Dance is many things to many people. It can be a discipline, a practice, a ritual, an exercise, a form of prayer or meditation, a kind of storytelling or seduction, or a medium for artistic expression. In addition to being a powerful means of knowing oneself and communicating with others, dance can also be a way to develop cognition and support identity formation.

I began considering all this when, in response to a friend's whimsical suggestion in 1977, I started taking classes in modern dance, ballet, and a form of classical Indian storytelling dance called *kathak*. Having come to dance as a late teen, I later became intrigued with how activities outside of school can inform classroom-based learning. Given the number of choices young people have for how to spend their time outside of school, I wanted to learn more about what motivated the young women with whom I dance regularly to dedicate several days each week to their art.

As a language and literacy educator since 1991, I have worked with adolescents and adults in a variety of school, college, workplace, and community settings. Several years ago, in an effort to weave my dance and academic universes together, I began to explore the world of dance as an educational researcher, hoping to unveil the distinctive dimensions of *embodied learning*, that is, how we learn and know through our bodies. My forays into embodied teaching and learning have fortuitously coincided with a surge in scholarship on multimodality in education. Being involved in both dance and educational research has opened up new questions about the nature of knowing and learning. The work in this article attempts to capture these preliminary explorations.

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research has helped me to make sense of embodied learning and development—growth in motion—at two community-based dance studios serving children, youth, and adults, ages 3–85.

This article highlights the perspectives of young women who have participated in dance for many years. Their viewpoints reveal the unique multimodal nature of embodied learning; in dance classes, teachers and learners communicate through a variety of modes: visual, auditory, kinaesthetic, spatial, musical, tactile, gestural, and linguistic. I employed ethnographic, multimodal, and discourse analyses to investigate how dance fosters the cognitive and attitudinal benefits documented in the literature on arts learning in out-of-school-time programs.

Cognitive and Attitudinal Benefits of Arts After School
A substantial body of scholarship on the effects of the arts and after-school activities has shown that when young people are allowed to determine social networks around self-defined areas of interest, and when young women in particular are involved in physical activities such as sports and dance, they tend to perform better academically; build more constructive relationships with peers and adults; learn to collaborate, think critically, and solve problems; and develop more confidence and self-esteem (Deasy, 2002; Eccles & Templeton, 2002; Fiske, 1999). While critics have often suggested that popular cultural forms offer little more than shallow outlets for personal expression, there is ample evidence that popular culture and the arts can offer youth a sense of self, voice, and place in broader artistic, cultural, and communal conversations.

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Self and Identity
In recent years, the concept of identity has come under scrutiny by scholars in many fields (Hall, 1996; Heath & McLaughlin, 1993; Holland, Lachicotte, Skinner, & Cain, 1998; Hull & Zacher, 2004). Many of these discussions have challenged the static nature of conventional, psychologically based notions of self—what anthropologist Kondo (1990) calls “seemingly incorrigible Western assumptions about the ‘primacy’ of the individual and the boundedness and fixity of personal identity” (p. 26). Following recent research on identity and agency (Holland et al., 1998), my study treats both in more fluid terms: Identity is ever-changing in response to social contexts. As Hull and Katz (2006) put it, “We enact the selves we want to become in rela-
tion to others—sometimes in concert with them, sometimes in opposition to them, but always in relation to them” (p. 47). Our sense of self-determination or agency at any given moment is constrained by specific social, cultural, and historical contexts, yet people can develop their agentive selves using the unique repertoire of cultural resources, relationships, and artifacts available. Afterschool programs of many different kinds seem to be especially good at helping young people gain access to such resources.

Maxine Sheets-Johnstone, author of The Primacy of Movement (1998), extends the notion of agency into the bodily realm. “Movement,” she claims, “is at the root of our sense of agency…it is the generative source of our notions of space and time. …[M]oving is a way of knowing” (p. xv). If she is correct, how might we expand our understandings of self and social connections to include our moving bodies? How are corporeal learning and knowing unique? Might such learning support development in ways that other forms of learning cannot?

