Becoming a Hurdler: How Learning Settings Afford Identities

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In this article, we present a model for thinking about how learning settings provide resources for the development of the practice-linked identities of participants, drawing on data from a study on an African American high school track and field team. What does it mean to make an identity available in the context of a learning setting? In this article, we draw on current theories in anthropology, psychology, sociology, and sociocultural theory to develop a conceptual frame that might be helpful in addressing these questions. We focus on how individuals are offered (and how they take up) identities in cultural activities. We define three types of identity resources that were made available to student-athletes learning to run track and explore how they took shape in teaching and learning interactions in track. [identity, learning, African American students, culture]

Over the past three decades, theorists have increasingly viewed learning as fundamentally tied to the social and cultural contexts within which it occurs and have come to see learning not only as a cognitive process but as a sociocultural process as well (Cole 1996; Greeno 1997; Gutierrez and Rogoff 2003; Lave and Wenger 1991; Lee 2007; Rogoff 1993). Much of this work builds on the theories of Russian psychologist Vygotsky (1962, 1978) and takes as a core unit of analysis the cultural practices that people engage in as they go about their daily lives (Kozulin 2003). From this perspective, learning is as much about shifts in participation in social and cultural practices and activities as about shifts in ways of thinking (Lave and Wenger 1991; Rogoff 1993, 2003). In short, learning is considered a characteristic of practice (Wenger 1998).

Identity has also been conceptualized as an aspect of social and cultural practice. Holland, Lachicotte, Skinner, and Cain (1998) argue that cultural practices are “figured worlds” that carry with them a set of norms, expectations, and ideas that constrain and enable particular kinds of participation. Within these figured worlds, identity is constructed as individuals both act with agency in authoring themselves and are acted upon by social others as they are positioned (as members, nonmembers, or certain kinds of members).

Wenger (1998) has extended practice-based theories of learning to incorporate issues of identity into processes of learning. He conceptualizes learning as an aspect of identity and identity as a result of learning. For Wenger, both learning and identity have to do with shifting relationships to people and objects in a particular setting and involve membership in communities of practice.

However, not everyone is a part of the community of practice in the same way. Wenger distinguishes between different trajectories of participation in communities of practice. For the purposes of this article, two of these types of trajectories are
salient—*inbound* learning and identity trajectories and *peripheral* learning and identity trajectories. Inbound trajectories involve newcomers “joining the community with the prospect of becoming full participants in its practice” (Wenger 1998:154). In contrast, peripheral trajectories never lead to full participation—rather, individuals on this trajectory stay marginal to the practice over time. These trajectories are composed of both learning opportunities and opportunities for the development of identity.

The link between identity and learning is not novel for educational researchers. Research on the learning and achievement of “minority” students has also highlighted (or implied) the relation between processes of learning and identity processes (Conchas 2001; Fordham and Ogbu 1986; Levinson et al. 1996; Mehan 1996; Ogbu 1987; Osbourne 1997) and has noted that identities can constrain or enable opportunities to learn and be successful in school (Davidson 1996; Ferguson 2000; McDermott and Varenne 1995).

Nonetheless, Wenger’s formulation is particularly powerful for understanding the intertwining of learning and identity processes in practice, as it attends to learning not simply as doing well academically but as a microgenetic and ontogenetic process of shifting participation in cultural practices. As such, it reconceptualizes learning from an in-the-head phenomenon to a matter of engagement, participation, and membership in a community of practice. In this article, we build on Wenger’s theory and draw on data from a study of identity and learning in the sport of track and field to consider the ways that identities of practice participants are made available in learning settings and the relation between learning and identity in cultural practices.

**Theories of Identity and the Social World**

Fundamental to Wenger’s theory is the idea that identity is constructed at the intersection of the individual and the social world. By and large, both sociological and psychological approaches have acknowledged that identity is simultaneously an individual, social, and cultural phenomenon. In psychology, Erik Erikson’s work is foundational for theories of identity. Erikson (1968) viewed identity formation as a psychosocial process that incorporates a psychological dimension (ego identity), a behavioral/character dimension (personal identity), and a social dimension (social identity), relating to roles within a community. Erikson’s work spawned a large body of research in psychology that has largely focused on psychological aspects of identity formation (e.g., Phinney et al. 2001). Similarly, theories of self have largely focused on psychological aspects of the self and its relation to cognition, behavior and choices, and the internal consistency of self-knowledge (Cote and Levine 2002).

Identity theories rooted in sociology have highlighted multiple interacting levels of identity and the social nature of identity constructions and have largely focused on the role of social structure and social interaction in identity processes (Weigert et al. 1986). Identity, from this perspective, develops in relation to key social circumstances, including social roles, cultural institutions, social structure, and everyday interactions with others.

In particular, sociologists from the symbolic interactionist school highlight the ways in which identities are negotiated in social interaction in daily life (Mead 1934) and take as central the idea that social reality is created and negotiated by people through the names and meanings (symbols) they attach to things when communicating with one another. Erving Goffman (1959, 1963, 1974) is perhaps one of the most
well-known symbolic interactionists. His research highlights the ways that we (in concert with others) take on and ascribe roles and personae in social interaction and considers the vital role of the social world in that process of ascription.

Contemporary symbolic interactionist research has generated theories that address additional aspects of identity development and maintenance. For example, McCall and Simmons (1978) developed the concept of “role identities,” as a focus that could elucidate the way in which social roles facilitate the development of personal identities through interaction. Stryker (1987) built on this idea and has argued that role enactments are an important source of identity and that identity commitment (as a function of a role) is related to the number of social ties and their affective importance (see also Stryker 1968). A related theoretical approach that has been taken up by psychologists is reference group theory. Reference group theory (Hyman 1942; Leach and Smith 2006; Merton with Rossi 1957; Turner 1956) argues that one of the most powerful influences on individuals’ sense of self and behavior is the reference group that they belong to (Suls and Wheeler 2000), which serves as a context for individuals to analyze information and make decisions.

