**Information for the September 22, 2017 TeachingWorks Journal Club Meeting**

We will discuss the following two articles in this meeting:

**1. McLean, L., Abry, T., Taylor, M., Jimenez, M., and K. Granger (2017). Teachers' mental health and perceptions of school climate across the transition from training to teaching. Teaching and Teacher Education, 65: 230-240.**

**2. Lindqvist, H., Weurlander, M., Wernerson, A., and R. Thornberg (2017). Resolving feelings of professional inadequacy: Student teachers' coping with distressful situations. Teaching and Teacher Education, 64: 270-279.**

In addition, bibliographic information is below for other relevant articles published in the following journals between February 15, 2016 and August 15, 2017.[1]

*Action in Teacher Education*
*American Educational Research Journal*
*Educational Evaluation and Policy Analysis*
*Elementary School Journal*
*Equity and Excellence in Education*
*Journal of Education for Teaching: International Research and Pedagogy*
*Journal of Teacher Education*
*New Educator*
*Teachers College Record*
*Teaching and Teacher Education*
*Urban Review*

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Acosta, M.M., Hudson-Vassel, C., Johnson, B., Cherfrere, G., Harris, M.G., Wallace, J., and S. Duggins (2017). Beyond awareness: Black studies for consciousness and praxis in teacher education. *Equity & Excellence in Education*, 50(2): 241-253.

> Critical Studyin' is a Black Studies-inspired, morally engaged pedagogy. With roots in anti-racist teaching, it is focused on race, ideology, and education. This study explores the learning experiences and outcomes of seven, preservice educators after taking a course that was based on Critical Studyin' and offered in a College of Education at one university in the Southeastern region of the United States. Researchers employed constructivist grounded theory techniques to the analysis of semi-structured interviews and course documents. Findings highlight the development of students' critical consciousness and agency as they engaged in critical interrogation of the complex relationships among race, culture, and classroom teaching. This study highlights the potential of Black Studies as a pedagogy teacher educators can enact to orchestrate disruptive learning experiences and environments necessary for anti-racist teaching.

[1] For the September 22, 2017, TeachingWorks journal club we considered the following journals: *Action in Teacher Education (**39**(1)); American Educational Research Journal (February 2017, **54**(1); April 2017, **54**(2); June 2017, **54**(3); August 2017, **54**(4)); Educational Evaluation and Policy Analysis (June 2017, **39**(2); September 2017, **39**(3)); Elementary School Journal (no new issues since previous meeting: March 2017, **117**(3); June 2017, **117**(4)); Equity and Excellence in Education (2017, **50**(1); 2017, **50**(2)); Journal of Education for Teaching: International Research and Pedagogy (2017, **43**(3)); Journal of Teacher Education (March/April 2017, **68**(1); May/June 2017, **68**(2)); New Educator (2017, **13**(2)); Teachers College Record (**119**(2); **119**(3); **119**(4); **119**(5); **119**(6); **119**(7); **119**(8)); Teaching and Teacher Education (May 2017, **64**; July 2017, **65**; August 2017, **66**); Urban Review (June 2017, **49**(2)).*

It adds further support for culture-centered approaches in educator preparation that scaffolds preservice educators in their development of justice-oriented perspectives and practices in education.

Arias, A.M. and E.A. Davis (2017). Supporting children to construct evidence-based claims in science: Individual learning trajectories in a practice-based program. *Teaching and Teacher Education*, *66*: 204-218.

New reforms envision ambitious teaching, requiring knowledge and abilities beginning teachers may not have. To support learning to teach, a practice-based approach has been suggested. This study examines four preservice teachers' learning pathways for one science teaching practice, supporting students to construct evidence-based claims, during a two-year practice-based teacher education program. Analyses uncovered variation and similarities across and within the teachers' pathways. For example, one teacher provided inconsistent support for elementary students to analyze data, whereas another developed sophisticated support. The findings suggest that elements of the program, such as coherence, facilitated the learning, having implications for teacher educators.

Bartholomaeus, C., Riggs, D.W., and Y. Andrew (2017). The capacity of South Australian primary school teachers and pre-service teachers to work with trans and gender diverse students. *Teaching and Teacher Education*, *65*: 127-135.

Growing numbers of young people are disclosing that they are trans or gender diverse, requiring affirming and informed responses from schools. This article reports on a survey examining attitudes towards inclusion, comfort, and confidence amongst 180 South Australian primary school teachers and pre-service teachers. The findings suggest that women held more positive attitudes and had greater comfort in working with trans and gender diverse students than men, and that awareness of programs designed to increase understanding was related to more positive attitudes, and greater comfort and confidence. The article discusses the need for further training alongside additional resourcing of initiatives aimed at facilitating inclusion.

Bastian, K.C. and J.T. Marks (2017). Connecting teacher preparation to teacher induction. *American Educational Research Journal*, *54*(2): 360-394.

Given concerns with the performance and attrition of novice teachers, North Carolina allocated $7.7 million from Race to the Top to create the New Teacher Support Program (NTSP), an induction model developed and implemented by the state's public university system and targeted at low-performing schools. In this study, we assess the associations between participation in the university-based program and the performance and retention of novice teachers. Overall, NTSP teachers were more likely to return to the same school. Outcomes varied by NTSP region, cohort, and dosage, with positive performance and retention results for teachers in the region and cohort with the most intensive participation and teachers receiving more coaching. These findings contribute to efforts to develop and retain teachers.

Brouwer, N., Besselink, E., and I. Oosterheert (2017). The power of video feedback with structured viewing guides. *Teaching and Teacher Education*, *66*: 60-73.

Three similarly designed interventions were evaluated in which preservice and in-service primary school teachers received video feedback using structured viewing guides in order to improve the instructional quality of reading and writing lessons. Self-assessments and observations show that after intervention, the teachers in experimental groups, who received structured video feedback, practiced significantly more of the teaching behaviours targeted than the teachers in control groups. The findings indicate that focussing video feedback on domain-specific effective teaching behaviours can be a powerful contribution towards raising teachers' quality of instruction.

Bryan, N. (2017). White teachers' role in sustaining the school-to-prison pipeline: Recommendations for teacher education. *The Urban Review*, *49*(2): 326-345.

> Educational scholarship has called attention to the disproportionate ways Black males are disciplined in schools, which has become the catalyst to their entry into the school-to-prison pipeline through which they are funneled from K-12 classrooms into the criminal justice system. Since the majority of teachers are White, it may be insightful to examine the role that they play in the process and how teachers also influence White children's perceptions of Black boys. Drawing from Lortie's (1975/2002) notion of the apprenticeship of observation in teaching, I contend that White children learn how to dehumanize Black male students, particularly as they observe how their White teachers disproportionately target them for minor and subjective school disciplinary infractions. Recommendations are provided for teacher education to prepare teachers to dismantle disproportionate and unfair ways that Black boys are disciplined.

Burns, L.D. and s.j. Miller (2017). Social justice policymaking in teacher education from conception to application: Realizing standard VI. *Teachers College Record*, *119*(2).

