

Developing Practices in Multiple Worlds: The Role of Identity in Learning To Teach

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Recently, researchers and policymakers have begun to question the role of professional education in learning to teach. This inquiry reflects skepticism about the contributions of teacher education, which is, in turn, fueled by popular ideas about the work of teaching: teachers are born not made, or that *real* learning begins once novices arrive in the classroom (Britzman, 2003). Despite its sometimes dubi-

ous reputation, teacher education has an undeniable economic value, as legislation demanding highly qualified teachers presses on schools and districts to recruit candidates who are credentialed by the programs in question. But what, exactly, are the contributions of teacher education to teachers' eventual practice?

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Our study takes up the challenge of understanding the role of teacher education in learning to teach by connecting novice teachers' experiences in pre-service education with their eventual practice. Through a longitudinal person-centered ethnography, we have been following 8 secondary teachers as they advance through various stages of their education, starting in a progressive, university-based teacher credentialing program, into their student teaching, and, eventually,

their induction years in the profession. Four of our interns specialized in mathematics and 4 in social studies. They varied in their subject preparation, reasons for entering the teacher education program, prior education and work experience. In this article we explain how a conceptual framework of teacher identity helps us understand the variations in interns' learning in the first stages of their formal education.

We observed our eight participants over their time in the teacher education program (TEP), including their work in courses and in their field placements. In-depth participant interviews accompanied many of the observations, along with interviews with their cooperating teachers, university supervisors, and university instructors. Our goal in data collection was to understand the interns' learning from a situative perspective—that is, to understand the complex social organization that shapes learning, including the learners, teachers, curricula, and the social environments in which they come together (Greeno, 2006). To do so, we needed to capture the ways in which the TEP constituted learning environments for the interns, as well as their individual ways of interacting with those environments.

Conceptualizing Identity and Learning in Teacher Education

In this article, we explore the relationship between novice teachers' identities and their learning during their pre-service training, illustrating the way that identity shapes and is shaped by their learning. In keeping with our goal to understand learning from a situative perspective, we developed a conceptual framework that relies on constructs that would allow us to remain sensitive to both the individuals we were following and the teaching worlds they met. Identity, as an analytic construct, provided access to both individuals' dispositions and the environments they encountered. Because accounts of *identity* necessarily provide for the description of individuals, it helps us see the people we are trying to understand. At the same time, identities are constructed through culturally available descriptors, narratives, and archetypes, embedding and linking the individuals in the contexts around them.

We frame identity development and learning as arising out of the interns' interactions with various *figured worlds* (Holland, Lachicotte, Skinner, & Cain, 1998)—the socially-constructed roles, meaning systems, and symbols of the cultural contexts they encountered. Following Holland et al. (1998), we conceptualize individual agents as operating within their various figured worlds by asserting and receiving different identities. *Identity* refers to the way a person understands and views himself, and is often viewed by others, at least in certain situations—a perception of self that can be fairly constantly achieved.

For our analysis, identity helps us make sense of the relationships individuals develop with the contexts they encounter in teacher education. But we wanted to relate this development to individuals' learning. To make sense of the varied experiences of our participants in what was, in name, the same certification program, we followed Lave and her colleagues in distinguishing between *arenas* and *settings*

as contexts for learning. According to Lave et al. (1984), arenas are physically, economically, politically and socially organized spaces-in-time. Settings, on the other hand, are the personally ordered and edited versions of the arena that arise as individuals interact in these contexts. Along these lines, we viewed the TEP as a kind of arena that each of the interns tailored into a setting for their learning. Part of the program took place at the university in the form of coursework. We refer to this learning arena as TEPworld, with its images of teaching practice, archetypes, and narratives. In addition, interns spent time in school placements throughout the program. We call this arena FieldWorld.

TEPworld provided certain constraints on and affordances for interns' learning that stayed fairly constant for our range of participants. That is, there were certain courses, assignments, and experiences that the program demanded. The FieldWorlds, on the other hand, were inherently more diverse. The figured world framework allowed us to investigate empirically the work our subjects did to edit and order TEPworld to make their own settings for learning, and how the range of FieldWorlds provided different kinds of tensions and opportunities for the interns to learn about teaching. Our goal was to better understand how teacher education can be structured to use these inevitable dynamics to productively shape the learning of more novice teachers.

