TeachingWorks

UNIVERSITY *of* MICHIGAN SCHOOL *of* EDUCATION

Information for the January 31, 2014 TeachingWorks Journal Club Meeting

We will discuss the following two articles in this meeting:

1. **Henry, G.T., S.L. Campbell, C.L. Thompson, L.A. Patriarca, K.J. Luterbach, D.B. Lys, and V.M. Covington (2013). "The predictive validity of measures of teacher candidate programs and performance: Toward an evidence-based approach to teacher preparation." Journal of Teacher Education 64(5): 439-453.**

2. **McDonald, M., E. Kazemi, and S.S. Schneider (2013). "Core practices and pedagogies of teacher education: A call for a common language and collective activity." Journal of Teacher Education 64(5): 378-386.**

In addition, bibliographic information is below for other relevant articles published in the following journals since the October 15, 2013 meeting and until December 15, 2013.[1]

Journal of Teacher Education
American Educational Research Journal
Elementary School Journal
Journal of Curriculum Studies
Teachers College Record
Educational Evaluation and Policy Analysis
Teaching and Teacher Education
Journal of Education for Teaching: International Research and Pedagogy

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Amrein-Beardsley, A., J. Barnett, and T.G. Ganesh (2013). "Seven legitimate apprehensions about evaluating teacher education programs and seven "beyond excuses" imperatives." Teachers College Record 115(12).

Background: Via the reauthorization of the Higher Education Act (HEA), stronger accountability proponents are now knocking on the doors of the colleges of education that prepare teachers and, many argue, prepare teachers ineffectively. This is raising questions about how effective and necessary teacher education programs indeed are. While research continues to evidence that teachers have a large impact on student achievement, the examination of teacher education programs is a rational backward mapping of understanding how teachers impact students. Nonetheless, whether and how evaluations of teacher education programs should be conducted is yet another hotly debated issue in the profession.

Purpose: The purpose of this project is to describe how one of the largest teacher education programs in the nation has taken a lead position toward evaluating itself, and has begun to take responsibility for its impact on the public school system. This research also presents the process of establishing a self-evaluation initiative across the state of Arizona and provides a roadmap for how other colleges and universities might begin a similar process.

Setting and Participants: This work focuses on the Teacher Preparation Research and Evaluation Project (T-PREP) that spawned via the collaborative efforts among the deans and representative faculty from Arizona State University (ASU), Northern Arizona University (NAU), and the University of Arizona (UofA). The colleges of education located within each respective university are the colleges that train the vast majority of educators in the state of Arizona.

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[1] For the January 31, 2014, TeachingWorks journal club we considered the following journals: *Journal of Teacher Education (November/December 2013, **64**(5)); American Educational Research Journal (December 2013, **50**(6)); Elementary School Journal (December 2013, **114**(2)); Journal of Curriculum Studies (2013, **45**(5); 2013 **45**(6)); Teachers College Record (**115**(11), **115**(12)); Educational Evaluation and Policy Analysis (December 2013, **35**(4)); Teaching and Teacher Education (November 2013, **36**; January 2014, **37**); Journal of Education for Teaching: International Research and Pedagogy (2013, **39**(5)).*

Participants also included other key stakeholders in the state of Arizona, including the deans and representative faculty from the aforementioned colleges of education, leaders representing the Arizona Department of Education (ADE), and other key leaders and constituents involved in the state's education system (e.g., the state's union and school board leaders and representatives). **Research Design:** This serves as a case study example of how others might conduct such self-examinations at the collaborative and the institutional level, as well as more local levels. **Conclusions:** This work resulted in a set of seven "beyond excuses" imperatives that participants involved in the T-PREP consortium developed and participants at the local level carried forward. The seven key imperatives are important for other colleges of education to consider as they too embark on pathways toward examining their teacher education programs and using evaluation results in both formative and summative ways.

Aydarova, O. (2014). "Universal principles transform national priorities: Bologna Process and Russian teacher education." Teaching and Teacher Education 37: 64-75.

In 2003, the Russian Federation joined the Bologna Process, which accompanied the introduction of global neoliberal reforms into the Russian post-socialist space. To examine these transformations, I juxtapose foreign language teacher education program documents before and after the introduction of neoliberal policies. Participation in the Bologna Process re-conceptualized the teacher's role from a public intellectual to a technocrat, contributed to a fragmentation of subject knowledge preparation, and began promoting the individualism of the new capitalism. I present responses to the Bologna Process by Russian academics and teacher educators and argue that neoliberal reforms may have long-lasting negative consequences.

Blömeke, S., N. Buchholtz, U. Suhl, and G. Kaiser (2014). "Resolving the chicken-or-egg causality dilemma: The longitudinal interplay of teacher knowledge and teacher beliefs." Teaching and Teacher Education 37: 130-139.

To examine the longitudinal relation between knowledge and beliefs and to determine cause and effect, 183 mathematics teachers were assessed three times during their first years of teacher education on their mathematics pedagogical content knowledge (MPCK) and their beliefs about teaching and learning. The data revealed that prior MPCK predicted later achievement. Prior beliefs also determined later ones. In addition, MPCK affected later beliefs: Higher MPCK at the first measurement resulted in more constructivist beliefs at later time points. By contrast, beliefs did not predict later MPCK. If constructivist teacher beliefs are to be fostered, teacher education should strengthen MPCK.

Chen, J. and G.T.L. Brown (2013). "High-stakes examination preparation that controls teaching: Chinese prospective teachers' conceptions of excellent teaching and assessment." Journal of Education for Teaching 39(5): 541-556.

