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Cover Page Footnote

Sara K. Schneider teaches qualitative methods and cross-cultural studies and co-directs the Interdisciplinary Studies Program in the National College of Education at National-Louis University in Chicago. Author of the monthly e-zine *Skin in the Game* (www.thinkingdr.com) as well as the books *Concert Song as Seen: Kinesthetic Aspects of Musical Interpretation*, *Vital Mummies: Performance Design for the Show-Window Mannequin*, and *Art of Darkness: Ingenious Performances by Undercover Operators, Con Men, and Others*, she writes and leads workshops about the body's role in spiritual practice, learning, work, and culture.

Wise Teaching to Students' Kinesthetic Intelligence: The Teacher as Surrogate, Guru, Foreshadower, Choreographer, or Expeditionist

Sara K. Schneider*

Introduction: The Kinesthetic Learning Spectrum

Put aside for a moment any thoughts about the word “regurgitation’s” sometimes derogatory usage in the educational setting: actually, the symbiosis of teacher and student is rather beautifully like that of a mother bird first ingesting the food she wants to later feed her chicks. The more experienced one takes part in the same physical act she asks of her offspring. This is not only modeling, it’s a “sharing in.”

Teachers discover this sharing-in quality when they practice alongside their students in learning activities that draw on bodily intelligence. Elementary school teachers in the Chicago-area village of Oak Park recently experimented with bringing kinesthetic learning methods to their classrooms. A kindergarten teacher quickly found the positive dynamic in this interdependence. Recognizing that when she was in front of her classroom, “the more I talked, the more they talked,” she decided to change her strategies: “I moved, and they moved.” In so doing, she created a trusting classroom of kinesthetic colleagues and fellow explorers.

In 1983, Howard Gardner published *Frames of Mind*, proposing that, rather than any singly valid measure of intelligence, there are really “multiple intelligences,” each localized in a distinct part of the brain, each offering a particular way of perceiving and encountering the world and a specialized approach to problem-solving.

Despite the academic controversies concerning Gardner’s theory, both the K-12 educational community and teachers of adult learners have become increasingly interested in its implications for differentiating instruction, especially to support learners who have not excelled in what Gardner termed the verbal-linguistic or the logical-mathematical intelligences that have been the mainstay of American education, as well as of intelligence and “high-stakes” tests. Differentiated lesson plans and methods of assessing student learning and progress have appeared in many classrooms. And as they vary their modes of instruction, teachers bring to bear their own varied intelligences.

Complementing the verbal-linguistic and logical-mathematical, Gardner identified five further intelligences: visual-spatial, musical, intrapersonal, interpersonal, and bodily-kinesthetic. The last of these may cause educators the greatest pause: many teach-

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ers may be predicted to enter their field self-identified with their oral and social skills rather than with their ability to learn and teach through movement and action.

Informal polling conducted among teachers enrolled in my Kinesthetic Intelligence courses in the Chicago area suggests that while many teachers may assign kinesthetic learning activities or assessments to their students, they are less likely to model them than activities related to the verbal-linguistic, logical-mathematical, or even visual-spatial realms, where they feel greater confidence.

Nevertheless, teachers are aware that many of their students may respond to bodily-kinesthetic activities when they haven't to seat-based tasks, assigning them even if they do not model them. This article arrays the roles teachers adopt with students when they ask them to learn through their bodies and the enormous potential for impact each one has, even in cases in which teachers consider themselves non-expert as movers. The principal issue, I propose, is not competence but the making of playful choices around participation.

Far from being a marginal means of perceiving, kinesthetic experience may be the most fundamental. When Sheets-Johnstone drew on studies of infant learning, she concluded that "thinking in movement is our original mode of thinking" (354).

However, far from being a monolith, the terms kinesthetic intelligence and kinesthetic learning cover a remarkable range of activities. They can involve learning about universal bodily processes, as in discovering and noting subtle fluctuations in heartbeat or in the humidity of the hands that occur in response to a stressor, such as bad news at work. They can also concern learning how to use the body to manipulate things in one's environment, such as how to wield a knife in the kitchen to create appealing shapes with raw vegetables or how to dig up tree roots without killing the tree. They embrace the dogged practice of physical activities one hopes will become made automatic as habits, such as learning to walk or to touch-type. Yet they also include in often-forgotten ways, complex activities that use the body to teach the mind or to expand perception by way of direct experience, such as developing a dramatic character through rehearsal or participating in a simulation of the historical interactions between particular social groups during the Holocaust.

The wide range and the near-universality of kinesthetic learning possibilities tells us that body-based learning has applications far beyond any kind of restrictive assumption that such learning and teaching apply merely to its conventional usages principally in early childhood to build motor skills or to the fields of sport or dance. Indeed, kinesthetic learning has powerful, underexploited applications not only for older children, but also for adults across the lifespan.