In our work, learning to teach is conceptualized as a project that involves constructing a repertoire of practices, along with developing pedagogical reasoning about the deployment of those practices. Interns encountered a variety of teaching practices during their time in the TEPworld and FieldWorld. The repertoire of practices that interns developed, and their justification for using or not using them, can largely be traced to these two worlds. Still other practices and reasons have their origins in the figurative RealWorlds of the interns' own past experience (Lortie, 1975) or projected futures. Analytically, we see the adoption of a practice as evidence of learning. Likewise, the explicit rejection of practices is viewed as an assertion of identity, as will be explained in the examples that follow. Harder to analyze are the practices that we have seen being promoted in TEPworld or Fieldworld which do not make it into the interns' repertoires without any explicitly stated awareness on their part that they have failed to take them up.

Interns' adoption, rejection, modification, and negotiation of teaching practices become a focal point of our analysis. In our longitudinal analysis, we note that their stated reasons for adopting, rejecting, or modifying practices are often rooted in their visions of good teaching, as well as their perception of what is feasible. Both of these are linked to the kind of teacher selves they have developed and seek to create – namely, their emerging identities as teachers as they are forged in TEPworld and FieldWorld, with frequent references to RealWorld.

Identity and Learning to Teach

In this section, we will present examples of how a framework of identity sup-

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ports our analysis of interns' learning to teach. In the first set of examples, we will illustrate how identities orient our interns in their learning. Identities are strongly linked to goals (Wenger, 1998), and we see this play out with interns' learning goals in both TEPworld and FieldWorld. Also, we describe the ways that learning can redefine interns' teaching identities through two processes we call identification and negotiation.

Identity and Goals for Learning in TEPworld

The interns' identities as students and prospective teachers shape how they engage in their coursework in the TEP, informing what they learn. To illustrate this dynamic on the microlevel, consider the following interaction we observed during a course on classroom assessment. During a discussion of pop quizzes, an intern made the following statement:

I don't think I'm a big fan of deceiving students and scaring them! I'm more of a fan, say, of "compile a list of key things in the chapter, work in groups," that's fine with me. I'm just not a scare tactic kind of guy. (Assessment Class Fieldnotes, January 26, 2005)

In formulating his justification for rejecting the practice of giving pop quizzes, the intern makes an explicit identity statement: he is "not a scare tactic kind of guy." In this statement, he associates pop quizzes with both deceptive and "scary" teachers (perhaps archetypes he draws on from past experiences of the RealWorld) and asserts his preference for other, presumably less scary, forms of study and review.

As this brief example illustrates, interns' identities oriented them differently to the teaching practices promoted in their formal coursework. Our in-depth case studies demonstrate how identity-oriented learning worked on broader levels of interaction. We will illustrate the ways identities shaped interns learning by describing two of the focal mathematics interns, Dania and Abe.

Images of Good Teaching: Clear Presentation versus Problem Solving

Dania and Abe reported different stances on participating in their coursework, stances that relate to their identity-based goals as prospective teachers. Over the course of our interviews, we repeatedly asked our participants to articulate their views of good teaching and how these views compare with the ones in their current contexts (e.g., in their settings of TEPworld or FieldWorld). Dania's views of good teaching consistently appealed to the competence of an individual teacher as a clear and dynamic presenter, one who is "able to teach at all different levels, to all different learning styles, all in one lesson" [Interview 1]. In a later interview, she elaborated this by explaining that good teachers are "able to transfer information like that requires you [the teacher] to know it and then requires you to know how you can best present that to the students so they pick up as much of it as possible" [Interview 3]. Although she had opportunities to learn about more constructivist

learning theories and teaching methods in TEPworld, Dania's notions of good teaching appealed to metaphors from a knowledge-transmission model of learning, in which teachers "present" and students "pick up" material (Sfard, 1998).