With influences from both sociological and psychological conceptions of identity, Cote and Levine’s (2002) cultural-identity model articulates three levels of analysis that are required to offer an account of identity, including individuals, social interaction, and broader society. Further, they argue that individuals utilize resources as they construct identities in social settings. Examples of these identity resources include tangible resources such as group membership, as well as intangible resources such as charisma, impression management skills, or psychological coping mechanisms. While in Cote and Levine’s approach, identity resources are properties of individuals, we view them as also located in the environment. These ideas about the nature of identity are consistent with Wenger’s theory, but they also offer additional conceptual tools to support our inquiry of the ways that the social world makes identities available to individuals in learning settings and the relation between learning and identity, which we will say more about in a moment.

Distinguishing between Learning and Identity

If the strength of Wenger’s theoretical approach is to help us think about the way in which identity and learning processes are related in practice, its weakness is the ambiguity around how these processes are related and whether or not they are distinct processes at all. At times Wenger describes learning and identity processes as interacting, for instance, where he says, “Learning transforms our identities: It transforms our ability to participate in the world by changing all at once who we are, our practices, and our communities” (1998:226). This quote speaks to the effect that learning has on identity—through transforming our ability to participate in the world. Here, learning affects identity by opening up new ways of participating and thus new identities. At other times he describes them as seemingly the same thing. For instance, he writes, “Because learning transforms who we are and what we can do, it is an experience of identity. It is not just an accumulation of skills and information, but a process of becoming—to become a certain person or, conversely, to avoid becoming a certain person” (1998:215). In this quote, he seems to suggest that learning and identity are identical processes and that to learn is the process of becoming that is identity. This contradiction may partially be explained by the fact that Wenger views participation in communities of practice as mediating
both learning and identity. However, the definition of learning as solely (or even primarily) a social process may obscure the important distinctions between processes of learning and processes of identity.

Other research has suggested that the distinction between learning and identity may be important to preserve. For instance, Herrenkohl (2001) and Wertsch (1998) argue that one can appropriate cultural tools (an aspect of learning) without taking them on internally (an aspect of identity). Boaler and Greeno (Boaler 1999; Boaler and Greeno 2000) make a similar point about math learners. They argue that the ability to do the math alone is not enough to support strong mathematical identities for students; rather, mathematical identities are tied to understanding and engaging authentic involvement in mathematics and seeing oneself as an effective mathematics learner in the classroom.

This research highlights the importance of conceptually distinguishing learning from identity, even as we come to understand their deep implications for one another. For the purposes of this article, we define learning and identity (in practice) as follows. We consider learning to be shifts in use of artifacts (both cultural and cognitive) for problem solving, sense making, or performance. We consider identity to be one viewing participation in the practice as an integral part of who one is; what we call “practice-linked identities” (Nasir and Hand 2005, 2008). These definitions allow us to consider the relation between learning and identity while still considering them to be independent processes.

In this article, we take up the question of how practice-linked identities are made available to participants in learning settings, paying particular attention to the ways that processes of learning are interwoven with processes of identity. Specifically, we focus on a high school track team and the ways in which identities as a track athlete were made available to students. We are especially interested in how such local connections between self and activity are fostered through interactions whose purpose is teaching and learning. To approach this analytical task, we draw on Cote and Levine’s notion of identity resources, Holland et al.‘s notions of positioning within figured worlds, and Wenger’s ideas about inbound and outbound identity trajectories through cultural practices. In doing so, we hope to bring some clarity and refinement to the question of how identity and learning processes are distinct, yet related, and a better understanding of how identities are made available in teaching and learning interactions.

We highlight three kinds of resources: material resources (the physical artifacts in the setting), relational resources (interpersonal connections to others in the setting), and ideational resources (ideas about oneself and one’s relationship to and place in the practice and the world, as well as ideas about what is valued and what is good). We also explore the ways in which these identity resources accumulate over time, thus having implications for athletes’ trajectories (of participation, of identity, and of learning) in the practice of track and field.

Methods

To explore learning and identities in the context of track and field, we relied on a variety of data-collection techniques. Our goal was to capture the breadth and depth of student-athletes’ experiences as they engaged in various aspects of learning their sport. The study involved student-athletes from a large public urban high school in a
Northern California city. The school, Hills High, served more than 2,200 ethnically and economically diverse students (50 percent African American, 20 percent Asian American, 17 percent Latino, and 13 percent white), grades 9 through 12.

The high school track and field team consisted of approximately 40 student-athletes, all African American, including the coaches. Many of the female track athletes were new to the sport the year we studied the team. The team practiced approximately two hours a day, four days a week, and had either a track meet or a practice on Saturday.

The coaches varied somewhat both in their experience and in their approaches to coaching. Our observations focus primarily on the head coach, Coach J, as he was most often in direct interaction with and instructing the athletes. He also oversaw practices and games. Coach J was a male in his early thirties and was also a member of our research team. Coach J had a muscular build and a deep voice that he used with great authority, though he also joked with the students frequently. He was a former track athlete himself, and he had been coaching for five years. He was assisted by two other primary coaches: Coach B, a female also in her early thirties, who was new to coaching, and Coach G, a male in his late twenties who often worked with the field event athletes (shot-putters and jumpers).

The research effort spanned eight months, from January to August 2003. Three researchers were involved in data collection. Two of the researchers, both from a local university, initiated a conversation with Coach J about our interest in studying teaching and learning in the context of track, out of which this collaborative project was designed. One of the researchers was an African American female university professor in her mid-thirties who had never run track but had studied learning in other sports contexts. The other researcher was a white female in her mid-thirties who was a postdoctoral fellow at the university and a former cross-country runner.

The researchers, thus, were positioned quite differently and took up different roles with the athletes. Coach J was an insider who knew the athletes well and was almost entirely in his role as the coach during practices and meets. The white female researcher, as a former track athlete, alternated between observing, making conversation with athletes, and offering them tips on their performances. The African American female researcher most often observed and took field notes or videotaped, occasionally joining in athletes’ conversations or conversations between athletes and coaches. She also occasionally gave students rides to meets in her car.