Think of the popular baby-shower games in which teams compete to see which can diaper a baby (doll) the fastest or guess the brand name of various chocolate bars melted into sample diapers. Such games are not only entertaining. They also enculturate the expectant parents to an aspect of their imminent daily physical reality! Similarly, taking a possible car purchase out for a test drive allows a potential buyer to consider and raise issues that might not otherwise surface, such as room for head clearance or ease in accelerating. In classrooms, kinesthetic methods may appear in foreign language learning with older students in such action- and gesture-oriented strategies as Asher's Total Physical Response or in medical training that brings students into contact with real patients, cadavers, and simulated models.

Table 1, below, displays vertically a spectrum of types of kinesthetic learning, from those based most strongly on physical repetition—getting a practice or habit “into” the body, such as learning to type, handwrite, or brush one’s teeth—to those most engaged in collaboration with the learning of abstract concepts. Each is associated with one or more roles through which teachers ply their craft. An explanation of these roles will follow.

Table 1: Range of Learning Tasks, Least to Most Abstracted from the Body

Kinesthetic Tasks	Examples	Likely Teacher Roles
Habit Formation Training the body directly, using repetition. Difficult to teach without capable demonstration though sometimes taught with expert verbal commands.	• Learning to hold a pencil, form letters, use scissors, type, drive, brush teeth, write script, ride a bicycle, dance • Practicing the motor skills involved in playing soccer, baseball, or sports (team or individual)	• Foreshadower • Choreographer
Association Training the mind through body movement, typically by repetition or by pairing movement and concepts to be learned. Teaching these skills requires some kinesthetic competence, even if tacit, though occasionally “comes from a book.”	• Learning English prepositions by dancing them • Jumping rope to memorize word spelling • Learning foreign languages using the Total Physical Response gestural method • Studying American Sign Language • Doing Body Math (learning multiplication, associating parts of body with columns of numbers)	• Foreshadower • Choreographer • Delegator
External Discovery Learning about the world through bodily interaction with the physical environment. May be closely associated with spatial and visual learning.	• Writing sensory descriptions by exploring objects tactilely • Interacting with museum exhibits • Learning math concepts by using the parts of the body to measure things or distances • Scavenger hunts • Walking the Stations of the Cross • Doing anatomical dissections • Practicing theatrical blocking	• Foreshadower • Choreographer • Delegator • Expeditionist

Kinesthetic Tasks	Examples	Likely Teacher Roles
Internal Discovery Gaining insights into inner life via body-based experiences. Here, repetition plays less of a role.	• Interpreting literature through the creation of living tableaux • “Voting with Your Feet” where students stand up, according to their position on an issue • Improvising dramatically • Dancing the process of mitosis (Lubeke) • Acquiring insights through contemplative movement or breath-work, as in yoga or tai chi	•Choreographer •Guru •Surrogate •Foreshadower •Expeditionist
Social Learning Learning about social realities, practices, and mores through action.	• Playing team-building games • Doing exercises from the martial arts to understand principles of positive conflict resolution • Acting out social situations, such as labor conditions in sweatshops • Inferring from physical experiences, e.g., gaining insights about American colonial culture by learning a social dance	•Guru •Surrogate •Choreographer
Concept Formation Making abstract concepts graspable through reference to or use of physical means.	•Creating Body Analogies, to illustrate the relationships between sentences separated by transition words (Wormeli 65) •Creating physical metaphors from linguistic metaphors •Understanding abstract concepts such as contrast, asymmetry, or texture through bodily-kinesthetic means	•Choreographer •Delegator

As is shown in the first row of Table 1, the most concrete use of students’ intelligence is for *habit formation*, when physical activities themselves must be mastered. Through repetition, the activity eventually becomes routine and the learner can free up his attention for other demands. Early fine motor skills training, including how to hold a pencil or form letters, falls into this category; so do complex cultural activities such as the teaching of small Ewe children in Ghana the culturally specific posture that will show them to be of high status, as Kathryn Geurts has detailed, or the training of South Indian marriageable young women by their mothers in the appropriate timing and duration of eye contact with visiting suitors, as presented in the Indian film *I Have Found It*.

The practice of new sports skills such as dribbling a ball or pitching also have as their goal the making habitual of successful movements.

In kinesthetic learning activities that are based on *association* (second row), body movement helps to encode a mental concept, such as an unfamiliar foreign word or the spatial relationships implied by prepositions such as “over” or “behind.” Students may memorize a concept or word in tandem with a gesture or movement. They may do “body math,” multiplying a two-digit number that they associate with each of their feet against a single-digit number mentally associated with their right knee (Armstrong 58). When the title character of *Akeelah and the Bee* memorizes her words for a spelling bee by reciting them as she jumps rope, she engages in associative kinesthetic learning. Also associative is that aspect of learning a theatrical role that involves memorizing assigned “blocking,” the movements over the stage space or the physical gestures associated with the performance of particular lines of a script.