**Studying Dance as an Educational Context**

For this study, I was interested in the following questions:

- In what ways is participation in dance connected to the development of young women’s identities?
- How does dance contribute to the cognitive, social, and emotional growth of the young women I studied?
- How might the nature of learning in dance help us rethink the organization of learning both in and out of school?

**Methods**

I researched these questions by combining ethnographic, multimodal, and discourse analytic strategies (Chouliaraki & Fairclough, 1999; Denzin & Lincoln, 1994; Dyson & Genishi, 2006; Kress et al., 2001) to explore a rich range of data sources: informal conversations, focus groups, interviews, student dance journals, photographs, artists’ statements, field notes, and over two hundred hours of videotaped classroom observations. Together, these research methods and data provide access to how young participants viewed the self through dance, offering insights into their perceptions of the connections between dance and everyday life.

**Context**

My original study, conducted from 2002 to 2005, focused on nine high school-age women who had been learning dance together at the Oakland Dance Center since preschool. “The teens,” as they were referred to by their teachers, welcomed opportunities to reflect on dance together. They enthusiastically engaged in informal conversations in hallways and dressing rooms, in focus groups and individual interviews, and in videotaped classes and rehearsals. They also kept dance journals, writing candidly about what dance meant to them and what it taught them about themselves and others. They explained how dance classes and rehearsals helped them negotiate multiple social worlds by creating habits of mind and body that filtered favorably—and seamlessly—into their public and academic worlds.

As arts education researchers have frequently pointed out, participation in the arts—while potentially beneficial to students of all backgrounds—is particularly helpful to young people considered “at risk” due to factors associated with low socioeconomic status. As arts education researchers have frequently pointed out, participation in the arts—while potentially beneficial to students of all backgrounds—is particularly helpful to young people considered “at risk” due to factors associated with low socioeconomic status.

In 2006, with the support of a grant from the Robert Bowne Foundation, I expanded my research to include 21 young women of diverse sociocultural and socioeconomic backgrounds who participated in a Teen Summer Dance Intensive at the Berkeley Center for Dance. The Summer Intensive, then in its fifth year, hosted teens from over a dozen public and private schools in the Bay Area. Several dancers had attended every Summer Intensive since 2002.

As arts education researchers have frequently pointed out, participation in the arts—while potentially beneficial to students of all backgrounds—is particularly helpful to young people considered “at risk” due to factors associated with low socioeconomic status: challenging home situations, low academic performance, dropping out, or asocial or unsafe behaviors (Catterall, 1998; Fiske, 1999; Heath, 1999; McCarthy et al., 2004). Some, though not all, of the teen participants at the Oakland and Berkeley dance studios might be considered “at risk” in these ways. A number of them contended with difficult circumstances at home, such as chronically ill siblings or complex living arrangements.

The dancers at the Oakland Center came primarily from middle and working class families, and seven of the
nine dancers attended public schools. While several of the 21 dancers at the Berkeley studio’s Teen Summer Dance Intensive attended private schools, the majority attended public schools serving high numbers of students from low-income neighborhoods. In 2006, one-third of these young women received partial or total scholarships to the dance program based on financial need.

**How Dance Shapes Lives**

The 30 young women in this study have repeatedly identified the following benefits of learning through dance:

- A chance to develop a sense of control over their bodies, emotions, intellects, and interactions
- An unusual capacity to take the long view of their own development
- An opportunity to participate in a supportive, communal learning environment
- Multiple, multimodal entry points for learning dance skills and for expanding social, physical, and intellectual repertoires
- A constructive conception of “mistakes” that underscores how risk-taking fosters learning and development

**Developing a Sense of Control**

The young women in my study said that learning dance gave them greater control over both their bodies and minds. Not only did this control shape how they felt physically and mentally, but it also allowed them to monitor their feelings and manage their actions in other contexts. “I feel like more than anything dance has…taught me that I can control my body… and I sort of have some control over how I feel because…dancing makes me feel so much better. It’s a way of channeling my emotions and understanding them,” said 15-year-old Maddy (focus group, June 18, 2003).