How prospective teachers conceive of teaching excellence and assessment purposes probably influences how teaching and assessment practices are implemented in the future. This study evaluated, in four 'normal universities' in the People's Republic of China, 765 prospective teachers' responses to two self-report instruments regarding the nature of excellent teaching and the purpose of assessment. Both questionnaires had previously been developed in Mandarin Chinese and validated with large samples of practicing teachers in China. The original models could not be recovered and with exploratory and confirmatory factor analysis alternative models were found. Excellent teaching was conceived as four inter-correlated factors (i.e. Professional, Model, Examination and Life-long), as also were the purposes of assessment (i.e. Diagnose and Formative, Irrelevant, Control and Life Character). Structural equation modelling showed that the strongest relationship between teaching excellence and assessment began with the examination factor which positively predicted assessment as Irrelevant and for Life Character development and negatively the Diagnose and Formative purpose. Results are consistent with the high-stakes examination system of China and the status of prospective teachers who have only recently stopped being students.

Conroy, J., M. Hulme, and I. Menter (2013). "Developing a 'clinical' model for teacher education." <u>Journal of Education for Teaching</u> 39(5): 557-573.

> This paper reports on the introduction of a 'clinical model' of teacher education at the University of Glasgow in 2011. The account is set against the backdrop of a review of major contemporary developments in teacher education. The common focus in this work is on such themes as the key function of the practicum, on 'teaching schools' and on the roles and responsibilities of the various players in teacher professional learning. The context for reform of teacher education in Scotland is described, showing how the opportunity for a radical intervention arose. The distinctive features of the Glasgow model are set out and a summary of the findings of the internal evaluation carried out at the University is offered. Issues identified include challenges of communication, the nature of professional learning and the cultural embeddedness of existing practices. In the light of this initiative, the paper then reviews insights gained concerning the relationship between policy, practice and research in teacher education, before concluding with comments on the future of research in teacher education.

Fishman, B., S. Konstantopoulos, B.W. Kubitskey, R. Vath, G. Park, H. Johnson, and D.C. Edelson (2013). "Comparing the impact of online and face-to-face professional development in the context of curriculum implementation." <u>Journal of Teacher Education</u> 64(5): 426-438.

> This study employed a randomized experiment to examine differences in teacher and student learning from professional development (PD) in two modalities: online and face-to-face. The study explores whether there are differences in teacher knowledge and beliefs, teacher classroom practice, and student learning outcomes related to PD modality. Comparison of classroom practice and student learning outcomes, normally difficult to establish in PD research, is facilitated by the use of a common set of curriculum materials as the content for PD and subsequent teaching. Findings indicate that teachers and students exhibited significant gains in both conditions, and that there was no significant difference between conditions. We discuss implications for the delivery of teacher professional learning.

Gazeley, L. and M. Dunne (2013). "Initial Teacher Education programmes: Providing a space to address the disproportionate exclusion of Black pupils from schools in England?" <u>Journal of Education for Teaching</u> 39(5): 492-508.

> Exclusion from school is a disciplinary sanction used in English schools to manage behaviour by limiting a young person's attendance at school and the over-representation of Black pupils in national exclusions statistics has been a long-standing cause of concern. This paper reports on the findings of a small-scale, qualitative study that explored the opportunities that the student teachers in the Initial Teacher Education (ITE) departments of four English universities had to gain an understanding of this particular form of educational inequality and how it might be addressed. Despite a strong focus on diversity and social justice within each institution, interviews with the student teachers highlighted gaps and inconsistencies in their opportunities to learn about exclusion from school and its disproportionate impact on Black young people. Nevertheless, Initial Teacher Education programmes emerged as an important space from which to explore student teachers' understandings of this issue, with a view to moving them beyond the sort of more individualised understandings that militate against recognition of this as an equalities issue.

Hardré, P.L., C. Ling, R.L. Shehab, M.A. Nanny, M.U. Nollert, H. Refai, C. Ramseyer, J. Herron, and E.D. Wollega (2013). "Teachers in an interdisciplinary learning community: Engaging, integrating, and strengthening k-12 education." <u>Journal of Teacher Education</u> 64(5): 409-425.

> This study examines the inputs (processes and strategies) and outputs (perceptions, skill development, classroom transfer, disciplinary integration, social networking, and community development) of a yearlong, interdisciplinary teacher learning and development experience. Eleven secondary math and science teachers partnered with an interdisciplinary team of university engineering mentors in a yearlong engineering education and project implementation program. It consisted of a 6-week on-site resident professional development and collaboration experience, with an ongoing support and follow-up including digital systems. Mixed-method, multisource data indicate that teachers engaged with motivations combining personal, intrinsic

interest and classroom integration goals. They formed and sustained an active community of learning and practice that supported their success, on-site and through classroom integration, thereby promoting innovations. Teachers reported positive perceptions throughout the program and demonstrated significant, productive trajectories of change-over-time. Teachers learned and transferred task-specific engineering and scientific skills, as well as more general inquiry-based pedagogical strategies to their secondary classrooms.

Hardy, I. and P. Grootenboer (2013). "Schools, teachers and community: Cultivating the conditions for engaged student learning." Journal of Curriculum Studies 45(5): 697-719.