> **Background/Context:** This article describes the fundamental role of social justice in public education and professional teacher education.
> **Purpose:** The purpose of this policy analysis is to explicate the theorizing, conceptualization, formalization, and implementation of the first standard for social justice teaching and teacher education in U.S. history, published by the National Council of Teachers of English and approved by the National Council for the Accreditation of Teacher Education in November 2012.
> **Design:** Using a policy narrative approach, the authors explicate the grassroots political processes, professional political action and advocacy, and policy procedures and scholarship undertaken to construct a successfully vetted, approved, and fully implemented national policy in one subject-area professional association (SPA). The authors demonstrate how other SPAs and affiliated groups may pursue similar policies for socially just teaching and teacher education across disciplines, fields, and contexts across education.
> **Conclusions:** Using research to theorize responsive teaching pedagogies and using findings from social psychology research to generate a socially just orientation to teaching in public schools, the authors highlight the ways in which social justice teaching is not simply a possible orientation for professional educators to consider but a fundamental tenet and primary consideration of public education overall. The authors conclude that SPAs and public education professionals not only may but must engage in social justice policymaking for educational equity in order to succeed in attaining education reforms that truly serve the public good.

Chandler-Olcott, K. and S. Fleming (2017). Multiple perspectives on the state-mandated implementation of a high-stakes performance assessment for preservice English teacher candidates. *Action in Teacher Education*, *39*(1): 22-38.

> Drawing on situated learning and communities of practice, this teacher-research study examined multiple stakeholders' perspectives about the purpose, design, and inaugural implementation of the edTPA, a teacher performance assessment mandated for state certification. Participants included teacher candidates, mentor teachers, a field placement supervisor, and a teacher educator involved with one English education program. Data included edTPA-related documents, artifacts from a student-teaching seminar, and interviews. Findings indicated differences in perspective. Mentors had the most negative views and the least information about the assessment, as well as the most skepticism about its positioning within the state's reform agenda. Candidates and the field supervisor identified benefits and concerns about the impact on student teaching. The teacher educator expressed anger and fear related to the new mandate but, over time, identified some aspects of the assessment aligning with past practice. Implications for research and practice are suggested.

Choppin, J. and K. Meuwissen (2017). Threats to validity in the edTPA video component. *Action in Teacher Education*, *39*(1): 39-53.

> The edTPA, a performance assessment designed to generate reliable and valid measures of teaching practice, increasingly is used as a gatekeeping mechanism for beginning teacher licensure in various states, including New York, Washington State, Wisconsin, and Georgia. One of the edTPA's key components is the demonstration of instructional practice by video recording. This article explores threats to validity associated with using video segments as part of the edTPA. Based on interviews with 24 teaching candidates from New York and Washington State, results show that candidates had difficulty fully addressing the competencies assessed by the edTPA, thoroughly representing their teaching practices, and learning from the process of analyzing their videos, affecting content validity, ecological validity, and consequential validity, respectively. One implication is that the utility of the video records may be limited to corroborating and triangulating claims made in the written commentaries, rather than serving as authoritative approximations of teaching practice.

Curran, F.C. (2017). Teach for America placement and teacher vacancies: Evidence from the Mississippi Delta. *Teachers College Record*, *119*(2).

> **Background/Context:** TFA represents an influential yet controversial preparation route for new teachers. In recent years, TFA has received criticism from traditionally trained teachers and schools of education on the basis that they are crowding out or taking positions away from non-TFA teachers. Despite this criticism, research on TFA has tended to focus on its impact on student outcomes rather than on its implications for teacher labor markets.
> **Research Questions:** This study explores the relationship between TFA placement in school districts in the Mississippi Delta and district advertised vacancies to provide the first evidence on the impact of TFA on teacher labor market outcomes. The questions addressed include the following: What is the relationship between TFA presence in a Mississippi school district and the number of district vacancies advertised through the state board of education? Do these relationships vary by characteristics of the vacancy such as grade level or subject area?
> **Setting:** This study uses data on school districts in the state of Mississippi for an 11-year period from 2001 through 2011.
> **Research Design:** This study utilizes two primary analytic strategies. The first encompasses school district and year fixed effects with a series of time-varying control variables to identify the impact of TFA placement off changes in the use of TFA by districts over time. The second approach capitalizes on an abrupt increase in the presence of TFA in Mississippi starting in 2009 by using a difference-in-differences design. A series of robustness and sensitivity checks are also included.
> **Findings/Results:** The results indicate that the presence of TFA in a district predicts approximately 11 fewer advertised vacancies per year per district and that each additional TFA teacher placed in a district predicts approximately one less advertised vacancy.
> **Conclusions/Recommendations:** The results indicate that in the Mississippi Delta, TFA appears to be filling teacher vacancies. This suggests that the continued use of TFA by districts may be a viable solution to addressing teacher shortages.

Curran, J.E. and C-l. Chern (2017). Pre-service English teachers' attitudes towards English as a lingua franca. *Teaching and Teacher Education*, *66*: 137-146.

> This study investigated the attitudes pre-service English teachers—English majors, students minoring in English, graduate students, and interns—have towards English as a lingua franca. Results showed differences concerning the native speaker of English as a role model and the importance of exposure to a variety of Englishes. Interns and English majors expressed higher expectations for attaining native-like proficiency; English minors showed less reliance on a native-speaker model. To help future educators develop greater awareness of the role of English in

today's world, teacher preparation programs in settings where English is a foreign language should reflect a global Englishes perspective.

Feez, S. and F. Quinn (2017). Teaching the distinctive language of science: An integrated and scaffolded approach for pre-service teachers. *Teaching and Teacher Education*, *65*: 192-204.

> To learn science and demonstrate science learning, school students must bridge the gap between everyday use of language and image and the specialised use of language and image needed to achieve science curriculum outcomes. Pre-service teachers studying at a regional Australian university were shown how to help their future students bridge this gap. A transdisciplinary model was used to demonstrate the teaching of specialised science literacies integrated with the teaching of science in the middle school years, resulting in high levels of engagement, more effective use of learning time, and valuable opportunities for teacher educator professional learning.

Gabriel, R. (2017). Rubrics and reflection: A discursive analysis of observation debrief conversations between novice Teach for America teachers and mentors. *Action in Teacher Education*, *39*(1): 85-102.

> Drawing upon discursive psychology as a theoretical and methodological framework, the author analyzes a set of five postobservation debrief conversations between novice teachers and their mentors. The author presents analysis and findings by highlighting how the interpretative repertoires of the rubric and protocol documents may be used to shape and limit what counts as reflective practice. Next, the author highlights contrasts in the ways in which participants oriented to reflection protocol documents either as authoritative or irrelevant. Finally, the author consider the implications of these orientations in terms of varied versions of reflection on practice.

Gelfuso, A. (2017). Facilitating the development of preservice teachers' Pedagogical Content Knowledge of literacy and agentic identities: Examining a teacher Educator's intentional language choices during video-mediated reflection. *Teaching and Teacher Education*, *66*: 33-46.

> This study examined a possible way of facilitating the development of PSTs PCK and agentic identities through video-mediated, guided reflection on literacy field experiences. Particularly, this study examined the intentional language use of a teacher educator as she engaged in dyadic reflection conversations with 26 PSTs. The questions guiding this study were (1) What discursive practices open spaces for PSTs to rehearse/develop both PCK and agentive identities? (2) What particular phrases does a teacher educator use to open such spaces? Positive Discourse Analyses revealed three distinct dialogic patterns that opened spaces for the PSTs to rehearse/develop both PCK and agentive identities.

Gelfuso, A. and D.V. Dennis (2017). Reproducing figured worlds of literacy teaching and learning: Examining the "language-in-use" of an inservice and preservice teacher enacting the practice of literacy planning. *Action in Teacher Education*, *39*(1): 67-84.

