to the novice” (238).

Lampert et al. focused on two key research questions:

1. “What do TEs (teacher educators) and NTs do together during the kind of rehearsals we have developed to prepare novices for the complex, interactive work of teaching?”
2. Where, in what they do, are these opportunities for NTs to learn to enact the principles, practices, and knowledge entailed in ambitious teaching?”

The authors analyzed 90 rehearsal videos from three programs for TE. The authors’ qualitative and quantitative analysis investigates the “actions and interactions that occurred between TEs and NTs around both routine practices and the judgments novices were learning to make” (227).

The design and analysis are informed by set of teaching practices, a set of principles “to guide teachers’ judgment in the use of those practices” and the mathematical content knowledge that the authors assert are needed to teach elementary mathematics (227). Further, the authors’ view of teacher learning rests on the “assumption that mathematics teachers need to learn to elicit, observe, and interpret student reasoning, language, and arguments and to adjust their instruction accordingly to promote learning” (227). Another fundamental assumption of the design and analysis has to do with students and their learning, as the authors argue that ambitious teachers consider students sense-makers.

The authors view instruction as relational work – that is, they write that teaching practices, content knowledge, and judgment in teaching must be used in “relationships among teacher, students, and the content to be learned” (228). As such, they sought to “design all these relationships into teacher preparation” (228) to support NTs’ learning of both the routine and adaptive teaching practice.

Results

The authors studied 90 rehearsals occurring across three programs for teacher education, focusing on different IAs. The authors found the following shared characteristics across the rehearsals they studied: they ranged from “12-15 minutes, with an average of 14 TE/NT exchanges per rehearsal” with “roughly equal amounts of time... spent in NTs teaching the IA (56%) as in TE/NT exchanges (47%)” (233). Lampert et al. interpret these finding as showing the highly interactive nature of rehearsals. The authors also reported what percentage of time was spent on different types of TE/NT exchanges:

- 60.85% - directive feedback
- 28% - evaluative feedback
- 21% - scaffolded enactment
- 17% - facilitated discussion

Table 2, reproduced below, illustrates the frequency of “substance codes” – what the TE and NT worked on together in the rehearsal. Of particular note is that TEs worked on “eliciting and responding” to students most often of any teacher practice, and also that this was worked on uniformly across cohorts, programs, and IAs. Also of note, the authors found more than 350 different code combinations highlighting that the substance of the rehearsals occurred in “relation to the NT rehearsing and in-the-moment situations that arose” (234). This is important, the authors argue, because this highlights how NTs and TEs worked together on the relational, interactive, and contingent work of ambitious teaching. In particular, the authors wrote that TEs and NTs work on attended to “eliciting and responding moves that (a) were continent on the way mathematical ideas are being engaged by learners in a particular situation, or (b) addressed multiple instructional demands simultaneously” (236).

Table 2. Frequency of Substance Codes, per TE/NT Exchange, and per Rehearsal.

Substantive focus	% of all TE/NT exchanges (n = 1,290) ^a	% of all rehearsals (n = 90)
Elicit and respond	35.74	95.56
Representation	23.64	77.78
Student engagement	21.55	85.56
Attending to IA	17.29	75.56
Content goals	14.03	57.78
Student thinking	13.95	71.11
Mathematics	11.94	71.11
Student error	8.60	30.00
Orienting students	7.05	47.78
Process goals	6.67	50.00
Launching the IA	6.20	37.78
Assessing understanding	5.12	43.33
Manage timing	4.34	37.78
Manage space	3.41	24.44
Body/voice use	2.95	24.44
Closing the IA	1.71	17.78

Note: TE/NT = teacher educator/novice teacher; IA = instructional activity.

^aRecall that multiple substance codes could be applied to the same TE/NT to reflect the multifaceted nature of ambitious teaching; hence, this column does not sum to 100%.

*** *Table taken from Lampert et al (233).*

Conclusions and questions

It is possible, the authors argue, to redesign university methods courses to support the development of NTs' abilities to do an "uncommon kind of teaching," to allow new teachers to "work on the nuances of interactional-related elements in practice" (240). Lampert et al. found that novices were able to work on both routine elements of practice as well as adaptive and accomplished teaching practice – rehearsals are "designed pedagogies to support the development of NTs' knowledge, skill, and commitment (239).

The authors identify a number of questions implied by this study, including:

- Do NTs carry the practices, principles, and knowledge they learn through rehearsals into their classrooms? And, if so, how?
- What impact does the school context in which NTs eventually teach have on their ability to maintain and implement the ambitious teaching practices they learn?
- This work was done in classes within TE programs. Can this approach to teacher education (TE) – grounded in clinical practice, with academic and professional courses interwoven – be implemented across entire programs?