This paper reveals the nature of the actions, discussions and relationships which characterised teachers' and associated school personnel's efforts to engage poor and refugee students through a community garden located in a school in a low socio-economic urban area in south-east Queensland, Australia. These actions, discussions and relationships are described as both revealing and producing particular 'practice architectures' which help constitute conditions for practice--in this case, conditions for beneficial student learning. The paper draws upon interview data with teachers, other school staff and community members working in the school to reveal the interrelating actions, discussions and relationships involved in developing and using the garden for academic and non-academic purposes. By better understanding such interrelationships as practice architectures, the paper reveals how teachers and those in schooling settings learn to facilitate student learning practices that likely to assist some of the most marginalised students in schooling settings.

Henry, G.T., S.L. Campbell, C.L. Thompson, L.A. Patriarca, K.J. Luterbach, D.B. Lys, and V.M. Covington (2013). "The predictive validity of measures of teacher candidate programs and performance: Toward an evidence-based approach to teacher preparation." Journal of Teacher Education 64(5): 439-453.

Calls for evidence-based reform of teacher preparation programs (TPPs) suggest the question: Do the current indicators of progress and performance used by TPPs predict effectiveness of their graduates when they become teachers? In this study, the indicators of progress and performance used by one program are examined for their ability to predict value-added scores of program graduates. The study finds that rating instruments, including disposition surveys, clinical practice observation ratings, and portfolio assessments, each measure a single underlying dimension rather than the multiple constructs they were designed to measure. Neither these instruments nor teacher candidates' scores on standardized exams predict their later effectiveness in the classroom based on value-added models of student achievement. Candidates' grade point averages during their preparation program and number of math courses were positively associated with their students' math score gains. These findings suggest a need for better instruments to measure prospective teachers' progress toward proficiency.

Jacobs, B.M. (2013). "Social studies teacher education in the early twentieth century: A historical inquiry into the relationship between teacher preparation and curriculum reform." Teachers College Record 115(12).

Background/Context: The field of social studies education is hardly lacking in historical investigation. The historiography includes sweeping chronicles of longtime struggles over the curriculum as well as case studies of momentous eras, events, policies, trends, and people, with emphases on aims, subject matter, method, and much more. Curiously, scant attention has been paid to the history of social studies teacher education. This study fills a gap in the literature by considering what effect, if any, teacher education in the social studies has had on the development of the field over time. Specifically, the study focuses on history/social studies teacher education in the decades immediately preceding and following the National Education Association's landmark report, The Social Studies in Secondary Education (1916), which commonly is credited with establishing social studies as a school subject.

Purpose: A basic premise underlying this study is that stability and change in social studies curriculum and instruction may be someway related to stability and change in social studies teacher education. Because the enterprise of social studies teacher education exists in large part for the sake of supporting the enterprise of social studies in the schools, changes in social studies

in the schools may well affect the preparation of teachers to teach the subject, and changes in social studies teacher preparation may well affect the teaching of the subject in schools. This study interrogates how teacher education programs contributed and/or responded (or not) to the emergence of social studies as a school subject in the early part of the twentieth century.

Research Design: This document-based historical study looks back nearly a century to the origins of the social studies field and considers the interrelationship between social studies as it was envisioned in the schools and social studies as it was configured in teacher education programs. The study is based on published monographs, reports, and articles on the status of history (pre-1916) and social studies (post-1916) teacher preparation programs that largely have been overlooked by social studies historians to date.

Findings/Conclusions: The story that emerges reinforces some longstanding assumptions about the development of the field: For example, there was little agreement among subject matter and education specialists regarding what constituted the social studies curriculum, so there was little agreement on what social studies teachers and students needed to know. But, it also suggests that disarray in the social studies field may have been as much a function of disorder in the realm of teacher education as it was of conflict among curriculum-makers about the nature of social studies in the schools.

Kosnik, C., L. Menna, P. Dharamshi, C. Miyata, and C. Beck (2013). "A foot in many camps: Literacy teacher educators acquiring knowledge across many realms and juggling multiple identities." Journal of Education for Teaching 39(5): 523-540.

This study involved 28 literacy/English teachers in four countries: Canada, the USA, the UK and Australia. The goal of the study was to examine their backgrounds, knowledge, research activities, identity and support within the university. The teacher educators had a range of classroom teaching experience which they drew on in many ways. Most went far beyond simply telling stories about their previous work. All were heavily influenced by their own childhood experiences, which continue to affect their current work. Many felt that they needed to hold dual identities, teacher and academic, because they were still heavily involved in schools through their research and in-service activities. Several felt that there was a hierarchy in their department with those most removed from schooling at the highest tier. Most saw themselves in the field of literacy not teacher education and gravitate towards literacy-focused conferences and journals rather than those in teacher education.

Levy, B.L.M., E.E. Thomas, K. Drago, and L.A. Rex (2013). "Examining studies of inquiry-based learning in three fields of education: Sparking generative conversation." Journal of Teacher Education 64(5): 387-408.

Many educational researchers across the United States have found that inquiry-based learning (IBL) supports the development of deep, meaningful content knowledge. However, integrating IBL into classroom practice has been challenging, in part because of contrasting conceptualizations and practices across educational fields. In this article, we (a) describe differing conceptions of IBL, (b) summarize our own studies of IBL in three fields of education, (c) compare and contrast the processes and purposes of IBL in our studies and fields, and (d) suggest numerous opportunities for cross-disciplinary collaborations on IBL curriculum, teaching, and research that could bolster its inclusion in K-12 education. We ground our exploration in knowledge-generating conceptualizations and practices in these fields.

McDonald, M., E. Kazemi, and S.S. Schneider (2013). "Core practices and pedagogies of teacher education: A call for a common language and collective activity." Journal of Teacher Education 64(5): 378-386.