Kinesthetic activities directed primarily toward *external discovery* (third row) often also involve spatial intelligence, including interactions with objects to be manipulated, such as blocks used for learning counting, and environments to be actively explored, e.g., in scavenger hunts or the circuit made by Catholics around the Stations of the Cross to experience and reflect upon the final events in the life of Jesus. Writing students are engaged in external discovery when they cultivate their ability to write rich sensory descriptions by exploring the tactile qualities of various objects.

In the fourth row are those learning practices that involve some form of *internal discovery*. Here, the learner’s insight derives from the proprioceptive, spatial, or felt sense of the experience, as when a performer suddenly seems to understand the dramatic character he is supposed to play after having experimented in rehearsal with a number of different interpretive possibilities. (Note that this is typically quite different from memorizing the blocking assigned by a director which, as mentioned above, is usually a process of association). The engagement of playwrights in dramatic improvisation in order to discover what their character “wants” or “says” belongs here, as do interpretive activities such as reading a passage about a character, then trying to “sculpt” the character with their own bodies in space or with clay, and finally using the insights or felt sense they get about the character in order to write (Wormeli 71). The Ewe teaching of proper posture mentioned earlier also partakes of this dimension, as each new generation learns a way to be from the way to stand.

Social learning (fifth row) encompasses those learning activities whose insights derive from the interactions among bodies and selves in a space, such as frequently happens when participating in social simulations or engaging in team-building games. The building of living tableaux of a literary situation in order to understand its complex dynamics teaches through relationship. So do class activities in which the instructor moves into and out of interactivity with the students, as in the Forum Theatre of Augusto Boal, which makes of every participant both participant and coach. Although speaking plays a major part in what the teacher does, the exercise Jeffrey Wilhelm calls “The Mantle of the Expert” may be considered a form of social learning. The teacher acts as a just-in-time content advisor to individual students trying to play their roles in a simulation and in need of, say, more historical information to take the next step; through such a role she models for students the seeing of others as living resources (101 – 102).

Finally, *concept formation* (sixth row) consists of learning that is ultimately most abstracted from direct viscerality, as when body-based experiences are used to help students learn abstract concepts. Students may learn through their bodies how a metaphor works as, in small groups, they negotiate meaning toward a shared physical representation of it. They may move around the classroom in ways that help them understand the differences between transitional words or phrases such as “however,” “on the other hand,” and “therefore” (Wormeli 65).

Table 1 simplifies how complex these learning tasks really are; many activities fit into more than one category. Medical interns’ interactions with patients can partake both of external discovery, as they gain practice in doing physical examination with real patients, and of social learning, as they strive to improve their bedside manner through trial-and-error interactions with patients. Other tasks may depend on the internal state of the student: some actors acquire their blocking largely through mechanical means and learn associatively, while others embark on a process of internal discovery to develop what some theatre people refer to as an organic character and gesture development.

Each type of learning proceeds differently, depending in part on how the teacher takes on the kinesthetic challenge. Next we look at how teachers can nurture students’ kinesthetic learning.

The Teacher’s Role in the Kinesthetic Learning Process

Many teachers, having been saddled with the expectation that they teach to each student’s strengths, assign but do not participate in learning activities or assessments that allow experientially oriented students to use their kinesthetic intelligence. Following perhaps an inhibition against being physical in front of their students, however, they may lose the opportunity for students achieving the maximum potential for insight and learning from the activity.

Such an inhibition is as much cultural as anything: bell hooks writes about the erasure of the body in the professoriate, while Susan Bordo hypothesizes that she lost an opportunity for a new academic position because, she believed, she “‘moved [her] body around so much’ during [her] presentation” (hooks 191 – 192; Bordo 183). The cultural prohibition against movement holds particularly heavily against women and is strengthened by public fear of the melding of private and public spheres in education. As Kimberly Wallace-Sanders has written, “The academy largely insists on the body’s erasure because the body is the undeniable reminder of our private selves” (188).

Yet in failing to overcome this cultural inhibition and in standing aside while students move, as if striving not to have a body of her own, both the teacher and students lose the full potential of kinesthetic learning activities. While the display or embodiment of expertise is the best-known way of teaching kinesthetically, other dimensions of active engagement can serve many other positive purposes. For, even with less expertise, a teacher is modeling: laying bare through her own attempts the no-less-important vulnerability of trying on movement; inspiring confidence that the task truly is achievable; fostering trust or deriving insights from the sharing of a physical experience with a student. Enthusiasm and willingness to jump into a physical activity alongside students can go a long way as, for example, the classroom teacher who reads in a teacher magazine about Paul and Gail

Dennison's Brain Gym—a technique for harnessing and integrating the activities of both left and right brain hemispheres—and experiments with some of the exercises with her students.