> There are international calls for teacher preparation programs to increase the quantity and quality of field experiences. The belief is that spending additional time in the field being mentored by inservice teachers will develop high-quality preservice teachers. However, the figured worlds of teacher education and the knowledge base of inservice teachers are largely left unexamined. This study took place within an urban Professional Development School and used critical discourse analysis to examine the "language-in-use" between one inservice teacher and one preservice teacher as they engaged in the planning of a literacy lesson. The authors identified the figured worlds of teacher, literacy teaching and learning, and mentoring, as interpreted from this discourse event. Findings include figured worlds of (1) teacher as the giver and withholder of knowledge; (2) literacy teaching and learning that appears inauthentic, contrived, and teacher centered; and (3) an understanding of mentoring as inservice teacher as giver of knowledge and preservice teacher as receiver. Implications for teacher education and teacher educators are discussed.

Goldhaber, D., Krieg, J.M., and R. Theobald (2017). Does the match matter? Exploring whether student teaching experiences affect teacher effectiveness. *American Educational Research Journal*, *54*(2): 325-359.

> We use data from six Washington State teacher education programs to investigate the relationship between teacher candidates' student teaching experiences and their later teaching effectiveness. Our primary finding is that teachers are more effective when the student demographics of their current school are similar to the student demographics of the school in which they did their student teaching. While descriptive, this suggests that the school context in which student teaching occurs has important implications for the later outcomes of teachers and their students and that teacher education programs and school districts should consider placing student teachers in schools that are similar to the schools in which they are likely to teach once they enter the workforce.

Guise, M., Habib, M., Thiessen, K., and A. Robbins (2017). Continuum of co-teaching implementation: Moving from traditional student teaching to co-teaching. *Teaching and Teacher Education*, *66*: 370-382.

> This mixed methods study examines the implementation of co-teaching as a model for the teacher education field experience. Participants included eight co-teaching pairs with the goal of determining the extent to which co-teaching occurred, conditions for success, and barriers to implementation. The authors posit that a continuum exists relative to co-teaching implementation with the cooperating teacher's view of his/her role and the purpose of the field experience contributing to where each pair fell on this continuum. This study provides insight into the conditions necessary for coteaching as well as factors that inhibited pairs from moving beyond traditional student teaching.

Haines, S.J., Kervick, C.T., Shepherd, K.G., and M.J. Levitt (2017). Enhancing quality: Listening to participant voices to improve our Master's program in special education. *Teaching and Teacher Education*, *66*: 24-32.

> Newly inducted special education teachers must be well-prepared to address changes in today's schools, including increased student diversity, implementation of tiered systems of support, and the need for increased collaboration with general education teachers and specialists. The purpose of this qualitative study was to develop and implement a data-based continual improvement approach to identify the strengths of our special education Master's program and address changes needed to ensure that graduates are ready to engage with the demands of their chosen profession. Using data gathered from 24 recent graduates and 20 field mentors, we describe our model and what we have done with our results over two years. An important finding is that our students greatly value the relationships they form during the program and the relationships the faculty model, and participants attribute our graduates' skills in collaboration to our program's modeling of collaborative processes and positive relationships. Implications for effective approaches to continuous improvement of special education teacher preparation programs are discussed.

Hepple, E., Alford, J., Henderson, D., Tangen, D., Hurwood, M., Alwi, A., Hassan Shaari, Z.A., and A. Alwi (2017). Developing intercultural learning in Australian pre-service teachers through participating in a short term mobility program in Malaysia. *Teaching and Teacher Education*, *66*: 273-281.

> This study investigates the intercultural learning of 10 Australian pre-service teachers participating in a short term mobility program in Malaysia. Drawing on Nussbaum's Capabilities Approach, intercultural learning is conceptualised as developing three capabilities: critical cultural self-examination; affiliation with and towards others; and building narrative imagination. Our findings confirmed that participation in this structured mobility experience promoted critical professional self-awareness regarding cultural diversity; built trust and intercultural understanding through intensive interaction with Malaysian peers; and developed participants as more culturally

responsive teachers. We recommend that a structured short term mobility experience be embedded within teacher education programs.

Hiebert, J., Miller, E., and D. Berk (2017). Relationships between mathematics teacher preparation and graduates' analyses of classroom teaching. *The Elementary School Journal*, *117*(4): 687-707.
> The purpose of this longitudinal study was to investigate the relationships between mathematics teacher preparation and graduates' analyses of classroom teaching. Fifty-three graduates from an elementary teacher preparation program completed 4 video-based, analysis-of-teaching tasks in the semester before graduation and then in each of the 3 summers following graduation. Participants performed significantly better on the 3 tasks focused on mathematics topics studied in the program than on the task focused on a mathematics topic not studied in the program. After checking several alternative hypotheses, we conclude that a likely explanation for the performance differences is the mathematical knowledge for teaching that participants developed as freshmen in the preparation program.

Johnson, D.W. and R.T. Johnson (2017). The use of cooperative procedures in teacher education and professional development. *Journal of Education for Teaching*, *43*(3): 284-295.
> Two aspects of teacher education for cooperative learning are the content taught and the processes used to teach the content. Of the two, the processes used may have the most powerful influences on the desired outcomes. One important theory related to the processes of learning is social interdependence theory. It posits that there are three ways to structure the learning processes in educational situations: cooperatively, competitively and individualistically. To structure cooperation among participants, five basic elements are needed: positive interdependence, individual accountability, promotive interaction, social skills and group processing. The large body of research on social interdependence indicates that cooperative, compared to competitive and individualistic learning, tends to promote (a) higher levels of achievement, retention and transfer of what is taught; (b) long-term implementation; (c) the internalisation of the required attitudes values and behaviour patterns; (d) the integration of the new procedures into teachers' professional identity; and (e) membership in the community of practice. Each of these processes will be examined in this article.

Jolliffe, W. and J. Snaith (2017). Developing cooperative learning in initial teacher education: Indicators for implementation. *Journal of Education for Teaching*, *43*(3): 307-315.
> This paper examines the impact of supporting pre-service teachers to use cooperative learning in one initial teacher education institution in England. In a context where the government requires all teacher education to be "school-led" and where school partners do not commonly use cooperative learning (Baines, Rubie-Davies, and Blatchford 2009), this presents challenges. Ensuring that government priority areas are fully addressed also squeezes the time available for pre-service teachers to develop the necessary depth of understanding of cooperative learning. Yet driven by a research-led programme that supports students to examine effective learning and teaching approaches, one university has endeavoured over the last five years to help all its student-teachers understand and adopt cooperative learning. In order to capture the impact, questionnaires and interviews with student-teachers have been utilised each year; results are summarised here together with research carried out by one of the students on the views of her cohort. Two short vignettes of former students in their early years of teaching signal the importance of formative experiences on teachers' positive self-efficacy, and particularly the lasting impact of observing effective practice early in the journey to become a teacher.

Kalchman, M. and R.H. Kozoll (2017). Developing distinct mathematical and scientific pedagogical content knowledge in an early childhood dual-content methods course: An alternative to integration. *Action in Teacher Education*, *39*(1): 10-21.

Methods for teaching early childhood mathematics and science are often addressed in a single, dual-content course. Approaches to teaching this type of course include integrating the content and the pedagogy of both subjects, or keeping the subject areas distinct. In this article, the authors discuss and illustrate their approach to such a combined course. They emphasize the development of preservice teachers' distinct pedagogical content knowledge in mathematics and in science rather than an integration of the two. The authors do this by concentrating their course development on a central unifying theme or idea within each content-area. Through course readings, media, in-class activities and discussions, and fieldwork, the authors highlight the similarities and differences between early childhood mathematics and science methods, thus offering preservice teachers a conceptual infrastructure that empowers them to make informed choices about their own mathematics and science programs.