Currently, the field of teacher education is undergoing a major shift—a turn away from a predominant focus on specifying the necessary knowledge for teaching toward specifying teaching practices that entail knowledge and doing. In this article, the authors suggest that current work on K-12 core teaching practices has the potential to shift teacher education toward the practice of teaching. However, the authors argue that to realize this vision we must reimagine not only the curriculum for learning to teach but also the pedagogy of teacher education. We present one example of what we mean by reimagined teacher education pedagogy by offering a

framework through which to conceptualize the preparation of teachers organized around core practices. From our perspectives, this framework could be the backbone of a larger research and development agenda aimed at engaging teachers and teacher educators in systematic knowledge generation regarding ambitious teaching and teacher education pedagogy. We conclude with an invitation to the field to join with us in imagining approaches to generating and aggregating knowledge about teaching and the pedagogy of teacher education that will move not only our individual practice but also our collective practice forward.

Moore-Russo, D.A. and J.N. Wilsey (2014). "Delving into the meaning of productive reflection: A study of future teachers' reflections on representations of teaching." <u>Teaching and Teacher Education</u> **37: 76-90.**

This study incorporated multiple methods of analysis to explore the productivity of future teachers' reflections after viewing animations as representations of algebra instruction. Two groups of future teachers posted their reflections on an asynchronous, electronic discussion board with no instructor scaffolding. The productivity of the reflections varied depending on whether their content, connectedness, or complexity was considered. This highlights the need to consider reflection as a multidimensional construct. The role of teacher educators and the benefits of using animations to facilitate productive reflection by future teachers are considered. In addition, the studying and reporting of reflection data are also discussed.

Oswald, M. (2014). "Positioning the individual teacher in school-based learning for inclusion." <u>Teaching and Teacher Education</u> **37: 1-10.**

This paper reports on a critical ethnographic case study investigating teacher learning in a primary school in South Africa. A qualitative research methodology within a cultural-historical activity theoretical (CHAT) framework was employed. The learning trajectories of two teachers are presented spawning questions on how the empirical relationship between individual (teacher) and social (school as system) could be represented within CHAT. It is possible to argue theoretically for an agentive positioning for the two teachers allowing for the possibility that elements of this project will be sustained.

Pereira, F. (2013). "Concepts, policies and practices of teacher education: An analysis of studies on teacher education in Portugal." <u>Journal of Education for Teaching</u> **39(5): 474-491.**

Education policies, and in particular those related to teacher education, are central to the construction of Europe as a knowledge society and for facing the social and economic challenges that European countries must respond to in this millennium. This article presents an analysis of studies on the evaluation of in-service teacher education conducted in Portugal since 1992. Based on the results of this analysis, the study develops a reflection on the concepts, policies and practices of in-service teacher education, contextualising it within a wider equation related to teachers' education in Europe. The study consisted of content analyses of scientific articles, research reports, studies of evaluation and legal documents that provide the guidelines for in-service teacher education in Portugal. At the end, a final reflection and some general recommendations for teacher education are presented. There is a focus on the importance of placing in-service teacher education at the centre of educational contexts and on the problems that this causes in teachers' work, emphasising its importance for social justice in Europe.

Romero-Contreras, S., I. Garcia-Cedillo, C. Forlin, and K.A. Lomelí-Hernández (2013). "Preparing teachers for inclusion in Mexico: How effective is this process?" <u>Journal of Education for Teaching</u> **39(5): 509-522.**

Inclusive education is the most advanced form of recognition of the right to education. Mexico has made important legal and administrative changes to foster inclusion since the end of the twentieth century. This research assesses the impact of the Mexican pre-service teacher curriculum on 813 pre-service teachers' sentiments, attitudes and concerns towards inclusion and their perceived self-efficacy to educate students with disabilities. It employs two internationally validated questionnaires: The Sentiments, Attitudes and Concerns about Inclusive Education Revised Scale and the Teacher Efficacy for Inclusive Practices scale. Comparisons made across area of training, time in the programme, policy knowledge, interaction with people with disabilities and

experience show that special education pre-service teachers in the last years of the programme have the most positive perspectives, while preschool teachers have the least positive ones.

Rubiano, C.I. (2013). "A critical exploration of Colombian teacher education from Freire's 'directivity' perspective." <u>Journal of Education for Teaching</u> 39(5): 574-589.

The paper presents an exploration of Colombian teacher education from Paulo Freire's 'directivity' perspective, which involves the political notion of education and the struggle for social justice. It examines certain existing tensions in teacher education, and analyses critically their implications for the teaching profession regarding an alternative pedagogical framework and new approaches for the professional identity-formation toward teaching for social justice. The paper also discusses the challenges for education research in Colombia, a country that both dreams of education as the nation's future and fights against its inherent sense of adversity.

Snoek, M. and M. Volman (2014). "The impact of the organizational transfer climate on the use of teacher leadership competences developed in a post-initial Master's program." <u>Teaching and Teacher Education</u> 37: 91-100.

The transfer of learning outcomes of Master's programs for teachers is not self-evident. In this study, 18 teachers who recently graduated and their supervisors were interviewed on the transfer of leadership competences developed during their Master's program and on how the organizational transfer climate of the school supported or hindered this transfer. In schools with high levels of transfer, strategic partnerships between Master's-level teachers and formal leaders were observed, which facilitated a two-way process in which the application of new competences led to changes in the workplace. Therefore, the Master's program contributed to both professional development and school improvement.

Solbrekke, T.D. and C. Sugrue (2014). "Professional accreditation of initial teacher education programmes: Teacher educators' strategies--between 'accountability' and 'professional responsibility'?" <u>Teaching and Teacher Education</u> 37: 11-20.