Jamaica, from the Berkeley studio, said that dance helped her concentrate. “It takes your mind off [problems]…. You’re in the moment and you’re not thinking about anything else that’s going on. To me dancing is my form of therapy” (focus group, June 18, 2003).

Aurelia, a fellow Berkeley dancer, similarly acknowledged the power of dance to make her feel safe: “Dance to me is like an emergency exit—say like you were in a building and it was burning, you would use an emergency exit to get out of it. It’s sort of like the world is—it’s like full of all these brutal realities, and dance to me is like a different world, it’s safe.” Aurelia also described how she learned self-confidence through dance, becoming more patient with herself. “I used to be really insecure before dance,” she said. “[Now] it gives me confidence just being able to look at myself in the mirror and say hey…if I can’t do that, then I can’t do it, you know, and I can work on it” (focus group, August 3, 2006).

Maddy, from Oakland, noted how the effects of dance transferred to other contexts of her life. “Like if I have to write a big paper right after I’ve been to dance, it’s easier than if I’m just stressing out about it for a whole evening,” she said. “You sort of have to be balanced and keep yourself in check a little bit. Not all the time, but you do have to have self-control… Like, if you’re all over the place inside your head…you can’t focus. After dancing…I can manage [my emotions] better…” (focus group, June 18, 2003). The dancers’ sense of control and their capacity to use dance to construct safe spaces were powerful tools for developing a sense of agency and self-efficacy outside the studio.

**Taking the Long View of Their Own Development**

Researchers have noted that sustained involvement in the arts leads to habits of mind and body that permeate other domains of life. For these young women, their continued involvement in dance seems to have given them an unusual capacity to take stock of their own growth across time.

For example, Jena, a middle teen who by 2004 had been studying at the Oakland studio since 1990, said that she appreciated the shifts she observed in herself over the years: “[Dancing] makes me feel good about myself…. And it makes me feel proud…because I know that even if I don’t feel it in my body, a year ago I was different” (interview, February 1, 2004). Working hard at something over time fosters a sense of pride. A rare long view of her own development is evident in Jena’s sense that significant shifts were taking place even when she was not fully aware of them. Jena continued, “…I think one of the effects of having done it for so long is it’s like your body is home…so doing a plié feels right to me, it’s like walking in my front door; I start to relax and get centered…. And so when it feels
that good inside your body it starts to make the rest of you feel good…” Echoing Aurelia’s claim that “dance is like an emergency exit,” Jena’s metaphor of “body as home” implies that through dance the body itself can become a safe haven—a rare notion for women, young or old, in present times.

While Jena viewed beauty as something one is “born with,” she saw dance as a powerful medium for instigating beauty. “Just making pretty shapes makes me feel beautiful…. And it’s not even me that’s gorgeous—I’m making something gorgeous which is even more rewarding because you have no role in being gorgeous—that’s how you were born, but to make something gorgeous is your creation” (interview, February 1, 2004). Redefining beauty through participation in dance allowed Jena to construct the notion of beauty in ways that fell outside of societally sanctioned norms, and, in so doing, to shape a sense of self that embodied beauty.

The young women also claimed that dance helped them develop patience with themselves. Jena said, “I’ve come to be patient when I’m dancing in a long-term sense…patient in the sense that important change can come over time. Just because you don’t see it doesn’t mean [you’re] not growing and changing” (interview, February 1, 2004). Physical or intellectual development and self-crafting are simultaneous processes; as we learn to dance or paint or play music, we also begin to define ourselves as artists. Over time, involvement in dance and other embodied activities can allow young people to build nuanced and changing portraits of themselves as movers, learners, thinkers, actors, and human beings.

Such an understanding of one’s own development requires opportunities for reflection, which students in many traditional learning environments rarely have. Perhaps learning time during afterschool hours could be more meaningful and effective if students were given more opportunities to reflect on their own development.

Unlike many formal instructional contexts where students privately receive grades based on individual performance, learning to dance is a highly communal activity.