Modeling's power has been amply demonstrated in a wide variety of contexts. Methe and Hintze found great gains in students' work in Sustained Silent Reading when teachers modeled the desired behavior. The willingness to undergo student scrutiny is central to creating a sense of teacher transparency. Gillespie highlights the importance of this quality to the teacher-student relationship: "Teachers must be willing to allow others (students) to see them honestly; to allow their humanness to be a visible part of their presence as a teacher. ... [It] requires that teachers are genuinely, fully present" (214). One might assume that modeling or moving along with students—potentially a higher-psychological risk activity for both students and teacher—would similarly convey teachers' "humanness."

Applying D.W. Winnicott's delineation of emotional development in early childhood to the educational setting, Susan Handler emphasizes the ways in which the classroom milieu, as it exposes students to risk, has the power to "reinforce early positive experiences and propel children forward" (4). In Handler's application, a teacher can make students' learning and growth less risky for them if he mirrors their experience while remaining detached from their affective intensity. In most American classrooms, the primary medium of instruction and learning is verbal-linguistic. Students can safely be said in general to perceive their teacher as a competent speaker of the language, qualified to direct them in its usage. As several authors have noted, modeling helps students build their passion for the activity, and solidifies their trust in the teacher (Downey; Griss; Jowett; Methe and Hintze). In kinesthetic learning, the teacher can use his own experience of an activity, just as a reading teacher would use his own impressions of a storybook, to inform class discussion and debrief.

All teachers own the potential for positive impacts for student learning through kinesthetic activity, yet they come to the encounter with a variety of gifts and make different decisions about how to use what they have. In the model presented here, there are four initial teacher roles in kinesthetic teaching and learning: those who "can and do," that is, those who can both do the kinesthetic activity they ask of students and teach in an engaged way. There are those who "can't but do," who, that is, come in without pre-existing physical expertise but join nevertheless in the activity alongside their students. There are those who "can but don't," that is, who teach even as, for whatever reason, they rest from their past high kinesthetic exploits. All of these model something of value in the kinesthetic learning experience. Finally, there are those who "can't and don't"; they simply assign kinesthetic learning activities to students without exhibiting either interest or engagement in them. Each of these represents a way a teacher may bring kinesthetic learning into her classroom, given her existing or developing skills, her values as a teacher, and the subject matter or insights she wants to make available to her students. We can now look at each of these four teaching roles in turn to understand the role of the teacher figured in each. The central circle of Figure 1 below, poses each of these four roles—along with two variations—in relation to the others.

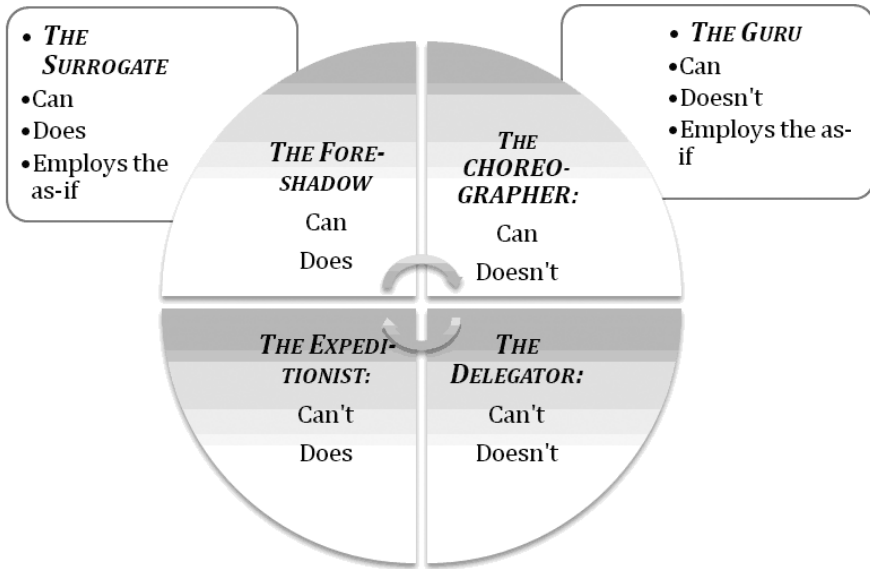


Figure 1: Six Teacher Types and Their Relevant Features of Kinesthetic Teaching

Those Who Can—and Do: The Foreshadowers

Those who both can and do, are “all there.” Eschewing theory, they move along with their students. A teacher who “can” may demonstrate or work alongside his students with confidence, or he may coach from the sidelines while still being perceived by them as kinesthetically competent. He models present or past expertise, demonstrating corporeal correctness or believably conveying some prior level of authority or expertise (since retired). Perceived competence does tend to give a teacher credibility in kinesthetic activities. For example, a teacher who wants to use yogic breathing techniques to help her irascible middle-school students learn to soothe their brushfire tempers may be more likely to be dismissed by those students if they don’t believe she’s experienced for herself the calming effect she’s pushing on them. Similarly, the science teacher who participates with her students in staging Kim Lubeke’s dance symbolizing the process of cell mitosis has quite a different effect from the one who bows out of direct participation with her students, concerned about the role of her advancing age on her movements skills (which she thinks were never really that good); the first teacher’s credibility stems either from proficiently “being there” alongside the students or else from reputedly demonstrating signs of having “been there.” Her proficiency holds her students in physical and psychosocial safety. They sense that what their teacher is asking of them will be worth the additional expenditure of energy and the potential for embarrassment, shame, or failure.