To gain insight into the athletes’ experiences we relied on field observations, surveys, formal semistructured interviews with 30 athletes, and informal and formal conversations with athletes and coaches during practice and at meets. We observed track practices and meets at least twice weekly for the duration of the study over the eight months of the track spring and summer season, resulting in over 125 hours of observation, conducted by the two female researchers. Practices and meets were videotaped whenever possible, and field notes of events were recorded. At the start of the high school season, we provided a survey (n = 39) to collect background information and baseline data on students’ attitudes and perceptions toward track and their views on school-related issues, such as how important school was to them.

The semistructured interviews sampled 15 boys and 15 girls. Questions focused on their history with the sport, their goals for the season, their sense of their role on the team, their perceptions of success and ability, their preparation for and performance in track meets, and relationships they established with teammates and coaches.
Interviews were audiotaped and then transcribed. Additionally, Coach J and the two other researchers met weekly for the duration of the season. During these meetings key events from the week were discussed, and Coach J offered his perspectives on events, goals for participation, and general philosophy and approach to coaching. We also collected artifacts produced by students, such as written statements of their goals and areas of strengths, entry submissions to track meets, records of anticipated point tallies before meets and actual meet scores, and newspaper articles involving the team or individuals.

The data analysis process was iterative and started early in the course of the study. As we analyzed transcripts and videotapes and discussed observations, we identified shifts in the ways in which students participated in activities and the ways in which they spoke about their participation. We tried to better understand the processes behind these changes and follow them as they continued to unfold.

After the first three weeks of the season, we identified six athletes (three females and three males) that we thought represented a range of athlete profiles, from those that were dedicated to the sport to those whose participation was less central. We tried to choose athletes that represented a cross section of events. We also made sure that these case study students were among those interviewed and paid particular attention to them during our observations.

All field note and interview data were entered into a qualitative analysis program and coded. Our coding process began with our analysis team independently open coding (Emerson et al. 1995; Miles and Huberman 1995; Strauss and Corbin 1998) a subset of the notes and transcriptions. This process revealed several analytic categories that we chose to focus on, including assessment and evaluation, relationships (coach–athlete, athlete–athlete, coach–coach), goals, identity, and learning. All data were coded using these categories, and then all instances of each coded segment of interaction were examined to explore recurring themes and patterns. We found that identity was a common theme, especially during teaching and learning moments. Another round of analysis and coding of these identity moments revealed that youth were provided multiple opportunities to become track athletes. We came to conceptualize these as “resources” for identity development in track. We also developed full cases of our case study students, whose experiences seemed to represent important aspects of the track experience. We draw from several of these cases in this article as well as from student interviews and the larger corpus of video and field note data.

Track and Field at Hills as a Figured World and a Community of Practice

Like any community of practice, track and field at Hills High was both a local community and a part of an imagined community. That is, students participated in both the local activities of track and field, including practices and meets, and a broader statewide and national track and field community. This broader community shared a set of norms, beliefs, and standards for good performance, as well as specialized language and ways of training the body for optimal performance at the various events. An important goal of track, shared among the national community, was reducing the time it takes one to complete an event, as times were the standard measure of performance in most events.

In this local community there were other important norms and values. For instance, the coaches at Hills were adamant about track being a means of helping students
succeed academically and get them into college. Another value was an emphasis on social relationships, in the interest of both creating social support and maintaining a winning record. In the figured world of track, members held the assumption that everyone could be competent at performing their event, along with a belief that some athletes were born with or develop natural physical talent that makes them faster. Hard work (and sometimes pain or throwing up) was the way to develop one’s talents. Another important norm was not letting the team down—that is, accountability to the team as a whole. We saw this norm being voiced both by coaches and by athletes, though at times, it was in tension with a desire for independence and/or blame for the athletes. Track practice was characterized by extensive repetition and consistent evaluation and feedback. The learning that occurred in the context of track was not purely cognitive but also involved physical and emotional dimensions, including knowing how to position one’s body during events, feeling rhythm and timing, believing one is capable and knowing to do one’s best, and having the emotional stamina to sustain oneself in the face of competition.

Identity Resources in Teaching and Learning Interactions in Track and Field

We argue that the practice of track made available (through the organization of the practice, its activity structures and artifacts, and the norms and interaction within it) three core resources that supported the development of students’ identities as track athletes. These are (1) material resources, (2) relational resources, and (3) ideational resources. By material resources, we mean the way in which the physical environment, its organization, and the artifacts in it support one’s sense of connection to the practice. Relational resources refer to the positive relationships with others in the context that can increase connection to the practice. Ideational resources refer to the ideas about oneself and one’s relationship to and place in the practice and the world, as well as ideas about what is valued or good.

Following, we explore how each of these resources for the development of practice-linked identities was made available as athletes participated in track and field. We also offer excerpts from a track practice that illustrate how these resources were offered and taken up in moment-to-moment interactions.

Our analyses suggest that as all of these resources supported identities as track athletes, they also supported learning. Material resources were the artifacts that one learned to master differently as a part of learning the sport. Relational resources were both a means of learning (that is, athletes learned through interactions with others in the practice) and a reason to learn. Ideational resources became a part of the definition of learning and competence and of determining what was worthy to be learned. Identity and learning processes, thus, were distinct, yet they mutually shaped one another through participation in teaching and learning interactions within the community of practice. Over time these interactions with identity resources accumulated to form trajectories of identities, which led toward fuller participation and expertise or toward peripheral participation and less rich learning outcomes.

Material Resources

Material resources for the development of a practice-linked identity in track consisted of the physical space within which track practices and meets were conducted
and the artifacts that were present in that space. These included the track itself, uniforms, spikes, hurdles, and starting blocks. Material resources also included how athletes came to use the artifacts in an expert way and how they moved through the space with expertise and ownership. For instance, a football player who had recently joined the track team showed up to the first meet with football cleats instead of the specialized track shoes (spikes) that he needed. Obtaining the specialized track shoes and coming to understand the difference between football cleats and track spikes were aspects of his becoming competent and coming to see himself as a track athlete.