In Dania's TEP coursework, she picked and chose what to pay attention to—in a sense, enacting the model of learning underlying her model of good teaching. She reported taking in only that which she viewed as useful. As she said:

I come to class, I pay attention, I don't promise to take notes and I don't promise to have done the reading ahead of time, but at the same time I'm trying to pick up what sounds important. *[Interview 1]*

By "trying to pick up what sounds important," Dania selectively attended to the content of these courses. She described, for example, paying more attention in her assessment class because she could "see how useful it is. So I'm trying to pay attention to that and actually do some of the reading" *[Interview 1]*. Like the intern who rejected pop quizzes because he was not a "scare tactic kind of guy," Dania asserted her ideas of what matters in teaching in (at least) two ways: by enacting her own model of learning as "picking up" material that instructors convey, and by selectively attending to the content of her courses based on her own notions of what was useful.

In contrast, we saw Abe, a former engineer, as taking more of a problem-solving view on teaching. Abe's notions of good teaching were more elaborate and subject-specific. He described a good teacher as somebody who is:

able to facilitate, just the whole classroom management issue, [...] able to sense sort of how the class is going, knowing when to spend enough time—spend more time on something or spend less time on something, learning how to assess students' understanding. [...] [R]unning group work effectively, providing clear directions whether it be oral, written, a combination of both, having the right level of specificity if that's the right word, the right concept. [...] And then of course in terms of subject matter, there's always more that I could learn about math and its applications and ways of just getting inside the students' heads and seeing what they're thinking and working with different approaches. That's one of my main interests. *[Interview 1]*

Abe was productively preoccupied with the intellectual work of teaching. In his methods class, when his classmates expressed admiration for his careful and probing questions during demonstration teaching, Abe reported that he spent a lot of time thinking about the mathematics he was planning to teach while doing other tasks, such as driving the car or taking a shower. In comparison to Dania, Abe had a more specific account of what it takes to be a good teacher. The teacher's work, as he describes it, is more active and complex. For Dania, the work of a good teacher involved clear presentation sensitive to multiple learning styles; for Abe, the work was messier, requiring monitoring of one's time, varying teaching strategies, as well as attending to students' understanding.

Abe's approach to his coursework reflected this in-depth and complex view. By

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his own account and our observations, he was fascinated by the processes of teaching and learning mathematics. Unlike Dania's mode of picking and choosing what to pay attention to, Abe approached his coursework with great zeal. As he describes:

Every one of the classes that we've taken so far would have been things I would have chosen to take anyway. So it's still very much that intellectual curiosity about everything that drives me in the classes. [Interview 1]

Abe resonated with his methods class's view of mathematics as problem solving. He viewed the work of teaching from a similar perspective and found the theoretical and practical tools of his coursework to be useful in understanding teaching practice. During interviews, he illustrated his thinking about teaching by discussing the questions he uses to sort through his planning:

I'm thinking about, "Okay, what would make a good example? What's kind of good way to have them pull apart this material?" [Interview 2]

[W]hat stands out to me is, "How do the kids interact with the math, and how does the teacher make the math accessible to the kids? How much set up does the teacher do? How do you develop a concept? How do you develop an overarching idea?" Those are some of the things that go through my mind during lesson or unit planning. I always want to make things connect to what we're going to be doing. [Interview 3C]

The questions Abe poses to himself about his teaching are ones that are not easily answered and will require him to tinker, collect evidence, and reflect—in other words, problem solve—about his practice.

Interns' identities as learners and as future teachers influenced their engagement in coursework and their orientation toward learning. Their views of good teaching reflected their own ways of learning as well as defining the parameters of their own personal learning agendas. Identities and their associated goals thus oriented the interns during their encounters with teaching in TEPworld and FieldWorld, creating personally tailored settings within those worlds that reflected their own identities.

Identification and Negotiation

While students may have entered the TEP with notions about learning and good teaching that shaped their experiences, the identities related to these ideas were not immutable. Students arrived with beliefs about good teaching, but often times, these ideas were elaborated or modified during their time spent in TEPworld or FieldWorld. We found that these modifications reflected interns' identity shifts as they learned about practice. Two processes, in particular, helped us understand the co-occurrence of shifts in identity and changes in understanding. We called these processes *identification* and *negotiation*.¹

Our focal participants aligned themselves in various ways with the kind of teaching promoted in TEPworld and FieldWorld. That is to say, these worlds—with their

roles, meaning systems, and symbols—became resources for them to understand their own emerging sense of themselves as teachers. When they integrated these into their existing identities, we called this identification. When they modified their identities based on what they encountered in TEPworld or FieldWorld, we called this negotiation.² Through participation in the activities and relationships in these figured worlds, identification and negotiation allowed the interns to use TEPworld and FieldWorld to understand themselves as teachers. The resulting newly modified identities changed their learning agendas, reorienting them to adopting or adapting teaching practices that had particular meanings associated with their newly modified teacher identities in that world. To the extent that interns identified with models of practice available in the TEPworld or FieldWorld, they came to behave *as if*, through completing these activities successfully (as defined by those in positions of power), they will become “good” teachers. We will illustrate the way that identification and negotiation can shift interns’ learning about teaching, along with their associated identities and goals, through the cases of Hilary and Brett.