Kim, E. and R.P. Corcoran (2017). How engaged are pre-service teachers in the United States? *Teaching and Teacher Education*, *66*: 12-23.
> Using the National Survey of Student Engagement (NSSE), findings are reported from the largest ever longitudinal study of engagement among pre-service teachers. Levels of engagement are investigated in 2013 (N = 1609) and 2016 (N = 1413) across 256 U.S. institutions. Using multilevel models, findings indicated that female, white pre-service teachers were less engaged than their male, minority counterparts with small to moderate effect sizes that differed by year. Institutional type, sector, and size were also significantly associated with pre-service teacher engagement. ACT prior achievement scores, however, were not associated with pre-service teacher engagement in either year. Implications for teacher preparation are discussed.

Liaw, E-C. (2017). Application of computer-mediated communication on teacher efficacy during school-based field experience. *Teaching and Teacher Education*, *65*: 81-90.
> Students in teacher training programs are familiar with the use of e-mail, blogs, and instant messaging. However, few studies have investigated the use of technology in field-related experience in teacher training program. We investigated whether asynchronous computer-mediated communication (ACMC) influences teacher efficacy during a practicum. The results indicated that such device was not as effective in enhancing teacher efficacy as many studies had hypothesized. This study revealed the importance of mentors and experienced teachers when adopting ACMC devices and suggested caution and evaluation regarding aspects such as learners' experience and the purpose of using the device as a learning tool.

Lindqvist, H., Weurlander, M., Wernerson, A., and R. Thornberg (2017). Resolving feelings of professional inadequacy: Student teachers' coping with distressful situations. *Teaching and Teacher Education*, *64*: 270-279.
> Student teachers face various difficult situations during their teacher education. The aim of this study was to examine how student teachers perceive coping with distressful situations during their teacher training. Focus groups and individual interviews were conducted. The results show that student teachers feel professionally inadequate, characterized by powerlessness, limited means of action and uncertainty. In resolving professional inadequacy, they use concepts connected to the social process of becoming teachers: modifying professional ideals, dependence on future colleagues and continuing to build experience. These concepts lead to acceptance and postponing strategies for learning from distressful situations.

Lovett, J.N. and H.S. Lee (2017). New standards require teaching more statistics. *Journal of Teacher Education*, *68*(3): 299-311.
> Mathematics teacher education programs often need to respond to changing expectations and standards for K-12 curriculum and accreditation. New standards for high school mathematics in the United States include a strong emphasis in statistics. This article reports results from a mixed methods cross-institutional study examining the preparedness of preservice secondary

mathematics teachers to teach statistics and identifying factors and experiences that influence their preparedness. Our results suggest that the cohort of teachers entering secondary mathematics classrooms in 2015-2016 were not well prepared to teach statistics. Specific suggestions are given for how teacher education programs must rise to the challenge of preparing their graduates to teach statistics.

Lynch, H.L. and T.R. Fisher-Ari (2017). Metaphor as pedagogy in teacher education. *Teaching and Teacher Education*, *66*: 195-203.

> Two teacher educators used metaphors to create spaces for students to express their shifting understandings of curriculum over time. This paper centers upon their reflection and analysis of affordances and limitations of metaphor as a pedagogical strategy for supporting students. Instructors noted a) critical shifts in students' dispositions and understanding over time, b) meaningful insights into students' needs for addition support, c) how powerfully relationships were nurtured with students, d) and the quilted nature of the metaphors created, both across students and over time. Limitations are noted, as well as directions for future research.

Martínez-Álvarez, P., Cuevas, I., and M. Torres-Guzmán (2017). Preparing bilingual teachers. *Journal of Teacher Education*, *68*(2): 155-178.

> This study draws upon a survey of writing conceptions and cultural dispositions data, as well as multimodal compositions allowing bilingual teacher candidates to recursively explore and deepen the relationships between language, identity, and culture in learning. We found that teacher candidates did rethink the relationships through the multimodal tool. Moreover, their epistemic writing conceptions were correlated with high intercultural dispositions and multimodal complexity. The multimodal composition allowed candidates to follow individually distinct processes, but they all made more references to their imagined teaching practice at the end of the learning experience. These references were the result of, and resulted in, a deeper reflection of the relationships. Our results have implications for preparing teachers to confront the reality of diverse classrooms through more flexible pedagogical practices that allow for diverse modes of meaning making, such as the multimodal composition in this study.

McLean, L., Abry, T., Taylor, M., Jimenez, M., and K. Granger (2017). Teachers' mental health and perceptions of school climate across the transition from training to teaching. *Teaching and Teacher Education*, *65*: 230-240.

> This study examined the trajectories of depressive and anxious symptoms among early-career teachers (N = 133) as they transitioned from their training programs into their first year of teaching. In addition, perceived school climate was explored as a moderator of these trajectories. Multilevel linear growth modeling revealed that depressive and anxious symptoms increased across the transition, and negative perceived school climate was related to more drastically increasing symptoms. Results suggest that this career stage may be a time when teachers are particularly vulnerable to declines in mental health, and speak to some within-school features that may be related to teachers' experiences.

Mena, J., Hennissen, P., and J. Loughran (2017). Developing pre-service teachers' professional knowledge of teaching: The influence of mentoring. *Teaching and Teacher Education*, *66*: 47-59.

> This study was situated in a Primary Teacher Education program in the Netherlands. The participants (N=16) comprised four each of: Pre-Service Teachers (PST); Mentor Teachers; School-Based Teacher Educators; and University-Based Teacher Educators. Video-recordings of four mentoring conversations for each PST which transcribed and translated for analysis. A mixed methodology was applied with analysis based on examining mentoring conversations in relation to the MERID-model through turn-taking analysis and Propositional Discourse Analysis. The study illustrates that mentors tend to use a more directive mentoring approach and that they

dominate dialogue suggesting that there is aneed for reconsideration of the mentor-PST learning relationship and how it is understood in teacher education.

Meschede, N., Fiebranz, A., Möller, K., and M. Steffensky (2017). Teachers' professional vision, pedagogical content knowledge and beliefs: On its relation and differences between pre-service and in-service teachers. *Teaching and Teacher Education*, *66*: 158-170.

> This study explores the structure of teacher cognition by investigating the relation of teachers' professional vision with pedagogical content knowledge and beliefs in the domain of elementary science education. An investigation using a video-based assessment approach on professional vision revealed that all three constructs are substantially associated but still separable. Latent correlations did not differ across master students (n = 113) and in-service teachers (n = 110) though in-service teachers had greater professional vision, pedagogical content knowledge and less transmissive beliefs. This suggests a stable structure of teacher cognition. Moreover, results indicate that especially transmissive beliefs hinder observing classroom situations in a professional way.

Miyahara, M., Harada, T., Tanaka, S., Fukuhara, H., Kano, T., Ono, T., and N. Sadato (2017). Mindfulness meditation for future early childhood teachers in Japan. *Teaching and Teacher Education*, *65*: 136-144.