National audit systems have emerged to assure their publics about the quality of pre-service programmes. This paper investigates and critically discusses accounts from interviews with four Irish teacher educators on their experiences with a professional accreditation process through the multi-focal lens of professional responsibility, accountability, survival and coping strategies. Evidence indicates that key actors' navigations between the logic of accountability and responsibility enables them to construct multiple performance scripts of teacher education programmes. We conclude that creative coping through the construction of multiple performance scripts are a vital element of promoting and sustaining professional responsibility among teacher educators.

Tan, Y.S.M. (2014). "A researcher-facilitator's reflection: Implementing a Singapore case of learning study." <u>Teaching and Teacher Education</u> 37: 44-54.

This paper reports a researcher-facilitator's reflection of implementing a professional development approach, and serves to address the inadequate attention given to the influence of researcher-facilitators in professional development efforts. The researcher-facilitator's experiences were compared to four Grade 9-10 Singapore Science teachers participating in a variation theory-framed learning study that promoted teacher research and collaboration. Extending current understandings of implementation and sustainability challenges, an analysis employing conceptual change framework surfaced three issues, namely, the choice and role of theoretical framework, degrees of openness to differences in patterns of variation, and role of a researcher-facilitator. Insights emerging from the reflection are discussed.

Whipp, J.L. (2013). "Developing socially just teachers: The interaction of experiences before, during, and after teacher preparation in beginning urban teachers." <u>Journal of Teacher Education</u> 64(5): 454-467.

This interpretive study investigated how 12 graduates from a justice-oriented teacher preparation program described their teaching goals, practices, and influences on those practices after their 1st year of teaching in an urban school. Relationships among these teachers' orientations toward

socially just teaching, self-reported socially just teaching practices, and self-reported preprogram, program, and postprogram influences were explored. Teachers who were individually and structurally oriented exhibited a sociocultural consciousness and described socially just teaching in various combinations of culturally responsive pedagogies, consciousness-raising, and advocacy; whereas individually oriented teachers focused primarily on "color-blind" caring relationships with their students. Factors that seemed to influence a more structural orientation to socially just teaching included (a) cross-cultural experiences before and during teacher preparation, (b) program course content and field experiences that challenged previous thinking, and (c) administrative and collegial support during the 1st year of teaching. Implications for teacher education practice and research are discussed.

Summary:
McDonald, M., E. Kazemi, and S.S.Kavanagh (2013). "Core practices and pedagogies of teacher education: A call for a common language and collective activity." <u>Journal of Teacher Education</u> 64(5): 378-386.
Abstract: Currently, the field of teacher education is undergoing a major shift—a turn away from a predominant focus on specifying the necessary knowledge for teaching toward specifying teaching practices that entail knowledge and doing. In this article, the authors suggest that current work on K-12 core teaching practices has the potential to shift teacher education toward the practice of teaching. However, the authors argue that to realize this vision we must reimagine not only the curriculum for learning to teach but also the pedagogy of teacher education. We present one example of what we mean by reimagined teacher education pedagogy by offering a framework through which to conceptualize the preparation of teachers organized around core practices. From our perspectives, this framework could be the backbone of a larger research and development agenda aimed at engaging teachers and teacher educators in systematic knowledge generation regarding ambitious teaching and teacher education pedagogy. We conclude with an invitation to the field to join with us in imagining approaches to generating and aggregating knowledge about teaching and the pedagogy of teacher education that will move not only our individual practice but also our collective practice forward.

Summary prepared by: Simona Goldin and Stefanie Iwashyna

McDonald, Kazemi, and Kavanagh begin by noting a key shift in the field of teacher education (TE), from specifying the "necessary knowledge for teaching towards specifying teaching practices that entail knowledge and doing" (378). This shift, they argue, is informed by imperatives to better prepare "novice teachers to raise the quality of disciplinary learning for students in U.S. schools and disrupt deficit perspectives of what students and teachers can accomplish" (378). The authors' goal to improve teaching by improving teacher education.

As such, McDonald et al.'s argument hinges on formulating ways to better support the development of what they refer to as "ambitious" teaching. They define "ambitious teaching" as teaching that "attends to the learning of all students – across ethnic, racial, class, and gender categories – and that aims to deepen students' understanding of ideas as well as their engagement in the solving of complex problems, rather than the more common place emphasis on activities and procedural talk" (385). The shift represents a "turn to practice" to redress persistent inequities in opportunities to learn. The key levers, the authors argue, are the development of core practices and associated pedagogies for teacher education.

At the center of the authors' work is an effort to address what they see as key weaknesses of TE—the need to articulate a common language for specifying practice, to identify shared pedagogies of TE, and to bridge the "divide" between coursework and clinical work (379). McDonald et al.'s theoretical piece is grounded by the objective to design TE such that all students benefit from teaching that is "content-rich, rigorous, and meaningful to students" (379). The authors return throughout the piece to issues of equity and access—to the power of core K-12 teaching practices, and "the view that it is possible to better prepare novice teachers to disrupt long-standing practices of mathematics teaching, which have not honored or built on the brilliance of children, particularly in schools with large populations of marginalized students" (380).

McDonald et al. propose what they refer to as a framework for reimagining teacher education constructed around core practices, and posit that this is crucial so that gains can be made not just in individual teacher education practice, but in collective practice. Core practices for K-12 teaching in the disciplines, they argue, highlight the "specific, routine aspects of teaching that demand the exercise of professional judgment and the creation of meaningful intellectual and social community" (378). They write that core practices might enable teacher educators to work collaboratively and coherently to support learning to teach.