Hilary: Identification to Support Learning about Assessment Practices

Hilary had an interdisciplinary social science degree from a public research university. Her background was in social justice work with urban youth, including work with homeless adolescents and in a teen health center in a local high school. She had several years’ experience as a counselor in a summer camp focused on social action, where she was a camp administrator during her time in the teacher education program.

In her first interview, Hilary described her “struggles” with her assessment course, a shared experience for the interns in TEPworld:

Well, assessment, who likes assessment? (*laughs*). I don’t like the facts and figures and I don’t like the data necessarily like—and they’re foreign concepts to me, it was like learning a new language. [...] It wasn’t in my schema. So I had to relearn all this new—learn all this new language, I had to reorganize my brain in how it thought, it’s exhausting, and it’s so detail oriented, you’ve got to come up with goals and your objectives and it has to match your [state standards] and cross reference this—I’m sort of not a very detailed person, I’m a big picture person, so it was just frustrating. [*Interview 1*]

There are two things to note about these statements about assessment class: Hilary’s assertions of her identity and her conception of assessment. In our framework, Hilary’s declarations about her personal preferences are identity statements. She asserted herself as a “big picture person” who dislikes the detailed “facts and figures” and “data” of assessment. Elsewhere when we asked about her notions of good teaching, Hilary described the importance of fostering respectful relationships with her students and facilitating their engagement with ideas. Her self-described struggle arose out of the need to reconcile the “facts and figures” of assessment with her own identity as a “big picture” teacher who valued relationships.

If existing identities were the only determiners of what interns learned, we might

predict that Hilary would tailor the arena of TEPworld to minimally include the work of assessment in her personal setting. She might have simply found it “not useful” to her own development as a teacher and decided to ignore it. Although training in concepts and tools of assessment was a common feature of the TEP, our data show that this kind of editing is, in fact, plausible. Another social studies intern rejected much of what she learned in the same assessment class because “the amount of work that goes into assessing is like, who would ever assess anything? [...] I would never do that *ever* again.” [Gemma, Interview 2B].

However, we find that the process of *identification* can override these identity-based personal preferences. In this sense, identification shapes the editing process of setting creation, leading to a different learning environment within the TEPworld that includes a wider swath of practices. In Hilary’s description of her own struggles with assessment, she explained a resource for her persistence:

I knew it was something that I had to work through, I had to like—I had to stick with it, I had to work really hard at it, because I had to get it. I knew that it had a purpose. I didn’t know what the purpose was but I knew it had a purpose. People kept telling me it had a purpose. [The instructor] said it a lot, like it’s going to be important. I have friends who are teachers who’ve gone through the TEP program, and they both have said that assessment is very, very important—it’s an asset when you know how to assess students well. [Interview 1]

Hilary had qualms about assessment and felt it might not fit her identity as a big picture teacher who values and cares about her students. Despite her reservations, the chorus of trusted voices telling her about the importance of assessment supported Hilary’s engagement in that class. Friends whom she viewed as worthy of emulation—friends whom she seemed to identify with—insisted that assessment is an important part of a good teacher’s toolkit. Her instructor’s message echoed this as well. This consensus allowed her to identify with, and thus aspire to, learning about assessment practices, even though her own identity-based preferences may have disinclined her to do so. This is an example of how identification with trusted persons can override the orienting forces of identity in creating settings for learning.