Another important artifact in track and field was the starting block. The starting block is a portable foothold that runners can use to get off to a fast start at the beginning of a race. Interestingly, the use of the starting blocks was left up to the individual athlete. When athletes showed an interest in using the starting blocks, they were taught how to use them, but such instruction was initiated by the athlete. Using the starting blocks supported students’ sense of themselves as track athletes and was a part of the way athletes positioned themselves as expert.

However, access to specialized artifacts was not always evenly distributed. At times, athletes’ bids for the use of particular specialized equipment were taken up by coaches or denied in line with coaches’ perception of potential. Consider one incident involving Gloria and Harrell, both first-year track athletes, who were warming up on the track along with several other athletes. While the coach felt that Harrell would never be a great athlete, he thought that Gloria had potential. When Gloria asked to try a new piece of equipment, the coach consented, but when Harrell made the same request, Coach J responded negatively. While both athletes actively sought out training on the equipment, Coach J differentially distributed access to the specialized equipment, perhaps strengthening Gloria’s track identity but not Harrell’s.

Relational Resources

Relational resources included the multiple opportunities for connection with teammates and the coach. As individuals connected to others in the practice, it strengthened their sense of connection to the practice itself, because they came to define themselves as a member of a community that participated in track. Track made relational resources available in myriad ways, which some students took up more readily than others. One way relational resources were made available was through the organizational structure of the meets. Meets lasted all day, with various events occurring throughout the day. Athletes and coaches passed the time together in the stands, with a large cooler full of food and water, so there was a lot of time for the sharing of personal stories and connecting to the group.

Many opportunities for connection arose spontaneously, like at meets, but such opportunities were also crafted and supported explicitly by Coach J. For instance, in one incident Coach J encouraged a student to spend the spring break at the home of a teammate who lived closer to the school—in this case a logistical issue about getting to practice created the opportunity for relationship building. In another incident, the coach relayed a story about a mid-season runoff, where a freshman intentionally lost a race to preserve her relationship with two older runners. In response to this, the coach told the older runners that they should do a better job of making the freshman
know that her relationship with them was not in jeopardy and that she “fits in.” In this interaction, and in others, the coach conveyed the importance of strong relationships between the students to creating an environment that supports optimal skill development and performance.

Opportunities for connection also played out in interactions between athletes. For instance, teammates developed nicknames for one another and encouraged one another as they performed their events. Thus, the coach and athletes coconstructed the strong relations with one another.

In the following example, Coach J explicitly built students’ relationships with one another and with him to both support their track identities and encourage them in a difficult learning activity. He was working with the girls’ relay team, practicing handoffs. There were four girls on the track (Marlena, Belle, Candy, and Shawna), each in her starting position, about 100 meters from one another, in different lanes. They had attempted the handoffs several times, but they kept missing each other, thus they kept needing to repeat the exercise. They were tired, and the coach talked to them as he gave them a moment to catch their breath. He asked two of the girls what they wanted to do when they grow up and then asked them other questions about why they had chosen those professions. After a few moments of conversation, he asked Marlena if she was ready to run again. Marlena ran and passed the baton to Belle, but she missed the handoff:

BELLE: I’m tired, and I can’t run no more!
COACH J: That was right there.
MARLENA: I got out that time.
CJ: Yeah you got out two steps too early. One step too early and you’d be fine. Y’all were right on pace to get it right here. Right here Marlena would have had it in full stride. . . . Let’s try it again.
Belle expresses frustration by making a face and walks back to her starting place.
CJ: I know. I know. If you’re that tired, then get it right.
CJ: What you wanna be when you grow up Belle?
She doesn’t answer for a moment.
B: A hustler. (She says this slightly playfully, in a somewhat resistant way.)
CJ: Did she say a hustler? . . . A hustler, no we don’t want that Belle.
B: Brett Farve.
CJ: (pressing) Do you want to be a businessperson?
B: I want to be an entrepreneur.
CJ: What do you think you’re good at selling?

This interaction continued for another 15 minutes, as they continued to practice handoffs and the coach continued to engage the conversation about their future careers, taking what they said and describing a way to turn their respective careers into a collective business.

This interaction between the runners and the coach served multiple functions. One function it seemed to serve was to give them much needed rest time at the end of a practice that had been demanding physically. But another purpose it seemed to serve was to offer the runners a sense of belonging in the practice. Coach J engaged conversations that fostered social relationships to sustain their effort in a difficult moment. As relationships were built, runners repeated important aspects of the practice that allow them to gain competence. This building of competence and of the relationships with one another served to strengthen their identities as runners. Thus,
Relational resources were fundamental to the teaching and learning process, as they provided both a means of and a motivation for learning.

**Ideational Resources**

One ideational resource in track and field was to control emotion and channel it. This is exemplified in a comment by Coach J in practice, “Take anger and frustration and turn it towards beating the person next to you.” In another example, values around who one should be in track were conveyed when Coach J told a hurdler to “master the hurdles rather than let the hurdles master you,” highlighting a way of being in track. With this statement, the coach referred to how one interacts with the hurdles physically but also indicated an optimal emotional stance. Most often, ideational resources were made available through social interaction and discourse.

The event that an athlete competed in was also an ideational resource, in that it provided an important idea about how one fit into the team. The coach referred to the athletes by the event that was their primary event—he called them “hurdlers” or “sprinters” or “jumpers.” Over time, they came to refer to themselves and one another by their events as well. In the following episode, a group of female track athletes were learning to hurdle during a track practice. Specifically, in the following segment, the hurdlers are learning to three-step, an important form to help better their performance. In our view, there are two important ideational resources that were made available in this interaction. The first is the idea that the athlete, Octavia, is a hurdler, and the second is about what is important to attend to and strive for in a performance of hurdling:

(Octavia takes off from the starting line toward the hurdles about 10 seconds after she got in set position. She goes over the first hurdle and lets out a little squeal before going over the second and knocking it over.)