As such, they acknowledge a "common mischaracterization of the core practices movement" that this movement is "pushing for the identification of one set of practices for the field to adopt as a whole" (380). They assert that this is not the case, but instead that participating "scholars seem less interested in prescribing one set of core practices and more interested in developing a common understanding of the concept of core practice so that the concept itself might become a field-wide tool for the organization and implementation of practice-based teacher education initiatives" (380). They refer to a preliminary list of criteria that all core practices might share (Grossman, Hammerness, McDonald 2009):

- "Practices that occur with a high frequency in teaching
- Practices that novices can enact in classrooms across different curricula or instructional approaches
- Practices that novices can actually begin to master
- Practices that allow novices to learn more about students and about teaching
- Practices that preserve the integrity and complexity of teaching, and
- Practices that are research-based and have the potential to improve student achievement" (380)

Key amongst these criteria is an effort to specify practices grounded in ambitious, disciplinary based work. The hope, the authors write, is to engender an ongoing dialogue amongst scholars and teacher educators about how to "conceptualize aspects of practice that support practitioner learning of high-quality instruction" (381). Here the authors are managing a key tension, and as such they write: "while we are wary of prescribing a set of core practices for the field as a whole, we are also not arguing that we should let a thousand flowers bloom.... Instead we believe that the field would benefit from coming to an agreement on a set of criteria for identifying, naming, and selecting core practices" (381). Arguing for the import of common, agreed upon language and pedagogies, the authors write that without these, "teacher educators are left on their own to figure out how to prepare teachers to teach the core practices, and… the field itself misses an important opportunity to generate knowledge on the range of ways in which we can support teachers' learning" (381).

A vital resource, the authors posit, is the cycle for learning to enact core practices. This cycle (represented in the figure below) is crafted specifically to disrupt the acquisition model of learning that the authors write is dominant in teacher education.
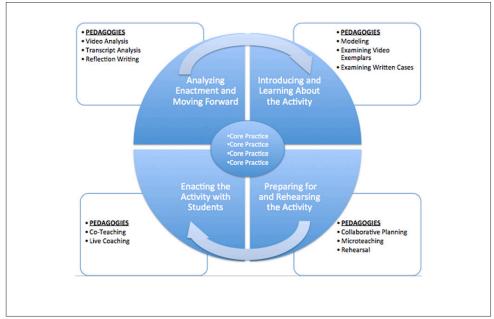

Figure 1. Cycle for collectively learning to engage in an authentic and ambitious instructional activity.

*** *This figure taken from McDonald et al., p. 381.*

In this model, interns' work learning to teach is scaffolded so that interns learn practices as they "come to life in meaningful units of instructing, preparing them to actually enact those practices, requiring them to enact the practices with real students in real classrooms, and then returning to their enactment through analysis" (382). Key to this approach is the aim to provide "authentic episodes of teaching around core practices for the purpose of novice learning" (382).

The authors caution against a few potential risks. Key amongst these, they write, is the danger that core practices might become "fad-like" and be picked up in superficial ways. McDonald et al. write that this danger might be avoided by elaborating the core pedagogies of teacher education: "for the turn to core practices to improve teaching and learning our vision of a closer partnership between schools and colleges of education, we must reimagine not only the curriculum for learning to teach (Grossman Hammerness et al., 2009) but also the pedagogy of teacher education" (379). That is, a shared language, common practices, and TE pedagogies would help "teacher educators in systematic knowledge generation regarding ambitious teaching and teacher education pedagogy" (379).

Questions/Considerations:
- The authors argue that core practices can address persistent educational inequities. What implications does this work have for culturally relevant pedagogy?
- Criteria for core practices: what are your thoughts about the set of criteria McDonald et al. propose? Is there anything missing? How might you refine this list?
- What contribution does this paper make to the literature and discussion about practice-based TE?

Summary:
Henry, G.T., S.L. Campbell, C.L. Thompson, L.A. Patriarca, K.J. Luterbach, D.B. Lys, and V.M. Covington (2013). "The predictive validity of measures of teacher candidate programs and performance: Toward an evidence-based approach to teacher preparation." Journal of Teacher Education 64(5): 439-453.
Abstract: Calls for evidence-based reform of teacher preparation programs (TPPs) suggest the question: Do the current indicators of progress and performance used by TPPs predict effectiveness of their graduates when they become teachers? In this study, the indicators of progress and performance used by one program are examined for their ability to predict value-added scores of program graduates. The study finds that rating instruments, including disposition surveys, clinical practice observation ratings, and portfolio assessments, each measure a single underlying dimension rather than the multiple constructs they were designed to measure. Neither these instruments nor teacher candidates' scores on standardized exams predict their later effectiveness in the classroom based on value-added models of student achievement. Candidates' grade point averages during their preparation program and number of math courses were positively associated with their students' math score gains. These findings suggest a need for better instruments to measure prospective teachers' progress toward proficiency.

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Background/Problem
Henry et al. argue that there is both a pressing need for reform of teacher education (TE) *and* a lack of evidence and understanding of what contributes to the effectiveness of teacher preparation programs (TTPs) (439).

While some research has begun to link TPPs to the teaching effectiveness of their graduates (as evidenced by value-added measurements [VAMs] of student performance on standardized tests), this body of work has only identified more or less effective TPPs. The authors argue: "TPP's graduates' average VAM scores can tell us whether a program is performing well or underperforming, but they cannot tell us why." In order to improve teacher education we need "insights into the mechanisms leading to higher or lower performance" (444).