As Hilary opened herself up to learning about assessment, making it a part of her desired identity as a teacher, her understanding of assessment shifted. Her initial conception of assessment as tests (facts, figures, and data) made it difficult for Hilary to learn from the ongoing informal assessment she saw in FieldWorld. Through interaction with her cooperating teachers and students, however, she modified her understanding of assessment practices. Specifically, she appeared to change her notion of the function of assessment in teaching. Hilary’s assessment discourse shifted from describing a practice that allows one to grade students, to a practice more aligned with her vision of good teaching. In debriefing an observation with a member of our research team, Hilary made sense of an interaction she had observed with a disengaged senior who had not turned in an assignment:

I told [the student], “I’m really curious to see what you think about the movies, the movies we selected and how it went. I’m curious to see what you picked up from the two of them. I mean, honestly I just want to know what you’re thinking.”
[Interview 2B]

Hilary appealed to the student to complete an assignment so that she could assess him in a way that aligned with her ideas of good teaching. Her interaction around the assessment did not focus on the “facts and figures” of the knowledge he gleaned from her lesson, but, in keeping with her relational approach to teaching, she did seek to understand what he thought of the movies from the assignment. By emphasizing her curiosity about his thinking, Hilary displayed the kind of respect that was important to her as a teacher. At the same time, she supported his engagement with the content of her class by urging him to complete his assignment.

Identification with trusted others initially allowed Hilary to include assessment practices into her personally tailored setting of the TEPworld, despite her reservations about this work. Her experiences with students in FieldWorld reinforced the importance of these practices, while broadening her understanding of their purposes. She eventually understood assessment as more than just the work of facts and figures, but actually a critical tool in developing the kind of trusting, reciprocal relationships with her students that were important to her identity as a caring and competent teacher. In this way, identification supported Hilary’s learning of assessment practices, and ultimately, preserved her own sense of herself as a teacher.

Brett: Negotiating a Teaching Identity to Learn New Practices

Brett had experience teaching before entering the TEP. He graduated from a 10-day emergency certification program and then taught mathematics for three years, where he developed a strong identity as a “good teacher” as defined and enacted in the figured world of his school. By his own account, he had strong classroom management skills and was well liked by his students. His purpose in entering a teacher education degree program was solely to obtain a graduate degree to replace the emergency credential that limited his teaching career. He did no research on the philosophies or characteristics of different programs, assuming that all such programs were too theoretical and abstract. “I don’t live in that world,” he explained in his first interview, contrasting academia to the “real world” of the classroom. Initially, Brett did not identify with or confer legitimacy on TEPworld and had a very instrumental view of his enrollment in the program. However, upon entry into TEPworld, Brett began a process of identity shifting, resulting in a newly negotiated teacher identity that changed his own learning agenda.

On entering TEPworld, Brett interacted with others who challenged his sense of himself as a good and accomplished teacher. One of these individuals was his methods instructor, herself a former teacher. Brett identified with her as someone who cared about creating equitable mathematics classrooms. He respected the way she challenged his well-developed notions of how to accomplish that goal:

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That first week in class I wanted to communicate to my classmates [that] I know what I'm doing, so I gave the answers pretty confidently. And she would come right back on top of me—not saying 'you're wrong,' but with the questions that led me to [realize] I was wrong, or like there's another way here...I realized all the things I'm doing, all the things that I thought were good math teaching that were helping my students, I really wasn't helping them... that all of what I thought I knew (*laughter*) that was good teaching, I didn't. [*Interview 1*]

Elaborating more on the difference between his old perspective and the one he was presented with, Brett explained: "I looked at things more in terms of teaching and not in terms of learning." Brett's experiences in TEPworld caused him to re-evaluate his past identity as a teacher, as well as to begin modifying his vision of his ideal future teacher self to one who would not only succeed in engaging students with schoolwork, but also engage students in mathematical thinking.³ Encounters with TEPworld not only challenged Brett's identity as a good teacher, but provided the resources for changing that identity and expanding his developing definition of "good" teaching. By changing his identity in this way, his behavior, interactions, and understanding of his present experience also shifted.

Thus Brett negotiated his identity as a teacher, changing his orientation toward learning in TEPworld and FieldWorld. He still valued not letting students "slip through the cracks" (*Interview 2B*), but his ideas about the nature of those cracks—and how to guide students around them—had changed. Brett became motivated to learn what he needed in order to close the gap between his former (now inadequate) sense of good teaching and his new future ideal. Whereas before, he "very much proceduralized things [...] breaking things down in steps and easy ways to memorize things" he now wanted to change, to teach mathematics by "thinking of different representations and deeper meanings, like questioning, leading them to stuff instead of taking them to it or showing it to them." With new ideas of good teaching, he desired to learn from those he felt were legitimate sources of relevant knowledge, including some of his instructors and peers in TEPworld and FieldWorld.