**A Supportive, Communal Learning Environment**

Unlike many formal instructional contexts where students privately receive grades based on individual performance, learning to dance is a highly communal activity. Students witness the corrections and feedback their classmates receive. Even dancers who are not the direct recipients of a teacher’s comment often physically try out corrections intended for others. Receiving feedback involves not only listening and making mental notes, but also incorporating the new information; internalizing it through the body’s senses, intellect, and musculature; and then externalizing the gestalt as strategic motion through space. Feedback is also frequently offered to the class as a whole. A teacher might say, “As I look around the room, I’m getting the sense that you’re not sure where your arms should be; in this particular movement the path of the arms looks like this,” accompanying her words with gestures and movements to demonstrate the trajectory in question.

Aurelia, Livy, and Hannah, who attended a large public high school in San Francisco and commuted each day by train to participate in the Summer Intensive, shared their insights about the camaraderie that builds through dancing with others. Having been involved in dance for several years, they described the advantages of shared learning spaces. Hannah described how, when dancing with other people, “In case you’re insecure about it, you can just work off their movement and trade information. I think in dance class you can make better bonds and relationships with people…because you automatically have something to share…[so] you can, like, learn and vibe off them” (focus group, August 10, 2006). Embodied learning allowed these young dancers to support one another’s learning and growth by sharing information not only through language but also through their bodies.

Dance also helped Livy to trust others. “In partnering…what really makes the bond is that you have to trust that person…to hold your body, so then you automatically kind of trust them emotionally and mentally,” she said (focus group, August 10, 2006). Though it is impossible to trace the precise path along which trust travels between the dance floor and other parts of the girls’ lives, they put forward a convincing case for its journey between domains.

In 2005, three years into the study and approximately 15 years into her dance experience, Jena described how safety grows from the vulnerability of learning dance in a group:
I think in dancing there’s a comfort in watching other people learn…and a safety in [seeing] another person’s uncertainty…. You know, you learn something with someone when you dance in a way that you can’t really learn something with someone in an academic way…. The gears and the whole mechanism is exposed in a way that it’s not when you’re learning something academically—you both start at the starting line and you end at the finish line together but you don’t run together. In dancing you get to go together, which is great…. It makes you feel confident in your ability, you have camaraderie, you can help someone in the learning process…. And I think it’s sort of community or relationship building also…and that demands a certain amount of safety in the room, you know, otherwise no one would ever go in. (interview, October 23, 2005)

Jena’s metaphor for academic learning evokes an image of individual runners moving toward a finish line. In contrast, her vision of learning dance is rooted in community—“you get to go together.” The young women in this study clearly benefited from regular participation in the complex social and kinesthetic practices of dance classes, in which youth and adults jointly crafted a community. For these young women, the social organization of learning dance not only promoted physical skills, but also broadened their social, emotional, and intellectual repertoires for engaging with others in the many social worlds they encountered outside the studio.

**Multimodal Teaching and Learning**

Teacher feedback in dance tends to be highly imagistic, metaphorical, and, above all, multimodal. The verbal cues, metaphors, and vocalizations that indicate movement quality are accompanied by gestures and demonstrations of the movement phrase or transition in question.

Teacher feedback in dance tends to be highly imagistic, metaphorical, and, above all, multimodal. The verbal cues, metaphors, and vocalizations that indicate movement quality are accompanied by gestures and demonstrations of the movement phrase or transition in question. As a group of dancers completed a combination across the floor, Nadia shouted words of encouragement over the music, first to Angela, and then to the group.