> To prevent future burnout and turnover among early childhood education students, mindfulness training may hold promise as a measure. A lab-based pilot and classroom-based feasibility study was designed to investigate an effective way to introduce mindfulness meditation. Results suggested that two types of audio-guided mindfulness meditation, a sitting meditation and a compassion meditation reduced stress level, and that the compassion meditation was perceived as more comfortable than the sitting meditation. As a tentative conclusion, the compassion meditation may be introduced first before the sitting meditation. Additional studies should examine the effects of longer-term meditation practice on teaching career development.

Morris, A.K. and J. Hiebert (2017). Effects of teacher preparation courses: Do graduates use what they learned to plan mathematics lessons? *American Educational Research Journal*, *54*(3): 524-567.

> We investigated whether the content pre-service teachers studied in elementary teacher preparation mathematics courses was related to their performance on a mathematics lesson planning task 2 and 3 years after graduation. The relevant mathematics knowledge was studied when the teachers were freshmen, 5 to 6 years earlier. Results showed that when there were differences in how completely graduates attended to the key mathematics concepts when planning lessons, the differences favored the topics studied in the courses, especially topics emphasized most heavily. We conjecture that teacher preparation can matter for lesson planning, an important task for teaching, if enough opportunities are provided to acquire the relevant content knowledge for teaching. We consider what this might mean for teacher preparation, more generally.

Morris, J.E., Lummis, G.W., McKinnon, D.H., and J. Heyworth (2017). Measuring preservice teacher self-efficacy in music and visual arts: Validation of an amended science teacher efficacy belief instrument. *Teaching and Teacher Education*, *64*: 1-11.

> The Science Teacher Efficacy Belief Instrument has been a widely reported measure of teachers' personal efficacy and outcome efficacy beliefs. This pilot study examined if the instrument could be amended for use in The Arts learning area. A small cohort of 110 Graduate Diploma of Education preservice teachers participated in the pilot. Factor structures were examined through confirmatory factor analyses. The model displaying best fit consisted of six items measuring outcome expectancy and 10 items related to teaching efficacy. Measuring self-efficacy is important as many teachers who teach the Arts in Australia and internationally are not subject specialist teachers.

Paolucci, C. and H. Wessels (2017). An examination of preservice teachers' capacity to create mathematical modeling problems for children. *Journal of Teacher Education*, *68*(3): 330-344.

> This study examined preservice teachers' (PSTs) capacity to create mathematical modeling problems (MMPs) for grades 1 to 3. PSTs created MMPs for their choice of grade level and aligned the mathematical content of their MMPs with the relevant mathematics curriculum. PSTs were given criteria adapted from Galbraith's MMP design principles to guide their work. These criteria were then used to evaluate the resulting MMPs, leading to findings and implications relevant to two areas—mathematics teacher education, and the design and evaluation of MMPs for young children. Results highlight an inclination toward creating problems for higher grade levels as well as concerns regarding both the PSTs' proficiency with the curriculum content and their capacity to create MMPs for particular content areas. Findings contribute to an important international conversation about the need for further research and development of resources aimed at supporting the integration of mathematical modeling in early childhood mathematics education.

Parsons, S.A., Vaughn, M., Malloy, J.A., and M. Pierczynski (2017). The development of teachers' visions from preservice into their first years teaching: A longitudinal study. *Teaching and Teacher Education*, *64*: 12-25.

> Contemplating and articulating one's vision is a reflective process that guides teachers' instruction and professional development. However, little research has explored how teachers develop their visions from preservice preparation to their first years teaching. The current study describes the visions of nine teachers over the course of seven years. The researchers describe teachers' visions, how the teachers enacted their visions, affordances to enacting their visions, obstacles teachers faced to enacting their visions, and how teachers' negotiated obstacles to enact their visions. Findings demonstrate the stability and influence of teachers' visions and the multitude of factors that impact teachers' daily decisions.

Pomerantz, F. and C. Condie (2017). Building bridges from pre-service experiences to elementary classroom literacy teaching: Challenges and opportunities. *Teaching and Teacher Education*, *64*: 211-221.

> This study investigated (a) the influences on pre-service and early career teachers' literacy instructional decision-making, and (b) how and in what ways transfer from literacy methods courses was evident in teachers' instructional decision-making. Although observations and interviews of ten teachers revealed some influence of teacher preparation, the school's curriculum was far more influential. Teaching fell along a knowledge transfer continuum from a conscious rejection of what was taught in pre-service education to some transfer of knowledge to transformation of knowledge. Findings suggest ways teacher educators can design assignments to maximize transfer to the classroom and support novice teachers.

Rakap, S. (2017). Impact of coaching on preservice teachers' use of embedded instruction in inclusive preschool classrooms. *Journal of Teacher Education*, *68*(2): 125-139.

> The purpose of the present study was to examine the impact of training plus coaching on special education preservice teachers' use of embedded instruction learning trials (EILTs) within ongoing activities of inclusive preschool classrooms. A multiple baseline across participants design was used to investigate the relationships between coaching and preservice teachers' implementation of EILTs across settings and over time. Corollary relationships between preservice teachers' implementation and child learning outcomes were also examined. Results indicate training plus coaching is an effective method for increasing preservice teachers' use of EILTs. Preservice teachers generalized their use of EILTs to another setting and maintained their use during follow-up sessions conducted 1 to 8 weeks after coaching ended. Moreover, as preservice teachers'

accuracy of implementing EILTs increased, percentage of children's correct responding increased. Implications for future research and practice are discussed.

Riley, K. and K. Solic (2017). "Change happens beyond the comfort zone". *Journal of Teacher Education*, *68*(2): 179-192.

This article shares findings from a qualitative study of an undergraduate urban education fellowship designed to connect teacher-candidates with activist teacher communities and explore questions of social justice, equity, and multicultural teaching. Fellows attended conferences, professional meetings, and on-campus dialogues over one semester. Interview transcripts and meeting notes were analyzed through the lenses of teacher inquiry and transformative learning theory. Findings reveal how teacher-candidates experienced shifts in their viewpoints through encountering new perspectives, discomfort with returning to their lives with new understandings, and a strong drive to further their learning about urban education. Within the context of a persistent gap between a mostly White, middle-class teaching force and a racially and socioeconomically diverse student population, this study offers an image of transformative preservice teacher education in which teacher-candidates encounter professional communities outside of the confines of the classroom.

Robertson, P.M., McFarland, L.A., Sciuchetti, M.B., and S.B. García (2017). Connecting the dots: An exploration of how pre-service special education teachers make sense of disability and diversity. *Teaching and Teacher Education, 65*: 34-47.

Although teacher education standards address preparing candidates to serve diverse learners, minimal guidance is available concerning specific program components and their influence on candidates' growth and development. Through constant comparative analysis of end-of-semester reflections, this exploratory, qualitative study investigated preservice special educators' developing perceptions about disability and cultural and linguistic diversity following field experiences aligned with courses. Participants reported a growing awareness of themselves, students they encountered, and the intersectionality between diversity and disability. Further, their insights reflected recognition of the combined influence of coursework, fieldwork, and opportunities for supported reflection. Implications for research and program development are offered.

Stevahn, L. and M.E. McGuire (2017). The plot thickens: Supporting pre-service teachers in authentic use of cooperative learning through the Storypath instructional approach. *Journal of Education for Teaching*, *43*(3): 316-327.