Identity and Learning: What Does This Mean for Teacher Education?

In our analysis, identity shapes (and is shaped) by interns' learning in teacher education. Broadly speaking, identities orient interns in the TEPworld and their various FieldWorlds, prompting them to take up and reject the various teaching practices they encounter (Nolen, Ward, & Horn, forthcoming). Identities play an important role in tailoring the arenas of TEPworld and FieldWorld into the personally relevant settings that constitute the contexts for their learning.

We also see that our interns' teaching identities are an ongoing project, and that this identity construction is a productive place to connect to novice teachers' own learning goals. Two processes, identification and negotiation, provide a way for teacher educators to conceptualize engaging interns' teacher identities to cre-

ate openings for new learning. Through identification, interns trust in the value of practices that may not be immediately seen as consonant with their emergent teaching identities. This trust, placed in a friend or seemingly competent instructor, allows interns to affiliate with and learn about a practice that may actually seem counterintuitive to them. With negotiation, interns modify their teaching identities to incorporate new images of good teaching practice that they have encountered in TEPworld. These newly modified identities carry with them different learning goals, thus shaping the interns' learning in both TEPworld and FieldWorld.

In this brief article, our goal was to present the ways in which emerging teacher identities orient interns' learning during teacher education. Our ongoing analysis considers a number of different facets and implications of this problem. Of particular interest for readers of this journal are the way we conceptualize the different kinds of alignment between interns' personally edited settings of TEPworld and FieldWorld. We see a range of alignment relationships between the two worlds; that is, the practices promoted in TEPworld may or may not be visible and viable in different combinations in FieldWorld, and vice-versa. The alignment configurations support and constrain interns' learning in different ways. We are trying to understand the relative positions of TEPworld and FieldWorld that make for a kind of productive friction. By that, we mean that the slight misalignments may engage interns in the kinds of identity work that supports productive learning.

In examining these cases, we see that the interns who made the greatest strides in learning seemed to have experienced a certain tension arising from the gaps between TEPworld and FieldWorld. In the best scenarios, this tension helped the interns develop their pedagogical reasoning while, at the same time, honing their ability to adapt and coordinate different practices. If they had too much ease in implementing teaching practices, interns had limited opportunities to develop adaptation strategies and their reasoning. On the other hand, if they had too much difficulty, they often abandoned the practices they learned in teacher education in favor of the ones in place in the classroom, thus limiting their opportunities to develop skills in deploying those practices.

As previously stated, we see the identification and negotiation processes as the most promising venue for thinking about the design of teacher education programs. For simplicity's sake, we kept our illustrations of these processes in this paper rather straightforward. In our other cases, we see examples of identification and negotiation taking place over longer stretches of time, across the settings of TEPworld and FieldWorld. It is clear to us that building explicit supports for mediating TEPworld and FieldWorld—and the potentially productive tensions between them—may be the most promising way to support the learning that this identity work makes possible.

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Notes

¹ These ideas are similar to Wenger's (1998) constructs of *identification* and *negotiability*. For Wenger, identification and negotiability represent two components of identity that are in tension with one another. He uses identification to refer to "the process through which modes of belonging become constitutive of our identities by creating bonds or distinctions in which we become invested" (p. 191), often by using socially-rooted labels like "grown-up" or "American." On the other hand, "[n]egotiability refers to the ability, facility, and legitimacy to contribute to, take responsibility for, and shape the meanings that matter within a social configuration" (p. 197); that is, negotiability is the work of being a particular *kind* of grown-up or American, thus adding to the wider meaning of grown-ups and Americans. Wenger's emphasis is on identification with and negotiability of the identity categories themselves, while we have a slightly different but related interest in the way different identities are taken up and modified by individuals over time.

² We view these as analogous to the Piagetian processes of assimilation and accommodation, but we view them as social as well as cognitive phenomena.

³ This notion of representations of a future act informing the present has been noted as a factor in development. Cole (1998) talks about this in terms of *prolepsis*. See also Hoffman-Kipp, Artiles & López-Torres (2003).

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