Nadia: {to Angela} YES, Angela. {to the group as a whole} All right! Good. Good. Hey Angela, {walking toward the girls} you can drop your head more on this place. I know that you don’t wanna kick somebody but {begins demonstration of turn and continues talking} once your leg is around, you’re home free. {makes an auditory gesture} “foooosh”— as she turns, suggesting the lyrical quality the movement should embody! Yeah? Let me see you do that. Come on out. {Nadia gestures with her hand, inviting Angela to come toward the center of the dance floor.}

Angela: {steps tentatively out without saying anything}
Nadia: Really drop your head. (notices Angela’s reluctance and speaks in a high voice) You can do it!
Angela: (laughs nervously)
Nadia: (in a high voice) We love you! (As Nadia demonstrates the movement again to help Angela get started, she simultaneously talks Angela through it.) Alright, so you’re here.** {Nadia begins the movement.} You’re gonna do that rond de jambe…
Angela: (emulates Nadia doing the movement)
Nadia: {While Angela is moving, Nadia continues to vocalize.} Um hm, uh huh.
Angela: (completes movement and turns expectantly to Nadia)
Nadia: Okay. So you got to about here… {places her body in the approximate position of Angela’s body during the turn}
Angela: Uh huh.
Nadia: And I want you to get to {vocalizes “fooosh” as she demonstrates the turn again} get your head down below right around your knees.
PORTION OMITTED
Nadia: Like hug a big beach ball between your knees. (gestures as she speaks, mimicking holding a giant beach ball)
Angela: (As Nadia is demonstrating, Angela experiments some more with the movement.)
Nadia: Try it one more time.
Angela: (steps into position next to Nadia and attempts the turn again)
Nadia: (As Angela is finishing the turn, Nadia begins to talk.) Better. Yeah! {addresses the class} See now you can really see that Angela’s initiating the movement with her head.
Angela: (tries the movement again)
Nadia: (to Angela as she completes the turn) Did you feel the difference?
Angela: (says something inaudible as she presses her hands around her lower back, curving it as Nadia had instructed, then laughs lightly)
Nadia: Yeah. Yeah. (moves into place for another demonstration of the movement as she talks) You know where it starts is here.** {stays in position, allowing time for the body image to register} The head movement starts here.
Angela: (initiates the turn again after revising the beginning position in her own body)
Nadia: There ya go!! {addressing the whole class with both gaze and voice} See what a difference that makes? {demonstrates the movement again, breaking it down even more} So the head doesn’t start HERE, {Nadia demonstrates what the movement is not, and then what it is. Angela tries it again.} the head starts HERE. To the side.** {Nadia continues talking and demonstrating. As she finishes, she turns to see Angela finishing her most recent attempt.} THAT is GORGEOUS.**

This episode illustrates the multiple modes of communication regularly used in teaching and learning dance. Nadia switched from physical demonstration to verbal instruction, which included the beach ball metaphor. She added vocal intonation that suggested the quality of the movement she was teaching, as well as verbal content and physical gestures.

Meanwhile, Angela was connecting new information to her existing base of knowledge and integrating her physical and mental understanding multimodally—watching and listening, but also embodying her learning through her own movements. By using several modalities simultaneously, Angela increased her capacity to learn. Angela was also monitoring her own learning process and responding intellectually and corporeally to moment-by-moment feedback. As she was absorbing the movement, she was also “learning how to learn”—which is, according to some, “perhaps the most important instrumental benefit of arts education” (McCarthy et al., 2004, p. 27).

Finally, in this supportive environment, peers and teacher are intimate witnesses to the learning process. As Jena said earlier, “The whole mechanism is exposed.” Angela was learning to challenge as well as to trust herself. The episode not only demonstrates how multimodal entry points can enhance learning, but also highlights the importance of feeling safe enough to take risks.

Taking Chances

In a focus group exchange (August 4, 2006), Berkeley teens Angela and Mara took turns comparing learning at school versus learning dance.

Angela: Although it’s not as much memorization [in school] as it used to be, it’s a lot of, like, just having information being thrown at you… and I think there’s a lot less risk… a lot less putting yourself out there and going with it even if you’re wrong in school. And in dancing there’s still a lot being thrown at you, but it’s more about your confidence and…

Mara: how far you’re willing to go…
Angela: yeah, and what risks you’re willing to take because you’re not going to be right 100 percent of the time, where on a test, that’s your goal.

Mara: Generally in dance if you make a mistake it just brings you closer to what you’re actually trying to get…whereas if you make a mistake in school it’s considered to be bad, and people who make a lot of mistakes get bad grades—that’s not what you want. In dance it’s more about feeling it and understanding how to get to the right place, and getting there is really important, but it’s not the ultimate goal.