Pre-service teachers typically find it challenging to implement cooperative learning authentically in schools given the complexities of classroom environments. Curriculum integration also is demanding because it requires combining research-informed pedagogies and best practices to promote academic and social learning. This article describes how Storypath, a narrative approach to organising the curriculum, assists novice teachers in skilfully implementing cooperative learning and meaningfully integrating it with other best practices. It begins by describing cooperative learning's central role in Seattle University's Master in Teaching (MIT) programme, along with elements foundational to cooperative work. It continues by explaining how Storypath scaffolds pre-service teachers' capacity to successfully facilitate cooperative learning, then provides a specific example focused on environmental sustainability. The example illustrates how Storypath naturally creates positive interdependence among participants, thereby nurturing compelling successful cooperative experiences in creating the story. The article concludes with reflections on impact from MIT graduates.

Svojanovsky, P. (2017). Supporting student teachers' reflection as a paradigm shift process. *Teaching and Teacher Education*, *66*: 338-348.

The aim of this study is to explore how mentors, in this case university supervisors and student teachers, make sense of their experience with the support of reflection on teaching practice during post-lesson group interviews (reflective seminars). Review of the literature suggests that there is little known specifically about how mentors and students perceive support of reflection. The perspective of seven university supervisors and eight student teachers is presented. One of the principal findings in the in-depth phenomenological analysis is that for trainees to be able to reflect during the seminars, it is necessary first to set up an alternative paradigm of teaching.

Tingstrom, C.A. and E. Nagel (2017). The impact of an obesity awareness intervention on anti-fat attitudes and expectations of preservice physical educators. *Action in Teacher Education*, *39*(1): 54-66.
Childhood obesity and the decline of physical activity are real concerns for physical educators. Physical educators are in a key position to positively affect physical activity among youth at risk for obesity; however, the presence of an anti-fat bias may inhibit their ability to effectively do so. By addressing anti-fat bias, not only in physical education teacher education curricula but also with current physical educators, these individuals may be better prepared to meet the needs of students who are overweight, thus, hopefully resulting in increased student motivation and participation not only in physical education class but in those students choosing to be active for their lifetime. The purpose of this study was to determine whether a brief obesity awareness intervention could ameliorate anti-fat biases among preservice physical education teachers and, consequently, affect expectations of performance and ability as well as intentions to comply with recommended best practice.

Tygret, J.A. (2017). The influence of student teachers on student achievement: A case study of teacher perspectives. *Teaching and Teacher Education*, *66*: 117-126.
The purpose of this case study was to discover the influence of student teachers on student achievement in an elementary school and explore how teachers perceived the influence of student teachers on their students' growth and achievement. The research questions that were explored in this case study are as follows: (1) What is the influence of student teachers on student achievement at an elementary school? (2) What are teachers' perspectives regarding the effectiveness of student teachers and their contribution to student achievement in their classrooms? (3) Does Colorado Senate Bill 10-191 affect a teacher's decision to accept a student teacher for a school year? If so, in what way?

Willegems, V., Consuegra, E., Struyven, K., and N. Engels (2017). Teachers and pre-service teachers as partners in collaborative teacher research: A systematic literature review. *Teaching and Teacher Education*, *64*: 230-245.
A systematic literature review (N = 14) was performed with a focus on the influence of collaborative teacher research on the professional development of pre-service teachers (PTs). A thematic overview of reported outcomes is presented. Collaborative teacher research has proven itself to be a promising practice for improving PTs' knowledge and attitudes regarding collaboration, reflection, inquiry, and student-centred teaching. Shared inquiry in less hierarchical partnerships between pre-service and in-service teachers, and other multiple actors, advances PT's learning more than one-to-one relationships between a mentor and a PT.

Windschitl, M.A. and D. Stroupe (2017). The three-story challenge. *Journal of Teacher Education*, *68*(3): 251-261.
The foundational document of the current science standards movement—the Framework for K-12 Science Education—is grounded in research about how students from diverse backgrounds learn science and the conditions under which they can participate in knowledge-building activities of the discipline. We argue that teacher educators should use powerful principles for instruction, derived from the research referenced in the Framework, to inform the design of courses and other preparatory experiences for novices. This implementation strategy contrasts with an alignment

approach, in which novices would be asked to familiarize themselves with the Next Generation Science Standards (NGSS), integrate student performance expectations into lesson plans, and teach activities similar to those described in the NGSS. We describe the more principled approach as a "three-story challenge" in which students, teachers, and teacher educators have responsibilities to learn and to take up new roles in the educational system that are fundamentally different from the status quo.

**McLean, L., Abry, T., Taylor, M., Jimenez, M., and K. Granger (2017). Teachers' mental health and perceptions of school climate across the transition from training to teaching.** *Teaching and Teacher Education*, *65*: 230-240.

**Abstract:** This study examined the trajectories of depressive and anxious symptoms among early-career teachers (N = 133) as they transitioned from their training programs into their first year of teaching. In addition, perceived school climate was explored as a moderator of these trajectories. Multilevel linear growth modeling revealed that depressive and anxious symptoms increased across the transition, and negative perceived school climate was related to more drastically increasing symptoms. Results suggest that this career stage may be a time when teachers are particularly vulnerable to declines in mental health, and speak to some within-school features that may be related to teachers' experiences.

*Summary prepared by Shari Saunders and Allie Sherman*

**Context**

The purpose of this study was two-fold. The authors' primary purpose was to examine the progression of two aspects of mental health symptomatology (depression and anxiety) among early-career teachers at multiple points during their transition from the end of their preservice teacher training through the end of their first year of formal teaching. The secondary purpose was to examine the role school climate might play in the progression of depression and anxiety symptoms.

The authors reviewed research indicating that teachers report:

> correlates of negative mental health (e.g., depression, anxiety) such as chronic stress, components of burnout (see Maslach et al.,1981 for a review), and low job satisfaction (Ferguson, Frost, & Hall, 2012; Fernet, Guay, Senecal, & Austin, 2012; Kyriacou, 2001; Loeb, Darling-Hammond, & Luczak, 2005). (p. 230)

These correlates are "associated with increased absenteeism, poor job performance and poor health outcomes among educators (Hakanen, Bakker, & Schaufeli, 2006; Katz, Greenberg, Jennings, & Klein, 2016; Montgomery & Rupp, 2005; Steinhardt, Smith Jaggars, Faulk, & Gloria, 2011)" (p. 230).

The literature also suggested similar struggles for preservice teachers. For example, "even preservice teachers … report marked struggles with negative mental health correlates (Chaplain, 2008; Goldstein, 2005), which likely contribute to the high rates of attrition from the field observed during the early-career stage" (p. 230). These struggles appear to start at some point during their preservice training. For example,

> preservice teachers in the first year of their training programs have been found to report predominantly high levels of confidence, self assurance, and optimism (Brookhart & Freeman, 1992); however stress, and especially perceived occupational stress, has been found to contribute to high levels of psychological distress among preservice teachers later in their program (i.e., in their practicum/ student teaching year; Chaplain, 2008), potentially indicating that student-teachers may experience a sense of disillusionment upon entering this stage of training and before they enter their first teaching position (Goldstein, 2005) p. 230.

Although there has been some research done on teachers' mental health, the authors noted gaps in that literature. Specifically, they raised concerns about (a) a focus on mental health at a single point in time, (b) lack of attention to teachers in transition as a specific group worthy of study, and (c) inattention to the potential relationship between external factors and the negative mental health challenges teachers experience. Their study attempts to address these gaps.