Kinesthetic competence may be perceived in the aged and arthritic ballerina who only rises from her wheelchair for short periods each day to show younger dancers key interpretive elements in the roles she originated; in the community college instructor who places her hand on her heart with confidence when introducing her adult ESL

class to the U.S. Pledge of Allegiance; or in the sixth-grade social studies teacher who draws on his sport experience and facilitates ball throwing and catching games to help the students understand principles of social interaction. While teachers may get excellent results by asking their students to create their own silent tableaux in order to get to the heart of a central conflict between a novel's characters, the teacher who participates in the experimentation through these tableaux—evidencing his or her willingness to interpret a novel anew in the presence of students—may inspire them to more open-ended, imaginatively reached-for possibilities.

Much cultural training has a physical basis in which experienced elders teach inexperienced youth, as when nineteenth-century European mothers teach a girl how much she must suck in her breath in order to fasten her corset, or contemporary American mothers teach daughters how to walk in high heels. And a whole class of examples of “hands-on” teaching can be found in the stereotyped movie scene of first physical contact between an onscreen couple, in which the man (in the role of the more experienced one) wraps his arms around the woman from behind, ostensibly to demonstrate how to hold a pool cue, golf club, or guitar, or to knead a mound of pizza dough. While the moviemakers—and the audience—know better, the character's overt premise is that the woman will learn through the man-teacher's body motions how her own should go (if she can concentrate!). I call this type of teacher the *Foreshadower*.

The role of the Foreshadower is perhaps the one that teachers most readily associate with body-based teaching and learning, and that frightens many of them away from moving along with students. However, the teaching of a Foreshadower is not the only way for students to gain insights from kinesthetic activities. Next we look at teachers who hold their expertise quiescent.

Those Who Can—But Don't: The Choreographers

Contrary to what one might assume from an article on kinesthetic teaching and learning, it is not in all cases better for a kinesthetically competent teacher to engage in physical activity with her students. Sometimes standing to the sidelines will be more likely to invite the desired result. For example, a classroom teacher who always got cast in leading roles in her own high school plays may believe that the more she demonstrates acting techniques in her ninth-grade honors English class's reading of *Julius Caesar*, the more she's hamstringing the students' dramatic acumen. Deciding to hold back from showing off her dramatic skills, she may well free her students'. Thus, the degree and type of modeling that may be ideal always depends on the situation, the teacher-student relationship, individual students' needs, the teacher's values, and the subject matter. The teacher who can but doesn't is a *Choreographer*. As Figure 1 shows, she is the only teacher type that is easily associated with the whole range of learning tasks.

The figure of the Choreographer is inspired by the retired dancer rehearsing younger performers and by the aging sports coach who, once an athlete, still has the imposing physique (and perhaps the chronic injuries) to prove it. In an instant, he can summon up a swift kick or an adroit shift of body weight that demonstrates to the students that he once really could do what he asks of them. The residue of experience is still there. In Marilyn Agrelo's film *Mad Hot Ballroom*, a documentary of an arts-enrichment program

that trained New York City fifth-graders in competitive ballroom dance, a school principal joins the professional dance instructors to teach the fifth-graders about proper ballroom dance “frame,” or body posture; she straightens her spine with the kind of élan that evokes this as a posture with deep roots in her body memory. Her knowing coaching seems to build the students’ confidence that they are getting able instruction. (It also doesn’t hurt the confidence-building that her past coaching has resulted in more than one city-wide win for her school’s dance team.)

For the Choreographer—the teacher who can but, generally speaking, doesn’t—corrections are often verbal. The relatively low physical involvement of the teacher allows the student to make her own discoveries; the learning environment remains truly safe, since the teacher’s expertise allows the student to rest in the knowledge that she’ll be prevented from making out-of-bounds or inappropriate choices. This style of teaching also affords an opportunity for true discovery, because the Choreographer cannot know in advance all the outcomes the student may come up with. It has a guide-on-the-side quality, exemplified by the student’s trial-and-error experimentation in the teacher’s presence, as when participating in a “Vote with Your Feet” human surveys exercise, in which students stand up at their seats or in a line according to their position on a particular issue or interpretation of a scene or character. Other examples of teaching that call for a Choreographer include driver’s education, classroom-based beginning computer instruction, or science labs in which the teacher allows the students to make their own mistakes under supervision, rather than trying to “save” student experiments that are beginning to veer off course.

