Becoming a teacher: emerging teacher identity in mathematics teacher education.
Krzywacki, Heidi (University of Helsinki-Finlandia, 2009) www.pucp.edu.pe/wszaXP

This research examines three aspects of becoming a teacher, teacher identity formation in mathematics teacher education: the cognitive and affective aspect, the image of an ideal teacher directing the developmental process, and as an on-going process. The formation of emerging teacher identity was approached in a social psychological framework, in which individual development takes place in social interaction with the context through various experiences. Formation of teacher identity is seen as a dynamic, on-going developmental process, in which an individual intentionally aspires after the ideal image of being a teacher by developing his/her own competence as a teacher. The starting-point was that it is possible to examine formation of teacher identity through conceptualisation of observations that the individual and others have about teacher identity in different situations.

The research uses the qualitative case study approach to formation of emerging teacher identity, the individual developmental process and the socially constructed image of an ideal mathematics teacher. Two student cases, John and Mary, and the collective case of teacher educators representing socially shared views of becoming and being a mathematics teacher are presented.
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This qualitative study utilizes constructivist grounded theory methodology (Charmaz, 2014) because refined praxis is a new theoretical framework that has not been studied before, and grounded theory is an appropriate tool when there is little to no existing empirical data.

This qualitative study focuses on the perceptions of teachers who are in teams engaged in refined praxis and contributes to researchers and practitioners interested in both teaming and reflection. Its goal is to provide rich descriptions of what happens in refined praxis teams, what teachers find most valuable, and an understanding of what types of factors contribute to whether, when, and under what conditions teachers find this type of learning to be effective.
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There is a significant lack of educational research in which teachers’ talk about teaching is not mediated by researchers. In the public sphere, teachers’ voices rarely reach us unfiltered by the media, union and school district representatives, education reformers, and policymakers. What if we could listen to teachers talk about teaching unconstrained by any topic or agenda, in a conversation initiated by them? The StoryCorps National Teachers Initiative (SCNTI) provides an unparalleled opportunity to answer this question. In 2011-2012, hundreds of teachers talked about teaching with someone significant to them. Listening to these conversations enables understanding of teaching from the perspective of those doing the work, in their own voice.

This study addresses the meanings and conceptualizations of teaching articulated by teachers. Three basic assumptions guide this research. First, because teaching is an uncertain craft (McDonald, 1992), I suggest poetics of teaching (Hansen, 2004) as a listening lens. Second, because the experiences of teaching are expressed in conversation, I suggest a prosaic approach to language (Morson & Emerson, 1990) which considers form and function. Third, I conceptualize teacher voice as a source of knowledge about teaching and the phenomenon by which we can comprehend its humanity, uncertainty, and unfinalizability (Bakhtin, 1981). Building on this conceptual framework, I propose a unique empirical approach to studying teacher voice: a synthesis of hermeneutics, metaphor analysis, and portraiture.

The answer to the question When teachers speak of teaching, what do they say? is in the form of a portrait, a portrait of teaching composed of teachers’ voices. I find that teachers talk about four essential human phenomena: love, learning, power, and purpose. Within these constructs, I provide a critical interpretation of teacher talk about teaching that illuminates the complex and varied nature of teaching work.

This study privileges teacher voice—literally and epistemologically—and presents research as an act of listening. It transmits and amplifies teacher voice to constitute a refreshed and reexamined cultural record (Lamothe & Horowitz, 2006) of teaching. And as critical interpretation of human experience, this research invites participation: a response to teacher voice.
In 1998 Paul Black and Dylan Wiliam published the article, Inside the Black Box: Raising Standards Through Classroom Assessment (Black & Wiliam, 1998b). They asserted that formative assessments were the strongest way of raising student achievement. There are a number of empirical studies that document positive impacts of formative assessment on student learning (Brookhart, 2004; Allal & Lopez, 2005; Köller, 2005; Brookhart, 2007; Wiliam, 2007; Hattie & Timperley, 2007). There are also critics of much of the existing research (Shute, 2008; Dunn and Mulvenon, 2009; Bennett, 2011; Coffey Hammer Levin and Grant, 2011).

The literature points to the need for more research in this area. Shavelson (2008), who looked at formative assessment in the science classroom stated, “[a]fter five years of work, our euphoria devolved into a reality that formative assessment, like so many other education reforms, has a long way to go before it can be wielded masterfully by a majority of teachers to positive ends. This is not to discourage the formative assessment practice and research agenda.”

In this study I examined how teachers understand formative assessment in relation to their instruction, and how they actually implement formative assessment in their math classrooms. I used a thematic analysis research design, analyzing interviews, and observation recordings and field notes. I created a Depth of Implementation Framework, based on both a definition of formative assessment constructed from the review of literature and on the data gathered from teachers, to help make sense of the interplay between teachers’ understanding and use of formative assessment. Based on the data, teachers’ use of formative assessment was characterized as deep, developing or superficial. Teachers’ understanding of formative assessment, especially the definitions that they constructed for themselves, had an impact on both how they used formative assessment and how they saw themselves improving their use of formative assessment.
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Recent innovations in teacher evaluation include the development of standards-based frameworks for observational evaluations of teacher practice and development of test-based measures of teacher effectiveness. These tools raise questions about how best to identify good teaching, about the roles of both evaluations and principals in improving teaching, and about the relationship between school context and teacher evaluation.

This qualitative study examines principals’ understanding and use of a test-based ranking of teacher quality—the Academic Growth over Time (AGT) ranking—and a standards-based observation framework—the Teaching and Learning Framework (TLF)—in the Los Angeles Unified School District.

Findings suggest principals believed outcomes matter, but harbored concerns about what AGT rankings actually measured. In addition, principals felt AGT rankings provided little information about how to improve teaching. Some were concerned that in low-scoring schools, the AGT rankings might reinforce test-focused instruction in ways that disadvantaged students.

Principals preferred the TLF because it was more comprehensive than previous observation tools, helped teachers evaluate their practice against clearly defined expectations, and helped principals improve instruction. Though principals used the TLF to assign teachers ratings, they primarily described it as a tool to improve the quality of teaching in their buildings. Principals noted that the TLF process placed heavy demands on the time of teachers and principals, and expressed concern about how they could sustain high-quality implementation of the TLF when they had to use it at scale.

Most principals noted cases where the AGT rankings indicated a different reality about a teacher’s effectiveness than what the principals expected, based on classroom observations. How principals reconciled discrepancies varied. Principals in higher-scoring schools were more likely to discount test-based measures and more likely to emphasize the professional capability of their staff as an asset.

The findings suggest principals’ use of evaluation tools is mediated by their confidence in the tools and their own leadership, by how useful they feel the tools are, and by their own school contexts. In addition, this study suggests that the unique burdens of persistent socio-economic and racial segregation may hamper local efforts to implement promising practices at some sites.
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