Henry et al. refer extensively to a 2010 analysis that explores the difficulties of linking teacher preparation to student learning outcomes, acknowledging that "teacher preparation does not directly shape student achievement, but through a long chain of indirect effects (Diez, 2010)" (444). Despite this caveat, they argue that their approach, which uses "value-added modeling to estimate the extent to which TPPs affect student achievement through their graduates and then to search for the predictors of the teachers' effectiveness," (444) has merit. They describe the "triple advantage" of their approach: (a) offering immediate evidence that teacher preparation does have substantively meaningful effects …, (b) identifying more and less effective programs so that improvement efforts can be focused where they are needed most and guided by reference to more effective programs, and (c) providing a means to test whether teacher candidates' performance during their preparation process predict their effectiveness in the classroom" (444). So while conceding the limitations of the measures they use (451) the authors view this study as a "proof of concept" (440) of whether the types of data that TPPs are already routinely collecting can be linked to graduates' effectiveness in the classroom.

Research Question/Purpose
Research Question: Henry et al. ask to what degree do the kinds of measures of progress routinely collected by TPPs (e.g., data on course taking, and grades, professional behaviors and dispositions, performance assessments during student teaching, Praxis I exam scores, and ratings of comprehensive portfolios of candidates work) predict variation in "candidates' later effectiveness in the classroom as measured by value-added models of student achievement" (439).

To address this question, the authors assess "the predictive validity of a series of measures and indicators of progress collected by a large TPP that has been found to prepare teachers who contribute to greater gains in their students' test scores than teachers prepared elsewhere." (444). The purpose of this research is "to begin to test an approach that could be used to provide an evidence base for continuous improvement of an individual TPP" (440).

The authors recount Diez's (2010) analysis that a "full assessment of the relationship between a TPP and later effectiveness will require attention to (a) whether and to what extent teacher candidates actually learn what a TPP seeks to teach them, (b) the extent to which they subsequently put what they learn into practice in the classroom, and (c) the degree to which these classroom practices contribute to student learning." (440) They argue that the present study takes a step toward such an assessment by examining the link between teacher candidates' performance in the TPP and their later effectiveness in promoting student learning, but they concede that the study does not address the extent to which teacher candidates subsequently apply in the classroom what they have learned in their TPP.

Literature Review
The authors identify, define, and review the empirical literature on five indicators of progress in TPPs:
- Coursework and grades
- Portfolios
- Clinical experiences/student teaching
- Standardized Assessments
- Dispositions

Data
The study sample comprises graduates of a TPP whose graduates demonstrate greater contribution to student learning (as measured by VAM scores) than other programs in the state. Criteria for inclusion in the sample were that they were teaching a tested subject (math or reading) in grades 3-5 in public schools in the state where the TPP is located. Sample was 279 out of 1791 graduates with TPP data. Though not reported in the article, the authors ran basic descriptive statistics to check for selection bias. Henry acknowledges the difficulty that "only about 35% of teachers in NC teach tested grades and subjects. When that is combined with the number of program graduates that do not immediately begin teaching in public schools in NC, the available sample is diminished" (personal communication, 2014).

Course taking and grades For how courses were categorized (e.g., content versus pedagogy courses, in-subject or not) see Table 1. GPA was taken from final two years of undergraduate study (grades earned while enrolled in the TPP).

Table 1. Description of Coursework Variables.

Coursework variables	Math model	Reading model
Subject-specific content courses	Math content	Reading content
Subject-specific pedagogy courses	Math pedagogy	Reading pedagogy
Other content courses	Reading	Math
	Humanities and fine arts	Humanities and fine arts
	Science	Science
	Health and physical education	Health and physical education
	Social studies	Social studies
Other pedagogy courses	Reading pedagogy	Math pedagogy
	Science pedagogy	Science pedagogy
	English pedagogy	English pedagogy
	Social studies pedagogy	Social studies pedagogy
General pedagogy courses	Instructional technology	Instructional technology
	Learning and development	Learning and development
Professional studies core courses	Technology Education	Technology Education
	Introduction to diversity	Introduction to diversity
	Foundations of American Education	Foundations of American Education

Ratings of professional behaviors and dispositions—a survey with 20 items grouped into three constructs: a) professional demeanor, b) professional commitment, c) professional interactions; survey is administered three times: as self-assessment, by clinical or supervising teaching (cooperating teacher),

and finally by university supervisor (this is the score used in the analysis.) rated on a scale of "always/almost always," "usually," "sometimes," or "rarely/never" (445).

Ratings of performance during student teaching instrument administered four times during the 15 weeks of student teaching; ratings were "above satisfactory," "satisfactory," "needs improvement," or "unsatisfactory" on four constructs: planning, knowledge of subject, professional attitudes and relationships, and instruction; constructs each contain four separate items: "(a) management of instructional time, (b) management of student behavior, (c) presentation, (d) instructional feedback and monitoring" (446).The authors used an index of the ratings from the second evaluation period.

Praxis I exam scores: The TPP required candidates to have a combined score of 522 on three tests or a passing score of 173 on math, 176 on reading, and 173 on writing. Because of program exemptions (e.g., certain SAT or ACT scores exempted candidates from PRAXIS exam, some candidates had no PRAXIS scores and 46% were missing one or more (446). Imputed data were used.