Nevertheless, in the absence of ability, enthusiasm can go a long way. Next we look at the teaching of those who disregard any lack of expertise and jump in anyway.

Those Who Can’t—But Do Anyway: The Expeditionists

Although one might assume from the Foreshadower and the Choreographer examples that the teacher who identifies himself as a mover is inevitably going to have more success in bringing kinesthetic activities into the classroom than is a non-mover, a teacher’s inexperience in a particular discipline need not keep students from their birthright of body-based learning. Hence, the category of the teacher who can’t but does. A teacher putting into play John Lee’s exercise of getting up and moving in character in order to help a creative writing class discover what that character “wants” to do in a short-story exercise, need only model the enthusiasm of giving it a try, not turn out a convincing, much less virtuosic, display of character interpretation (124). Similarly, in an elementary school field trip to a local archaeological site, the teacher needs no special skill at digging or identifying fragments to be an effective model of the process of searching for buried artifacts in the ground; she can just outsource the faculty of kinesthetic competence to the archaeologist hosting the class visit. Given her proven leadership role with the students, her enthusiasm for (literally) getting her hands dirty carries a potent message about the value of the archaeological enterprise and what’s available to be learned in it. Such a teacher’s present-time willingness to be an active co-learner with her students, no matter how foolish she may end up looking, whets the students’ learning. This is the *Expeditionist*, whose capacity for kinesthetic engagement with her students is much more important for carrying the

learning than is any previously earned kinesthetic expertise.

The Expeditionist believes in the value of experiential learning and is willing to explore and learn alongside her students: she learns to milk a cow beside her students during a class field trip to a working dairy farm; learns and practices the laboratory experiments along with, or just one step ahead of, her students; or decides to try kinesthetic activities from multiple-intelligences sourcebooks that are designed to reinforce curricular concepts.

The learning led by an Expeditionist feels collegial to and builds trust with the students, as it emphasizes the willingness of the teacher to share the inherent vulnerability of the learning situation with them. It levels the playing field for students who are less confident with experiential learning: if the teacher, with the stakes perhaps a bit higher, is willing to jump in, then so can they. Enthusiastic if inexperienced participation also allows the teacher to gain those insights that are best available, and often come faster, with a beginner's perspective. She can then turn around and help students with those aspects of the learning task with which they actually struggle.

Those Who Can't—And Don't: The Delegators

As we have seen, many teachers *don't*; that is, they self-consciously exclude themselves from the ranks of those who could effectively implement kinesthetic strategies in their classrooms, believing they're neither kinesthetically competent nor capable of engaging in learning-oriented physical activity with their students without such competence. Yet, as we have seen, much learning can happen under the appropriate conditions, either where the teacher is highly competent but chooses to or must remain in a more distanced position, or where he has no particular kinesthetic training but is ready to jump in and learn together with his students.

However, if both teacher competence and engagement are low in a learning situation that depends on the teacher far more than on peers, it would be hard to transcend any but the absolutely most rudimentary instantiations of kinesthetic *learning*, even where kinesthetic *activity* is clearly occurring. The *Delegator* gravely limits his impact by remaining both physically detached and unschooled in the potential for kinesthetic learning.

This is the situation faced by many school teachers who, perhaps required to differentiate learning for students of varied learning styles, simply assign dramatic or other kinesthetic activities, say from a teaching manual, without an understanding of how the kinesthetic medium can be utilized to evoke or to cement learning. It is, arguably, where many teachers start out as they're trying to implement kinesthetic learning activities while in a fairly unconscious or even fearful state about using their bodies in their classroom teaching. (It is also the zone where principals, interested in incorporating a multiple-intelligences approach to differentiation, demand it of teachers without offering them the professional development to be effective.)

Having a physically disengaged teacher who is also not perceived by students as particularly competent makes this the psychologically riskiest environment for kinesthetic learning and the one least likely to succeed in accomplishing anything for the students other than blowing off energetic steam through physical activity and peer interaction. (Of course, this is not an insignificant value in an era in which physical education,

recess, art, music, and other relatively embodied activities are being cut from the school day, as Mara Sapon-Shevin has noted.)

Having looked at two spectra—the can/can't and the does/doesn't—and the teacher roles that ensue from their combination, we introduce just one more. This third, subtly deeper dimension of kinesthetic learning and teaching comes to the fore in the approaches of teachers I call the *Surrogate* and the *Guru*, both of whom bring social learning into play through their own “as-if” engagement with their students in social simulation. Such forms of teaching bring a new wrinkle to the very nature of modeling: rather than merely demonstrating and sharing in the activity, the teacher imprints human relationship itself. Next we look at this third dimension.