OCTAVIA: I can’t get.
COACH J: Look here kid.
O: I can’t.
CJ: Look here, you’re going to be a hurdler. That was the best that you’ve ever gone over any hurdle. That was the best that you’ve gone over any hurdle. Did you feel how much speed you had when you came off? But you have to control that speed and when you get to the next hurdle, one two three up, out. (He shows her.)
O: How many did I have, four?
CJ: Yeah, that’s why you, that’s, yeah, you had four, that’s why it went over.
(Octavia walks back to the starting line area and gets back in line behind the other hurdlers.)

Immediately after her attempt, Octavia evaluated her performance negatively, expressing frustration and a belief that she could not accomplish the task—she could not get over the hurdles. The coach responded with, “Look here kid, . . . you’re going to be a hurdler,” an explicit verbal positioning as a hurdler, which dismissed and reframed her negative assessment and offered the idea of herself as a hurdler. He then reframed what Octavia evaluated as a negative performance into verbal praise, “That was the best that you’ve ever gone over any hurdle.” In making this statement, he not only marked her performance as successful but also shifted the criteria by which she might be evaluating her own success. He asked, “Did you feel how much speed you had . . . ?” and in doing so, he identifies one aspect of hurdling, speed. He further scaffolded her understanding of her performance, “But you have to control that
speed... when you get to the next hurdle.” In this interaction, several ideational artifacts about Octavia and about hurdling were made salient. Importantly, she actively participated in this exchange, deconstructing her own performance.

Thus far, we have articulated the presence of three types of resources for identities in track and field. We have explored how each of these types of resources supports track identities and have described how these resources were made available in teaching and learning moments.

We would like to reflect for a moment about where learning fits into this analysis of identity resources. In our view, the identity resources that we have described both constitute a way that the practice of track and field makes practice-linked identities available for participants and illustrate the what, the how, and the why of learning in track. In the case of the material resources, we saw that coming to successfully engage and manage a range of specialized artifacts simultaneously made practice-linked identities available to participants and became the content of their learning. In the case of relational resources, we saw that the relationships between athletes and with coaches both strengthened athletes’ sense that they were members of a community of practice and became a way to sustain participation in difficult learning moments. Our exploration of ideational resources showed that young people are often explicitly positioned athletes as “hurdlers” or “jumpers” and that they are offered a perspective on what kind of hurdlers, jumpers, and people they should be striving to become. In other words, these ideas about the sport and about the athletes informed the goals of learning.

In this analysis, we have attempted to provide a sense of the range of ways that material, relational, and ideational resources were made available to track athletes. We have also tried to think carefully about how these resources were related to learning. However, thus far, our portrayal has not been sensitive to change over time or the ways in which such resources were not offered to the same degree for all athletes. Further, these analyses have not accounted for the ways that these moments of teaching and learning were cumulative and over time came to define different trajectories of identity.

Trajectories of Identities: Inbound and Peripheral Practice-Linked Identities

We focus in this section on athletes’ identity trajectories—both inbound trajectories and peripheral trajectories. In doing so, we begin with an extended case of an inbound identity trajectory. We describe Octavia, a student (who appeared in the prior section) who exemplified an inbound trajectory, and we consider both the process of this inbound trajectory and potential relational, material, and ideational identity resources that she was given access to. We then briefly consider three additional cases, Yaheem, Gozi, and Carla. Yaheem offers more insight into inbound identity trajectories and the potential power dynamics between teacher and student. Both Gozi and Carla illustrate peripheral identity trajectories, as both remained on the margins of the practice and the full range of resources of identity development was never made available to them. In this section, we make several main points: we highlight the difference between inbound and peripheral trajectories of identity; we explore how different participants in the same practice can be offered different identities; and we consider change over time in practice-linked identities.
Inbound Identity Trajectories

Octavia was a tall, thin African American sophomore who always seemed a bit unsure of herself on the track but very matter-of-fact about her schoolwork and being college bound. Unlike most of her team members, she did not carry herself as an athlete off of the track. At a track meet out of state the team had the opportunity to tour a local college campus. While the other athletes showed up in sweats and running gear, Octavia wore a short jean skirt and sweater. On the track, however, she was quite focused; she rarely smiled, and she was intent on her performance. This was her first year running, and she got involved with the track team because her twin brother ran on the same team and her mother decided that she would run too, so that they would be together.

Octavia identified strongly as a student, and she saw college as a way to escape some of the family conflict at home. Near the beginning of the season, she was assigned to compete in the 100-meter hurdle event by the coach, because he believed that she had potential as a hurdler. Octavia did not see this potential, and she spent most of the season knocking down hurdles and falling during meets. As the season progressed, she gained some mastery over her hurdling and stopped falling so much. She also joined the relay team as a second event in early March.

We argue that Octavia’s practice-linked identity with respect to track increased over the course of the season. That is, she became more connected to the practice of track. This shift was evidenced both in her retrospective account in an interview toward the end of the year and in changes in her participation in practices and meets from early in the season to later in the year. Co-occurring with these shifts were changes in Octavia’s goals in track, changes in her performance as she learned to hurdle, and changes in her social relationships with other members of the team.

Early in the season on our survey, Octavia was asked to personally rate the importance of her participation in track and school and the importance of being a good student and a good athlete, on a scale from 1 to 6. She rated her participation in track as a 4 and the importance of being a good athlete as a 3. She also wrote that her track goal was to “become a better hurdler,” which was quite general as compared to the goals of other team members who had run track longer—they had more specific goals, like making it to the state championship meet or achieving a certain time on an event. At this time in the season, the coach said of Octavia, “She just has no idea what she is capable of... she has no idea.” In a conversation with researchers late in the season, Octavia described her early feelings about track, “I was mainly there to be with my brother and because my mother wanted me too—it wasn’t really my thing.”