Angela and Mara emphasized the “one-time-chance” nature of measures such as grades and exams, where the consequences of “messing up” are sometimes brutal. By comparison, in the context of their community-based dance program, they understood that taking risks was fundamental to developing new levels of expertise and gaining confidence in their developing abilities.

How can we realistically ask young people to become intellectual risk takers—to play with ideas, images, language, movement—if the consequences for doing so put them at such an obvious disadvantage? What might learning look like—both during and after school—if, instead of measuring what learners have yet to master, we used multiple modes to support students in constructing knowledge?

What might learning look like—both during and after school—if, instead of measuring what learners have yet to master, we used multiple modes to support students in constructing knowledge?

Faith in their abilities to exceed expectations—their own and others’. It rewards rather than punishes risk-taking and vulnerability.

Mara and Angela wisely suggested that end products—one-time shots demonstrating what students know—should not be our only goals. The high-stakes tests and other assessment measures so prevalent these days stunt the very capacities education in our democratic society aims to promote: independence, critical thinking, reflection, respect for others, negotiation, and confidence. By rewarding end performance almost exclusively, the design of formal education and the measures of student success on which we currently rely are at cross-purposes with some of our most deeply held convictions about the development of young people. It is striking that dance, a performing art, should turn out to accord these young women more occasions than their schools did to take the intellectual risks and exploratory chances necessary to achieve real growth. Such risk-taking also helps young people develop a durable sense of identity—one that is not fixed but that shifts in nuanced and thoughtful ways, responding spontaneously to the inevitably unpredictable nature of life.

**Multiple Modes, Trust, and Education**

Strategically designed afterschool programs can support youth with interactional and multimodal opportunities for positive identity formation and cognitive growth. Out-of-school multimodal learning contexts like those I investigated provide space for a powerful kind of learning that we know far too little about. As school-based and out-of-school curricula are being narrowed in the current age of testing and accountability, I fear that we are failing to pay adequate attention to the promise of multimodal learning. In doing so, we are forfeiting significant resources for constructing positive educational experiences.

Educators, both in and out of schools, can cultivate environments where young people are encouraged to use their minds and their bodies to experiment without fear of failure. Respectful, self-reflective learning spaces can help young people develop self-awareness, confidence, and a sense of control over their bodies, minds, emotions, and social interactions. Learners of all ages, but especially youth, deserve such spaces where, if they
lose their sense of balance or perspective from time to time, there are no negative consequences.

Such havens are no small accomplishment. They can broaden our understanding of identity formation and cognitive development. Combining use of multiple modes of communication with supportive social relationships and varied opportunities for participation can offer young people potent environments for cultivating agency. If selves have their roots “not in words but in corporeal consciousness,” as Sheets-Johnstone (1998, p. xx) suggested, then opportunities to enact a self through dance after school may help us imagine educational practices that could more successfully support youth development both on and off the dance floor.

For the young women I worked with, dance enabled them to become the people they aspired to be. Hall (1996) suggested that identities are about reinvention: We utilize “the resources of history, language, and culture in the process of becoming” (p. 4). As these women suggested, the “resources of history, language, and culture” are experienced through our bodies as well as our minds. If identity is indeed about reinvention, and education is, broadly speaking, about nurturing our changing (moving) selves, we would do well to broaden our notions of development. We should treat all communicative modes and educational spaces—in the classroom or garden, on the dance floor or basketball court—as places to invite one another to engage more fully in the multiple and multimodal processes of becoming.

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References


Katz

GROWTH IN MOTION 21


**Notes**

1 In keeping with the research of these educators, in particular the work of Bresler (2004) and her colleagues, I believe the arts and popular media provide unusually rich opportunities “to explore what embodiment means for educational researchers and practitioners” (p. 9).

2 All names of organizations and individuals are pseudonyms.

3 I borrowed the term “auditory gesture” from UC Berkeley Linguistics Professor Eve Sweetser (personal communication).