The Third Dimension of Kinesthetic Teaching: Teachers Who Enter the “As-If”

The third dimension of kinesthetic teaching can be a little harder to wrap one's mind around than whether the teacher *can* move, or whether she *does*. Here, the exact *role* of the teacher and the nature of the learning setting come into play as a teacher strives not only to reach a cognitive outcome but also to invite learning that will be applicable to a larger social reality. For example, a self-defense workshop may feature the instructor playing the role of an assailant to give her student-partner practice in the self-defense strategies of the class. Here, of course, the instructor is not an actual assailant. Rather, she knows both how to let the student's jabs find their mark for the sake of the learning experience and how to protect himself from true harm. The teacher is in a Surrogate role, standing in for the potential future attacker.

This martial arts partnering invokes what we might call an as-if condition, after the tradition of the “magic if” that was core to pioneering acting teacher Constantin Stanislavski's system. Using Stanislavski's magic if, the actor learns how to behave as a dramatic character would by imagining himself, as it were, in the character's own shoes and behaving *as if* he were the character himself. The gay actor required to play a dramatic love scene, with an actress he cannot find it in himself to see as attractive, imagines what the character, a heterosexual who *is* in love with the character the actress is playing, would do—and then performs those actions or behaviors.

In stage acting, the as-if refers to the development of a character. In the teaching-learning scenario, I am applying the as-if to the portrayal of *relationship*, part imaginary, part real, through the teacher's use of her body in her teaching. She uses her bodily presence, her immediate relationship with the individual student, or her construction of a simulated environment for learning, as a kind of rehearsal self that functions as a stand-in for future, outside-the-immediate-classroom-situation relationships and behaviors.

The as-if mode is much like what Johan Huizinga identified as “the play element in culture,” a mode of being whose rules “determine what ‘holds’ in the temporary world circumscribed by play” itself, and like what Richard Schechner defined, in reference to performance, as a “subjunctive” mode that can point to a future “indicative” mode of being for the student. Viv Aitken characterizes teachers as “relationship managers” who direct the starting and stopping of learning in a stylized partnership with their students; it is they who signal when play is to start and stop.

This final dimension of the model, examining social play as a simulation for future contextualized behavior, deals with a subtle and yet profound side of teaching, the instrumental role of the social world and the environment in teaching. It demonstrates how closely related kinesthetic learning is to both its social and spatial cousins, while also suggesting that many forms of compelling teaching, not just the kinesthetic, rehearse students using the as if. Because of its relationality, the teacher can see actual kinesthetic learning as it occurs; this is, fortunately, a far cry from requiring kinesthetic displays of learning acquired using other intelligences to be performed for her. The play dimension deals with the extent to which the student is aware of person and place as media, through which he can learn and then discard from his physical universe while retaining in memory, insight, pattern, and emotion.

A more detailed description of two quite canny teacher types follows, both of whom *can* and also *do* use relationship to teach. They are also referenced in Figure 2, above, which indicates that they are elaborations upon the more foundational roles the Foreshadower and the Choreographer.

Those Who Can But Don't—Gurus Who Use Simulation

Building on the role of the Choreographer, the Guru adds in an element of social simulation. The name is taken out of its original meaning, referring to Indian spiritual teachers who teach their disciples by wisely assigning practices or activities that will, by completing them within the context of the guru-disciple relationship, affect the desired learning. Here, of course, the name Guru is extended from the spiritual domain to all kinds of learning. Schön comes near the Guru's engagement in learning design when he writes about the role of the professional coach,

. . . who works at creating and sustaining a process of collaborative inquiry. Paradoxically, the more he knows about the problem, the harder it is for him to do this. He must resist the temptation to tell a student how to solve the problem or solve it for her, but he must not pretend to know less than he does, for by deceiving her, he risks undermining her commitment to their collaborative venture. One way of resolving this dilemma is for the coach to put his superior knowledge to work by generating a variety of solutions to the problem, leaving the student free to choose and produce new possibilities for action. (296)

The Guru may collaborate with the student from afar, anticipating her probable choices and experiences and designing environmental responses that will continue to teach in his absence. He may be a designer of simulations, like the overnight "Global Village" experiences for teachers and students hosted by the not-for-profit world hunger organization Heifer International, in which visiting students can experience, as realistically as possible, the conditions of poverty in many parts of the world. Instructional designer Michelle Evans's simulation "Follow the North Star," an intensely emotional weeklong simulation of antebellum slavery, offers enough realism that participants can form an affectively lasting relationship to an historical event outside their own life spans (cited in Weinberg).

Even emotionally and ethically challenging learning situations may place a teacher in a Guru role. A Holocaust reenactment, performed over several days during a summer camp, casts counselors as figures of terrible authority, doubling their power over the students. Remembering their raw experience in this simulation, participants may be drawn to review the dual roles of those they knew as camp counselors and to feel how the overall design of the simulation moved them toward learning, however painful.