This moderately involved positioning with respect to track was also evident in her performance in practices. Early in the season, Octavia reluctantly performed the hurdling drills during practice and rarely spoke to her team members. She spent most of practices performing drills with the other hurdlers; as she did so, she frowned, huffed, and tried to skip her turn. She did not know key track terms, such as the “lead” leg, and when corrected by the coach, she responded halfheartedly by saying, “I guess” and “I’ll try.” When she knocked over a hurdle she was unwilling or unable to evaluate her performance.

Thus, Octavia’s participation in track at this initial point in the season was somewhat reluctant, though she did engage in the drills, and she continued to attend practice. Her own characterization of the role of track in her life was as something she
participated in to appease others: she did not take much ownership or have deeply held goals for her participation.

By the end of the season, her practice-linked identity with respect to track and being a hurdler shifted, involving both shifts in relationships with coaches and team members and increasingly skilled performances. In an informal interview toward the end of the season, Octavia described her own development as a member of the team, “I guess I started to really become a part of the team, we are like family.”

This sense of family was evident in her interactions with others on the team. At the season’s end, Octavia identified her role as “the mama of the team.” This sense of personal connection to other team members was evidenced by her increasingly friendly interactions with teammates. During this same practice, Octavia and another student took responsibility for leading the practice of the elementary school “club” team that practiced with them. As they gave the younger students instructions and drills, they used language and gave feedback in a way that mirrored what their coach did with them. This instance was an extension of Octavia beginning to take more responsibility for herself and others in the track context.

Her goals for performance became more specific. She went from having the general goal of getting better to saying, “Next year I want to win State.” This statement and others illustrate that she intended to participate in track in the future and that it was important to her to become a better athlete and to improve her times. However, even at the year’s end, she expressed ambivalence about her confidence in her ability to consistently make it over all of the hurdles.

Finally, Octavia shifted in her positioning of herself and responses to feedback during practice. We noted that early in the season Octavia participated in practices with a bit of frustration and resistance. In the last two practices of the league season, Octavia performed warm-ups and drills and practiced the 100-meter hurdles on her own without guidance or direction from the coaches. When offered evaluation or feedback, she nodded her head and attempted to incorporate the feedback into her performance. However, this shift in participation was not unilateral—at another practice late in the season, Octavia displayed this same drive and independence, but at the end of practice she sat down on the grass for about 20 minutes to socialize with her teammates. At this point in the season, Octavia seemed to be participating in the practice not for others but for herself, so that she might improve her performance.

Throughout the season, multiple resources for the development of a practice-linked identity in track were accorded to Octavia. With respect to material resources, Octavia performed her events on the track and on the field, wore appropriate gear for running track (and a uniform during meets), and learned to engage the physical artifacts (like the handoff stick and the hurdles) with increasing fluidity. Octavia was offered explicit instruction on the use of these artifacts throughout the season.

Octavia also had access to relational resources. She had many opportunities and was both implicitly and explicitly encouraged to build social relationships with her team members, as well as with the coach. These social relationships are supported by her membership on the four-person relay team, which both confirmed her competence as an athlete and offered her opportunities to bond with the other three members of the relay team. As these relationships developed, Octavia came to see herself as “the mama of the team.” In this role, she both accorded herself and was accorded by others a unique social position on the team, where she saw herself as responsible for and responsive to the needs of others.
And finally, Octavia had significant access to ideational resources that could support her developing practice-linked identity as a runner and hurdler. She was told on multiple occasions (explicitly) that she was a hurdler and that she would learn to master the hurdles. She was also repeatedly given instruction on ways to think, move, and feel like a hurdler. Octavia actively chose to take up this instruction. We saw a couple of examples of this earlier, when Octavia’s goals for her hurdling performance were consistently reframed to focus on appropriate goals for her performances and how to focus mentally and emotionally: in short, how to “be” a hurdler.

Yaheem’s case also illustrates an inbound identity trajectory. Yaheem was a football player who began running track as a senior when a shoulder injury meant that he could not play baseball in the spring as he had done in prior years. He was headed to a local state university, where he had landed a football scholarship. Yaheem was about 5’7” tall, broad shouldered, with medium brown skin and shoulder-length dreadlocks. He was driven and goal oriented as a track athlete. Early in the season, Yaheem was not at all self-identified as a track athlete. He was the star football player and was known on campus in that role. He did not know much about track and wondered why his “spikes” had flatter points on them (it is because they were football cleats). His goals for the season were “just to get faster. So to help me for my football times to increase. And I would like it to help me build up my form as well.” In short, Yaheem’s goals were about football, not track.

By the end of the season, Yaheem had taken on a central role on the track team. He became a valued member of the relay team and ran the relay race, the 100-meter, and the 200-meter and competed in the long jump, as well as discus and shot put. He saw himself as a go-to man on the team, a person that the coach could count on to be versatile and to fill important gaps on the team. He felt quite successful in the sport and felt that Coach J respected his contribution to the team.

As with Octavia, all three types of identity resources were consistently made available to Yaheem. Through his participation in practice, and being assigned to a wide range of events, Yaheem had access to a range of material resources, including the equipment and spaces on the field and on the track for learning to perform his events. Since he saw himself as an athlete, he was confident about his ability to learn to use his body in the events and to use the equipment necessary to perform well. Coach J encouraged him to try an increasing number of events over the course of the season and came to draw on his versatility.

Relationally, Yaheem was provided with multiple opportunities to develop relationships both with the coach and with his teammates, especially those on the relay team. Both Coach J and Yaheem identified their relationship as having gotten off to a rocky start when Yaheem was a sophomore. Coach J perceived him as an arrogant athlete, and Yaheem acknowledged that he used to be “bad” sometimes. They were disdainful of one another at a distance until Yaheem’s senior year, when he decided that he wanted to run track and approached Coach J. Both reported that since this initiative on the part of Yaheem, they had a strong, positive relationship. In addition to having and creating opportunities to build a personal relationship with Coach J, Yaheem was also on the relay team with three other male runners, Terry, Calhoun, and Carl. Coach J assigned Terry and Calhoun to look after Yaheem, especially after he discovered that Yaheem had a tendency to disappear (“wander off”) during meets to spend stretches of time alone. By the end of the season, Yaheem was close friends with Calhoun and Terry, as well as the other seniors on the team.
With respect to ideational resources, Yaheem already had a sense of himself as an athlete in general; however, he had very little sense of what it meant to be a track athlete in particular. He was encouraged to think about himself in a variety of roles on the team and came to think of himself as a generalist that could help out in multiple ways in a pinch. Rather than be worried that he did not have a particular specialty, Yaheem embraced the identity of being an all-around track athlete. Both he and the coach acknowledged this role in conversations near the end of the season. Yaheem’s athletic success confirmed his identity as a track athlete for him. His times got better over the course of the season, and he was relied on more by Coach J and teammates; thus his trajectory was inbound—toward being a more central participant in track and field.