Ratings of comprehensive portfolios: Portfolios consisted of four parts: "candidate work sample of instructional practice, classroom management, impact on student learning, and technology skills" (446). University supervisors evaluated the portfolios, assigning ratings of "above expectations," "meets expectations," or "below expectations" rating on three constructs that have between 3 and 7 underlying items. Based on the EFA, this variable was measured by an index of 13 items; two items were eliminated due to low loadings. (446)

Outcome Measures. Two outcome measures were used: student math and reading scores on a state end-of-year exam; these exams are criterion-referenced multiple-choice tests aligned with state learning standards. Henry et al. report that the test scores are standardized within year, grade, and subject (mean = zero; standard deviation = 1).

Covariates: A number of covariates were used to isolate teacher effects. Covariates at the student, classroom and teacher, and school level were included in the analysis.

Analytic methods: HLM and exploratory factor analysis were used to analyze the TPP performance indicators. EFA (principal components analysis with orthogonal rotation) for "the three types of assessments at each administration point established the basis for examining whether the attributes measured relate to student performance." (445)

Findings:
EFA Findings: The authors report the results of their exploratory factor analysis: "items on each of the three instruments used to measure teacher candidates' performance and progress measure a single underlying construct rather than the three or four constructs the instruments were intended to measure" (448). That is, the responses on these items are so highly correlated that they effectively measure "only one underlying construct" (448). Another way to put this is that TPP candidates tended to score consistently across the different measures. For example, it is unlikely that a candidate would be rated as "above satisfactory" on their planning and "unsatisfactory" on their instruction.

Predictive Validity Findings. That authors report that "Overall, predictive validity was low" (448). They found that none of the following indicators were related to students' performance in math or reading:

- Praxis 1 scores
- Student teacher performance ratings
- Portfolio ratings,
- Professional disposition ratings

The following associations of course taking and GPA with VAMs were found in the math model:

- a one-course increase in math content courses was associated with an increase of about 3% of a

standard deviation in students' math performance.
- a one-course increase in math pedagogy courses was associated with a reduction of about 5% of a standard deviation in students' math achievement.
- GPA in final two years had a positive relationship with math achievement.

The following associations of course taking and GPA with VAMs were found in the reading model:

- more nonreading content pedagogy courses (e.g., math pedagogy, science pedagogy, and social studies pedagogy courses) was associated with 2% of a standard deviation reduction in reading achievement.
- One additional core studies course was associated with an 11% of a standard deviation increase in reading achievement

Table 7. Average Effects of Preservice Measures of Progress and Performance on Program Graduates Effectiveness in Elementary Schools.

Variables	Math model Unstandardized coefficient (*SE*)	Reading model Unstandardized coefficient (*SE*)
Subject-specific content courses	0.033** (0.009)	−0.004 (0.006)
Subject-specific pedagogy courses	−0.053** (−0.013)	−0.006 (0.005)
Other content courses	−0.001 (0.002)	−0.001** (0.002)
Other pedagogy courses	−0.002 (0.006)	−0.023 (0.009)
General pedagogy courses	0.001 (0.007)	−0.005 (0.005)
Professional studies core courses	0.037 (0.032)	0.112** (0.023)
Additional courses	−0.001 (0.004)	−0.002 (0.003)
Total GPA	0.126** (0.041)	0.008 (0.032)
SAT/ACT	0.000 (0.000)	0.000 (0.000)
High school rank	−0.001** (0.001)	−0.001** (0.001)
Praxis I—reading	−0.002 (0.002)	−0.001 (0.002)
Praxis I—writing	−0.002 (0.003)	−0.001 (0.002)
Praxis I—math	0.001 (0.002)	0.001 (0.002)
Portfolio ratings	0.001 (0.003)	0.003 (0.002)
Disposition rating index	0.002 (0.003)	0.001 (0.002)
Student teaching rating index	0.003 (0.004)	−0.002 (0.004)
Community college partnership	0.001 (0.078)	−0.015 (0.062)
Same schools as student teaching experience	−0.016 (0.035)	−0.009 (0.028)
Same grade as student teaching experience	0.050* (0.026)	0.041** (0.021)

Note. GPA = grade point average; SAT = Scholastic Assessment Test; ACT = American College Testing.
*Significant at the .10 level. **Significant at the .05 level.

Discussion/Conclusion
Overall predictive validity of performance indicators while enrolled in the TPP was low. Disposition surveys, student teaching ratings, and the summative portfolio assessment did not measure the multiple, underlying constructs they were intended to measure. Instead they provided what could be considered a global rating of the teacher candidates. Furthermore, none of these instruments produced measures that predicted the candidates' later effectiveness as teachers in the state's public schools as measured by value-added to their students' performance on math or reading achievement tests. Teacher candidates' grades in their final 2 years of coursework were positively associated with value-added scores of students' math achievement but not with reading achievement. The number of math courses taken by teacher candidates did predict their students' value-added test score gains, but the association with the number of math pedagogy courses taken was negative and significant. For reading, the number of professional studies core courses was positively related to teachers' value-added and the number of other content courses was negatively related to teachers' value-added. Otherwise, course taking had no statistically significant effect on later effectiveness in the classroom.

The authors argue that "the present study points to work that is needed if TPPs are to make evidence-based improvements in their programs. Developing instruments with face validity is not sufficient to guide the needed improvements. Instruments that yield measures with high levels of predictive validity are

required if progress is to be made in preparing more effective teachers" (451).

Questions:

- Are we, as TEs, aware of stronger and weaker candidates in our programs? What is evidence for our own TE practice?
- This kind of approach of tying TPPs to the effectiveness of their graduates (largely through VAM scores) is gaining traction in the policy world –what are the implications for our work here? How should we respond to this work?
- What is, or might be, the role of summative assessments (the kind that might have predictive validity for later effectiveness) in TE?