The deep, in-the-bones learning that can come from Guru-designed simulations carries over from a relatively time-delimited situation to real-life commitments; here, games are celebrated as devices for learning living. After setting the stage, the Guru stands back to let the students do their own learning, as they maintain confidence in the structure the Guru provides.

Those Who Can and Do—Surrogates Who Use the Kinesthetic Relationship as a Teaching Medium

Also depending on social simulation to devise relational learning, the Surrogate brings his presence very centrally to the teacher-student relationship. Yet, among all the teaching styles, the teacher who acts as Surrogate holds a special betwixt-and-between position. While he is not the student's ultimate or true interactor in a real-life situation, he is an as-if partner, either selecting reactions that might be expected in a realistic context or else telling the student how such a partner would react. I am reminded of an Argentine Tango instructor who, feeling me anticipating his plans in leading me in the dance, decided randomly to pause and dance us in place to the music, thus training me to follow him, rather than to try to lead or pull him into movement. (Argentine Tango continues to be a male-directed social dance form.)

Such training was assuredly about teaching me surrender of control and social sensitivity in addition to dance technique—all in the service of fitting me to dance with future, "real" partners. Thus, the Surrogate is engaged, and engages the student, not only physically but also social-emotionally. In the classroom, the Surrogate may participate in an historical simulation or oral interpretation exercise opposite her student. She may stage and participate in Boal's Forum Theatre, becoming at one point director of an interactive scene, then participant along with students as another of them directs. The moments in which she appears in role allow students to perceive her in her duality.

The Surrogate may be considered an extension of the Foreshadower. Both are perceived by the student as being highly competent, both are physically engaged in the activity; one might say that both bring their professional bodies to bear in their teaching. The difference between them lies in a kind of use of the self by the Surrogate that is not required in the Foreshadower's teaching, a form that goes beyond *modeling for* to *playing opposite* the student. The teacher's own body teaches relationship *through* relationship.

Greg Downey describes a "reflecting" style of martial arts teaching that permits the teacher to play opposite the student and to train not merely his positions but also his instincts and patterns of movement in relationship (208). In a language arts classroom, the teacher helping her students stage a Shakespeare play is often a Surrogate. She may be both able and perceived as competent. In addition, in response to students' rehearsal readings of the witty lines, she may purposefully laugh in the places where she anticipates

future audiences will get the play's humor, thereby accustoming her students to allow wait time between lines. Such a Surrogate uses her own responses to actors' trial interpretations to suggest to them possible future responses by a real audience.

In his ethology studies, Bateson captures the simulation quality of the Surrogate role when he observes that otters not only fight, but play at fighting, practicing (or rehearsing) for when a real fight should offer itself (qtd. in Goffman 40). Goffman finds that in both human and animal play, "The playful act is so performed that its ordinary function is not realized. The stronger and more competent participant restrains himself sufficiently to be a match for the weaker and less competent" (41). Goffman calls the "frame" that cordons off the activity as a simulation a "key," which adds a "layer" or "lamination" to the activity performed (82). We might think of the edge of the frame as the student's and teacher's relationship to the real activity the teaching activity carries. The relating has several layers. As Donald Schön describes it, the participants are as if "in [a] hall of mirrors . . . continually shift[ing] perspective. They see their interaction at one moment as a reenactment of some aspect of the student's practice; at another, as a dialogue about it; and at still another, as a modeling of its redesign" (297). That reenactment is the province of the Surrogate.

Conclusion

One can work physically, one can work knowingly. That "knowing" is within all teachers' reach as they learn about the full potential and range of kinesthetic learning possibilities, from habit formation to concept formation. This typology of teachers and types of kinesthetic learning suggests a complexity in choices, interactions, and learning outcomes far beyond what has previously been suggested. What it points to, I hope, is that positive results with students are possible both for those who are expert movers, whether they exhibit their know-how explicitly or tacitly, and for those who unselfconsciously try kinesthetic activities along with their students, even without particular expertise. Returning to Table 1, one can observe that the Expeditionist, an enthusiastic if inexperienced teacher, figures prominently in learning activities that involve either external or internal discovery, while all five of the teacher types who are simply trying their best can find a place in learning tasks involving internal discovery.

Equipped with this model, both teachers and administrators may plan teaching and learning strategies with greater pragmatism, making choices founded on teachers' existing or developing skills, teaching values, and the subject matter or insights they want to make available to their students. Teachers can be empowered to adopt a form of bodily-kinesthetic teaching that will both reach all students and stimulate those who particularly shine in kinesthetic activities, even if not in other modalities such as the verbal-linguistic. In so doing, they restore students' access to their most vital path of learning. As they gain confidence in what they can offer students through their own physical or mental participation in kinesthetic activities, they stand to benefit those not only in the primary grades, but across the entire lifespan of learners—including themselves.

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