Peripheral Identity Trajectories

We have focused thus far on the ways that practice-linked identities were made available to students through material resources, relational resources, and ideational resources. Octavia’s case (and Yaheem’s) represents the kind of positive identity and learning trajectories that may be possible when these resources are readily abundant for newcomers. We now consider two alternative cases, the cases of Gozi and Carla—in which the resources to support a practice-linked identity were less available, thus resulting in peripheral identity trajectories.

Gozi was tall (about 6’3”) and thin, with dark brown skin and hair shaved very close to his head. He was unsure of himself and spoke softly, often mumbling. In practice, he was playful and sometimes off task, and as the season progressed he was often singled out by the coach as goofing off or not paying attention (even when he was paying attention). He ran the 200-meter event but wanted to run hurdles or the 100-meter race. As for many of the male track athletes (and like Yaheem), track was not Gozi’s first sport. He had both played basketball and run track since his freshman year.

By his junior year, however, it was evident that he was not going to be a star on the basketball team. According to his report, the basketball coach did not give him enough playing time during the games to show his skill, due to the presence of the younger brother of a professional basketball player who was also on the team. At this time, he began to think about taking track more seriously. In many ways then, from this point Gozi potentially could have been on an inbound identity trajectory. And yet, as the season progressed, Gozi’s participation remained marginal. By the end of the season, Gozi had virtually disappeared from involvement with the team.

One major reason why he stayed on such a peripheral identity trajectory had to do with his relationship with Coach J. Both he and Coach J relayed a story of an incident that occurred when Gozi was a freshman that laid the foundation for their contentious relationship. Once, when the track team was practicing, running long distances for conditioning, Gozi and another student caught the bus part of the way (and pretended they had made the full run) rather than running the entire course. From Coach J’s perspective, this was an indication of Gozi being both lazy and a goof-off, while for Gozi, this was simply a mistake he had made under the misdirection of a more senior teammate. Unlike Yaheem, Gozi did not choose to approach Coach J directly to repair the relationship.
This history, as well as Gozi’s tendency to be a bit distracted in practice, resulted in Coach J not expecting much of Gozi and thus virtually ignoring him during practices, except to be punitive when he perceived Gozi to be goofing off. In our interviews with him, whenever he talked about Gozi, Coach J gave examples of times when Gozi was not doing what he was supposed to be doing, though there were lots of moments during practice and meets when Gozi tried his best. For instance, he described one incident where another coach reported to him that “Gozi is riding a bike around the track.” Coach J reported that he told Gozi to get off of the bicycle and then gave him extra drills. Coach J gave Gozi a goal to reach during these drills (he had to finish in under a certain number of seconds), and he purposefully made the goals almost impossible to reach. The punitive relationship between Coach J and Gozi resulted in Gozi receiving less guidance and support than many of the other athletes, not significantly improving his performance, which led to further divestment in him on the part of Coach J. In an interview mid-season, Gozi wistfully acknowledged that he was not one of Coach J’s “favorites.”

Their relationship was also affected by Gozi being unsure about whether he preferred basketball or track. As a freshman and sophomore he put more time and energy into basketball, which Coach J thought was a bad decision. On one occasion Coach J told the researcher that Gozi wanted to pursue basketball even though “you average like two points per game!” By the time he decided he was serious about track, Coach J had already written him off. Further, Gozi did not make strong connections with the other athletes, in part due to the way he was marginalized by Coach J. Eventually, Gozi too gave up on finding a place in track and ended the season unsure about whether or not he would return the following season.

Gozi’s relationship with the coach affected his access to material resources. Gozi reported that he wanted to run the 100-meter sprint, yet Coach J kept him in the 200- and 400-meter races. His times did not significantly improve over the course of the season, and he did not learn to interact with new artifacts in meaningful ways.

The poor relationship with Coach J also mattered for his access to ideational resources. Coach J saw him as a goof-off, who was lazy and did not really want to work—thus he rarely received the kind of rich feedback on his performances or on thinking or feeling like a track athlete that Octavia and Yaheem experienced. Gozi was rarely mentored during practice and was rarely spoken to by Coach J during meets.

Similarly, Carla was an athlete that Coach J did not see as having much potential; thus, she was ritually ignored. Carla was medium height and medium build, with dark brown hair. She was quiet and a bit serious but did not always seem to be able to execute the instructions she had been given. She was socially awkward and did not fit in well with many of the other athletes; though there was a mutual cordiality, she did not develop good friends on the team.

Carla was assigned to run hurdles, and during practice Coach J often critiqued the performances of the athletes before and after her but walked away during her performance to attend to students on other areas of the field. It seemed that Carla sought Coach J’s attention—she often watched him as he walked away and tried to wait to perform until he returned. In an interview, she also spoke of not knowing how to get Coach J to take her more seriously as an athlete. Like Gozi’s, Carla’s performance did not much improve over the course of the season, though she continued to attend practices and meets.
With respect to resources, Carla had access to the material resources of the track, the hurdles, and the field as a space on which to perform her event, but she had little in the way of feedback on how to better interact with those material artifacts to improve her performance. She had minimal access to relational resources, at least through Coach J, as he seemed to limit interaction with Carla by remaining unavailable. Finally, she had less access to ideational resources in part due to Coach J’s impression of her as having low aptitude for track and in part because she had direct interactions with Coach J less often than Octavia or Yaheem. While Carla seemed to notice this lack of access, she did not have strategies that might alter the situation.