**Research Questions**

1. "How do early-career teachers' levels of self-reported symptoms of depression and anxiety change as they transition from preservice teacher-training programs into their teaching careers?" **(**McLean, Abry, Taylor, Jimenez, & Granger, 2017, p. 232)
2. "What, if any, is the association between school climate and the trajectories of these symptoms?" (McLean et al., 2017, p. 232)

**Methods**
*Data Collection*
The authors engaged in a longitudinal study following preservice teachers, at a public institution in the United States, from their last semester of teacher training through the end of their first year of teaching. This study had three data points. T1 took place during the final term of participants' undergraduate program, T2 occurred during the beginning of their first year of teaching, and T3 happened at the end of their first year of teaching.

*Participants*
There were two participant samples, the original sample and an analytic sample. Two hundred sixty-five participants made up the original sample. One hundred thirty-three of these participants made up the analytic sample, which included only those who, upon completion of their teacher preparation program, were hired into full-time teaching positions. The analytic sample was 95% female; 73% Caucasian, 19% Hispanic/Latino, 3% Asian or Pacific Islander, 3% Multiracial/Other, < 1% African American, and <1% Middle Eastern. About 95% of the participants were under 33 years old (range: 21-30; mean: 24).

*Measures*
The authors used a variety of measures to collect data.

| Measures | Assessment Tool | Sample Items and Scales |
|---|---|---|
| Depressive Symptoms | The 10-item version of the Center for Epidemiologic Studies Depression Scale (CESD-10; Radloff, 1977) | This measure asked respondents to rate how often over the past week they experienced each of ten symptoms associated with depression. Example items included, "I was bothered by things that usually don't bother me" and "I could not get going." Each statement was rated using a 4-point scale ranging from rarely or none of the time (less than 1 day) to most of all of the time (5-7 days) (p. 233). |
| Anxious Symptoms | Generalized Anxiety Disorder Scale (GAD) | This scale asks users to report how often in the past two weeks they have been bothered by seven symptoms of anxiety. Examples included, "not being able to stop or control worrying" and "worrying too much about different things." Teachers responded on a 4-point scale (1 |

| | | ¼ not at all, 4 ¼ nearly every day)" (p. 233). |
|---|---|---|
| School Climate | An adapted 30-item version of the Consortium on Chicago School Research Teacher Survey[2] (CCSR; see Sartain, Stoelinga, & Brown, 2011) | The two dimensions of focus on the survey were: School Leadership and Professional Capacity. School leadership questions inquired about teacher-principal trust (e.g.,"To what extent do you feel respected by your principal?") Professional capacity questions asked about teachers' collaborations with their peer colleagues; the sense of collective responsibility within the school; and trust, collaboration, and innovation between teachers (e.g., "How many teachers in this school set high standards for themselves," "How many teachers in this school are eager to try new ideas," and "To what extent do you feel respected by other teachers?"). Teachers rated all items on a scale of 1 (none/not at all) to 5 (nearly all/a great extent) that indicated how many of their school partners (principals and peer colleagues) they felt fit with each statement or the extent to which they felt a given statement was true within their school (p. 234). |
| Perceived Social Support[3] | Multidimensional Scale of Perceived Social Support (MSPSS; Edwards, 2004) | Participants were instructed to think about the extent to which they disagreed or agreed with 20 statements pertaining the social support they receive from family, friends, colleagues, and community-based groups. Example items included "My |

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[2] This survey was adapted … to include only questions pertaining to the factors … that have been found to be most predictive of teachers' decisions to leave their schools, including the perceived quality of relationships among school colleagues within and across school hierarchies, and the perceived sense of collaboration and innovation within a school (McLean et al., 2017, p. 234)

[3] Participants' perceived social support and recent stressful life events were covariates in this study.

| | | colleagues really try to help me" and "I can talk about my problems with my family." Participants responded on a scale ranging from 1 (very strongly disagree) to 7 (very strongly agree) (p. 234). |
| --- | --- | --- |
| Stressful Life Events[4] | An adapted version of the Life Experiences Survey (LES; Sarason, Johnson, & Siegel, 1978). | This survey listed ten target stressful life experiences including school-related events (e.g., started or finished a new program, failed or did not graduate), work-related events (e.g., fired or demoted, started or changed jobs, conditions at work change), and personal events (e.g., death of a friend or relative, major fight). Possible scores on this measure ranged from a minimum of 0 to a maximum of 10 points…" (p. 234). |

*Analytic Approach*
The authors used Mplus[5] (Version 7; Muthén and Muthén, 2005 as cited in McLean et al., 2017, p. 234) to estimate a series of multilevel linear growth models. They ran growth models to assess the T3 intercept and change across time points in symptoms in order to determine whether there were shifts in early career teachers' self-reported symptoms of depression and anxiety from the final term of their training programs to the end of their first year of teaching. The authors also added school climate to the initial models "as a main effect and as a cross-level interaction term with the time point variable" (McLean et al., 2017, p. 234) in order to determine the connection between school climate and changes in symptoms of depression and anxiety over time. "All models controlled for participants' self-reported perceived social support and stressful life events at T3" and "for cohort membership in order to account for any effects attributable to potential differences between cohorts" (McLean et al., 2017, p. 234).

**Findings**
1. *Research Question 1:* The authors found that
    a. although teachers' self-reports of depression and anxiety were lowest at TI, highest at T3, and increased between T1 and T2, their levels remained relatively stable between two time frames, T1-T2 and T2-T3.
    b. both school climate and social support were significantly and negatively correlated with depression and anxiety at T3, but stressful life events were not significantly correlated with either at T3.

2. *Research Question 2:* The authors found that there was a significant and negative relationship between school climate and both depression and anxiety. Specifically, participants who perceived

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[4] Recent stressful life events and participants' perceived social support were covariates in this study.

[5] A latent variable modeling program

lower-quality school climate reported increases in depressive and anxious symptoms. Although the authors found a relationship between school climate and the development of early-career teachers' mental health symptoms, they could not determine the nature and directionality of these relationships.

**Conclusions**

Given that undergraduate student teachers' vulnerability to having depression and/or anxiety symptoms increases at some point from program completion to the end of their first year of teaching, the authors suggest that preservice teachers receive "mental health training and support before they start their careers" (McLean et al., 2017, p. 237). They suggest that mental health supportive programs (e.g., mindfulness training programs, Roeser et al., 2012; Roeser, 2013, as cited in McLean et al., 2017, p. 237), might be more beneficial if embedded in preservice teacher education programs. Although participants' symptoms did not reach clinical levels, the authors expressed concern that without interventions, symptoms of depression and anxiety might continue to increase. The authors also expressed concern about the role diminished mental health may be playing in the high levels of attrition seen among early-career teachers and the negative impact of this attrition on P-12 students. In the end, the authors propose that "a multicomponent approach that attempts to improve both school climate and teachers' mental health could contribute to positive results in terms of teachers' well-being and longevity in the field and students' success in the classroom" (p. 238).

**Lindqvist, H., Weurlander, M., Wernerson, A., and R. Thornberg (2017). Resolving feelings of professional inadequacy: Student teachers' coping with distressful situations.** *Teaching and Teacher Education*, *64*: 270-279.

**Abstract:** Student teachers face various difficult situations during their teacher education. The aim of this study was to examine how student teachers perceive coping with distressful situations during their teacher training. Focus groups and individual interviews were conducted. The results show that student teachers feel professionally inadequate, characterized by powerlessness, limited means of action and uncertainty. In resolving professional inadequacy, they use concepts connected to the social process of becoming teachers: modifying professional ideals, dependence on future colleagues and continuing to build experience. These concepts lead to acceptance and postponing strategies for learning from distressful situations.