In this section, we have highlighted the range of trajectories toward practice-linked identities that different athletes encountered and have analyzed the different levels of access to the three resources for identity development that we have focused on in this article. Our findings show that students’ identity trajectories can shift over time and that not all track athletes are offered the three resources for the development of practice-linked identities to the same degree, nor do they all create and take up resources in the same way. Our data seem to indicate that the personal relationship between the coach and the athlete was central in determining athletes’ access to the other material and ideational resources, as much of the teaching and learning occurred in one-on-one interactions.

Conclusion

The primary purpose of this article was to consider the ways in which novices to a learning practice came to take up practice-linked identities associated with that practice and how such identities were made available. We were also concerned with understanding variability in the identity trajectories made available and taken up by athletes. From a theoretical perspective, we wanted to better understand the nuanced relation between identities and learning.

Our data indicate that there were three primary resources that were made available in teaching and learning interactions in track: material resources, relational resources, and ideational resources. The resources were made available to athletes by virtue of their presence in the physical space and through one-on-one interactions with Coach J. Additionally, ideational resources were often conveyed as students were explicitly positioned into particular roles with respect to the events at which they would compete in meets. Our analyses show that relational resources sometimes served as a kind of gateway to material and ideational resources (and thus as a gateway to learning).

We also found that access to the three identity resources varied with individual learners. Some athletes were on inbound trajectories. That is, they were moving toward becoming more central participants in the practice of track and field and developing stronger practice-linked identities as track athletes. Other athletes were on peripheral identity trajectories. They were not moving toward becoming more central participants—they could be characterized as “treading water” in the practice. They did not move closer to becoming more central participants yet were not necessarily moving toward nonparticipation either. Findings show that the coach–athlete relationship and the coach’s perceptions of the athletes’ dedication and drive strongly influenced which of these trajectories they were on. In other words, much of students'
access to the identity resources (though not all) we identified was filtered through
their interactions with Coach J. This finding highlights the critical role of the nature of
the relationship with the teacher/coach for opportunities both to develop practice-
linked identities and to become better at the practice. Thus, findings also highlight the
complex and mutually informing relationship between identity and learning in learn-
ning settings. The resources that we identified as being critical to supporting practice-
linked identities were also important learning resources.

For instance, ideational resources determined the goal of learning—as their sense
of what was valued in the practice and what was “good” served to guide the goals that
athletes set for their learning. Relational resources often constituted the “how” and
“why” of learning. Occurring through social interactions, these personal relationships
helped to sustain motivation through difficult moments. Material resources provided
the content of learning—that is, they were the physical artifacts and spaces that
novices came to master as a part of their learning.

This relationship between identity and learning seemed to be mediated by engage-
ment, persistence, and goals. That is, when students had access to ideational resources
for identity development, they set goals that supported particular kinds of learning.
When students had access to relational resources, they persisted in difficult learning
moments. All three identity resources supported greater engagement, which also
supported learning. Thus, we have argued that identity and learning are distinct
processes that inform one another. A focus on the three identity resources helps
develop a more nuanced analysis of the ways in which learning and identity processes
overlap and interact.

This work may also have implications for studying learning in school settings. In
particular, prior research has highlighted “oppositional” identities on the part of
“minority” or “urban” students. A fuller treatment of which contexts make identities
as learners in school available (or not) for students might offer a more balanced
perspective on the ways that identities are constructed vis-à-vis social contexts. The
framework presented in this article lends itself to a focus on the work that the learning
context and the people in it are doing, in addition to the ideas and identities that
students bring to learning settings.

Additionally, the work presented here has implications for better understanding
the relation between learning and identities in school settings. Specifically, it makes
the case for a treatment of learning and identity that considers them to be intimately
related to one another but also to be distinct processes. Thinking about learning and
identities in schools in this way might support a clearer conceptual understanding of
the relation between learning and identity that does not conflate them or view them
as unrelated. It is our hope that our approach extends identity theories that highlight
the importance of the social world (including proximal processes and cultural prac-
tices) to identity processes and offers particular insight into how such identity pro-
cesses unfold in teaching and learning settings.

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**Note**

**Acknowledgments.** We would like to thank the LiFE Center (and the National Science Foundation) for support during the preparation of this essay. We would also like to thank Mike Rose and Tryphrenia Peele for helpful comments on an earlier draft of this article.

**References Cited**

Boaler, Jo

Boaler, Jo, and James Greeno

Cole, Michael

Conchas, Gilberto

Cote, James, and Charles Levine

Davidson, Ann Locke

Emerson, Robert, Rachel Fretz, and Linda Shaw

Erikson, Erik H.

Ferguson, Ann Arnett

Fordham, Signithia, and John Ogbu

Goffman, Erving

Greene, James

Gutierrez, Kris, and Barbara Rogoff

Herrenkohl, Leslie

Holland, Dorothy, W. Lachicotte, D. Skinner, and C. Cain
Hyman, Herbert  
Kozulin, Alexander  
Lave, Jean, and Etienne Wenger  
Leach, Collin, and Heather Smith  
Lee, Carol  
Levinson, Bradley, Douglas Foley, and Dorothy Holland  
McCall, George, and Jerry Simmons  
McDermott, Ray, and Henri Varenne  
Mead, George Herbert  
Mehan, Hugh  
Merton, Robert, with Alice Kitt Rossi  
Miles, Matthew, and A. Michael Huberman  
Nasir, Na’ilah, and Victoria Hand  
Ogbu, John  
Osbourne, John  
Phinney, Jean S., G. Horenczyk, K. Liebkind, and P. Vedder  
Rogoff, Barbara  
Strauss, Anselm, and Juliet Corbin  
Stryker, Sheldon  
Suls, Jerry, and Ladd Wheeler  
Turner, Ralph

Vygotsky, Lev

Weigert, Andrew, J. Smith Teitge, and Dennis Teitge

Wenger, Etienne

Wertsch, Jim