*Summary prepared by Alexandra Sherman and Shari Saunders*

### Context

The work of teaching is inherently emotional, and previous literature suggests "student teachers' emotions play a crucial role in the construction of a professional identity" (Lindqvist et al., 2017, p. 271). Some emotions that emerge during student teaching are positive, but others may be distressful. Distressful feelings that arise during the learning to teach process can negatively influence student teachers' performance and, ultimately, their desire to remain in the field. However, coping with these emotions and developing a positive professional identity are often considered things best learned "on the job." This belief minimizes the role teacher education may play in this process. This study examines the distress that student teachers experience, as well as how they cope when faced with distressing circumstances, in order to better understand teacher education's role in preparing them to become full-time teachers.

### Research Questions

Lindqvist et al. (2017) "aim to examine how student teachers perceive coping with distressful situations during their teacher training" (p. 270). By doing so, the researchers hope to expand the body of literature addressing how student teachers cope with the processes of learning to teach and developing a professional identity.

### Methods

*Methodology – Participants*
All participants were Swedish and had completed the entirety of their schooling in Sweden. Participants had a variety of subject-matter foci, but all planned to work with students in lower secondary school (13-16 years old) upon completion of their training. Twenty participants were recruited via (1) email and (2) through their participation in visiting seminars. All participants were between 21-30 years old. Five participants were male and 15 were female.

*Methodology - Data Collection*
The first author, Lindqvist, conducted this study at a teacher education program in Sweden. He moderated all of the focus groups and conducted each individual interview. Lindqvist's relationship to the teacher education programs in which the participants were enrolled was not mentioned.

The participants were divided into four focus groups of 4-6 participants each, organized so that members were all in the same stage of their teacher education, either the 5th or 9th semester of training, with two groups each. In the focus groups, participants were questioned about distressful situations they had experienced during their student teaching.

Following the focus groups, the researchers conducted five semi-structured follow-up interviews with a subset of individual participants, selected using theoretical sampling based on the conversation during focus groups. Selected individuals mentioned experiencing distressful situations in their student teaching, but, due to time constraints or group dynamics, did not elaborate on their experiences

*Methodology – Analysis*

The researchers employed a constructivist design to co-construct meaning with and among participants during the focus groups and individual interviews. They took a grounded theory approach to analysis, generating codes in an iterative process until they were satisfied that they had reached saturation. Throughout coding, team members wrote analytic memos including reflections, questions, and comments that arose from the data and data analysis process.

**Results**

Researchers classified the situations that student teachers found distressful as either "daily hassles" or "major events". A large majority of distressful events were, in fact, those that occurred frequently as part of the daily life of a student teacher, such as handing classroom management or building student-teacher relationships. Because of these distressful situations, student teachers reported suffering from feelings of professional inadequacy, which the researchers described as "not being able to live up to the expectations of the student teachers' own professional standards" (Lindqvist et al., 2017, p. 273). Most were concerned about how to maintain a positive professional identity while managing the negative feelings associated with participating in distressful situations.

The authors found three subcategories of professional inadequacy to be most salient among the student teachers. Primarily, student teachers experienced *powerlessness*, in that they were "[un]able to have any impact on a situation" (Lindqvist et al., 2017, p. 273). For example, student teachers struggled with being unable to influence a student's home circumstance, even when it influenced students' performance in school. Another subcategory was identified as *limited means of action.* Student teachers felt unsure of their ability to positively contribute in response to distressful situations "because of both limited time and restricted participation in school life" (Lindqvist et al., 2017, p. 274). As a student teacher, one has limited control over a classroom environment and limited time with which to develop and maintain relationships. Consequently, student teachers felt unsure of their ability to contribute in a positive way within the school environment when faced with distressful situations. Finally, distressful situations presented student teachers with *uncertainty*. Because of their inexperience and inability to anticipate how students might react in a given situation, student teachers often felt unsure of how to manage the complexity of life in schools.

In addition, the researchers found a number of ways student teachers tried to minimize or resolve these feelings of professional inadequacy. First, student teachers worked on *modifying professional ideals*. By adjusting their expectations, student teachers were better able to have a less emotional response to distressful circumstances. Further, student teachers had to work on *learning to be dependent*. By seeking help from colleagues within schools, student teachers were able to resolve some of their feelings of professional inadequacy. Finally, student teachers needed to continue *building experience.* Student teachers often entered the field feeling underprepared, which contributed to increased fear of continuing to be underprepared to do their future work as teachers. Most student teachers assumed that they would truly learn how to teach during their first year(s) as a teacher and that feelings of inadequacy, and thus in this sense this worry could only be resolved over time.

The researchers classified the student teachers' strategies for managing feelings of professional inadequacy in two ways: (1) postponing strategies or (2) acceptance strategies:

"The postponing strategy as an avoidance coping strategy means that the student teachers did not think they could learn from the distressful situations during work-based learning. They assumed they needed a lot of teaching experience and collegial support during their first years in schools as beginning teachers. The acceptance strategy is an avoidance coping strategy based on the assumption that they, as student teachers and future teachers, do not have the capacity to live up to their professional standards due to external constraints. As a result, they accepted not having an impact on the distressful situation and therefore modified their ideals" (Lindqvist, et al., 2017, p. 277).

While student teachers accepted their feelings of professional inadequacy by modifying their ideals and learning to rely on colleagues, they also often postponed feelings of professional inadequacy by concluding that they would "really" learn to teach after they had gained more experience.

Lindqvist et al. also discussed how these distressful situations in teaching lead to feelings of moral stress for student teachers. Moral stress, "defined as painful feelings or psychological distress that occurs when a professional is conscious of the morally appropriate action but cannot carry out that action because of external or situational obstacles" (Lindqvist et al., 2017, p. 279), was prevalent among student teachers, as they were unable to connect the experiences they had as students of teaching to their work as student teachers. As a result, they felt inexperienced and unable to act. This was found to perpetuate the cycle of distress and feelings of inadequacy throughout the process of learning to teach.

**Discussion and Implications**
The authors aimed to gain insight into how student teachers deal with distressful situations as they learn to work. They conclude that student teachers cope by avoiding – either through accepting the need for new ideals of what it means to develop a professional identity or by postponing the timeline in which one believes a professional identity should be developed. By avoiding professional identity development as a means of alleviating feelings of professional inadequacy, student teachers add to to the mounting challenges they face during their first years of teaching, some of which may contribute to burnout and ultimately leaving the profession entirely. Instead of dealing with these feelings while supported by a teacher education program, these individuals had to address them on their own.

The study refers to Karasek and Theorell's 2009 model of the relationship between demand and control when explaining the level of distress felt by student teachers. The model argues that "stress is more likely to be a negative factor when control over the work situation is low while at the same time there are high levels of demands placed on the person performing the work" (Lindqvist et al., 2017, p. 277). In the current study, demands on student teachers were perceived as high while their feelings of control were low, therefore leading to increased levels of stress. Remediating this stress, as attempted by the student teachers in this study, is very difficult given the moral aspects associated with the work of teaching.

The authors identify two main practical implications of this study: (1) teacher education may benefit from directly addressing student teachers' emotions during the process of learning to teach, particularly while student teachers are working in classrooms; and (2) teacher educators should speak directly with student teachers about the constraints and opportunities associated with the profession of teaching as a way of helping student teachers develop feelings of agency within the given structure of the work of teaching. If student teachers are more informed about their future work, they will be better equipped to handle their feelings associated with the distressful situations they are likely to encounter.