

Improvisational Interactivity: Moving Beneath the ICE

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Abstract

The relationally-oriented, interactive approach to Creativity Imagination Education (ICE) featured in this chapter prioritizes motion-sensitivity and the felt kinaesthetic sense. As an alternative to cognitively construed conceptions of creativity, we provide a series of student friendly inter-activities that invite you to experience the bodily feelings and energetic flows of improvisational creativity firsthand. Inspired by research conducted with improvisational experts in salsa dance, push-hands tai chi, acro-yoga, tap dance and equestrian arts, we attune to the sensorial and relational depths beneath the educational ICEberg. While pathways may certainly be created from the simple mimetic practices featured in this chapter to more physically-skillful games and partnered disciplines, we trust that focusing on everyday interactions with one another will inspire you to consider how teaching and learning can be enhanced by moving interactively and improvisationally with others.

We think visually. We think in sound. We think kinaesthetically. We think in abstract terms. We think in movement. (Ken Robinson, 2007)

Introduction

Imagination and creativity may be regarded as heady qualities, such as when out-of-the-box ideas seem just to pop into our minds. But what of ideas that percolate away, germinating, growing and sometimes bursting into the open as ‘a-ha’ moments? They may be hunches, intuitions, feelings even, rather than well-formed thoughts, yet we can all relate to times of feeling our most imaginative and creative selves – times of inspiration and of breathing more deeply and moving more animatedly in the moment as a good idea literally takes shape. These moments of inspiration tend to happen when we get out from behind our desks, move away from the computer screens, and become active. We play a game or sport with friends, take the dog for a walk, run with a partner, go out dancing, do anything that involves physical interaction. It may be that we are then simply refreshed in coming back to the heady task at hand. But what if, instead of thinking of this physical interactivity as a ‘body break,’ we paid closer attention to these interactive moments that inspire us? Our contention is that there is a kinaesthetic consciousness at work and that the more we tap into the bodily feelings and energetic flows of improvisational interactivity, the greater the potential for imaginative and creative thinking.

Some key pointers in this direction appear in the literature on imagination creativity education (ICE). Howard Gardner (2006) put the “bodily-kinesthetic intelligence” exemplified by athletes, dancers, martial artists and so on within a grab-bag of “multiple intelligences” that includes “interpersonal intelligence.” He wrote that “the ability to use one’s body to express

emotion (as in a dance), to play a game (as in a sport), or to create a new product (as in devising an invention) is evidence of the cognitive features of body usage” (Gardner, 2006 p. 10) whereas “[i]nterpersonal intelligence builds on the core capacity to notice distinctions among others – in particular, contrasts in their moods, temperaments, motivations, and intentions” (p. 15). Kieran Egan (1997), however, has posited “somatic understanding” as foundational to his developmental schema of imaginative education. It is a kind of understanding that “remains with us throughout our lives, continuing to develop within, though somewhat modified by other kinds of understanding” (p. 163). Most notably, Egan emphasizes “mimetic skills” that are developed as the basis of more representational and symbolic understandings (p. 164). These skills are not ones of mere imitation and mimicry but of the postures, positions, gestures and expressions of inventive representation and communicability. The exercise of one’s imagination and creativity is, in effect, rooted not just in our bodies but also in the bodily interactions we have with others. How we interact with one another and how, in particular, educators “interact and connect with students is central to imaginative teaching and learning” (Egan, Bullock & Chodakowski, 2016, p. 1006).

Fettes (2013) draws heavily upon Egan’s developmental schema of imaginative education, emphasizing more precisely how it is that “bodily experience” is foundational. He illustrates, through phenomenologically-based nature writings, the ways in which “direct immersion in the natural world, in rich sensory experience,” is reflective of a bodily and interactive “imaginative participation.” Judson (2018), who works with both Egan and Fettes, outlines “a walking curriculum” that instantiates such a sensory-rich, interactively-enabled, nature-based approach to imaginative education. Hatt and Graham (2017) are inspired by a similar stress on Vygotskian “principles of imagination” and recognition of the kinaesthetic

feelings and energetic flows of improvisational interactivity. Hatt (2018) states that an image we form in our minds draws “from a concrete experience of reality that passes through the domain of aesthetic emotions and culminates in artistic reality that forever alters the original reality” (p. 127). What is particularly telling in the instances that Hatt describes is that they reveal how “[t]he richness and depth of the creative activity of the imagination is dependent on the reciprocity and mutuality of direct and indirect life experience” (p. 142). In other words, beneath the ICE are moving, sensing bodies in improvisatory interaction with one another.

We will consider, in this chapter, various physically interactive and improvisatory practices that may serve as a guide to moving beneath the ICE and becoming sensitive to the kinaesthetics of the creative process. First, we offer simple examples that can be easily taken up as interactive and improvisatory practices. Second, we refer to various disciplinary practices we have studied which illustrate the kinaesthetic ‘listening’ echoing through conceptions of imagination and creativity. Third, we consider what can be drawn from these practices that are useful to teachers and that can be used in school Health and Physical Education programs. Fourth, and in conclusion, we will contemplate the ramifications of moving beneath the ICE and cultivating the kinds of improvisational interactivity in schools that are especially needed at this time.

ICE-Breakers

Let’s begin with an interactive game that you can play in person or online. To play you need a minimum of three people: an observer who is designated to be the detective; a leader whose identity is hidden from the detective but is known to the rest of the group; and at least one follower. The leader’s goal is to initiate movement patterns that the rest of the players can follow

without being caught out by the detective. The detective tries to guess who is the leader by describing telltale signs. Depending on the size of the group, a maximum of three guesses are granted. After a moment of debrief where the telltale signs are identified and a strategy to become less obvious is discussed, the game continues. The leader, whether identified or not, becomes the next detective and is asked to turn away while the next leader is determined in silence through an invitational gesture or a secret message. New leaders show consent in accepting this role by identifying themselves to the followers with a wave. The game begins again when each new detective is invited to turn around and is asked to identify the new leader who is leading the follower or group of followers in synchronous movements.

Take about five to ten minutes to play this game and then return to this chapter. For further instructions, see the following [video](#) and/or [online instruction on the InterActivities tab of the Function2Flow website](#). It is easier to begin with hand gestures but if you wish to add a level of complexity, the leader may wish to lower the hands and switch the focus to initiating more subtle movements such as small changes in angles and positions of the head, the shoulders or torso.

Interlude to play *Guess the Leader/Copy Cat*

What happened? Was the detective able to easily discern the leader? What strategies did the leader employ to go unnoticed? How difficult was it for the leader to come up with movements for everyone else to follow? How did it feel to convey these movements? Was a moment reached when the followers were completely in tune with the leader?

Consider how this interactivity has enlivened you. Has this interactivity been more than an ICE-breaker? Are you feeling more connected to your peers in ways that feel imaginative and creative?

Now let's try a rhythmical interactive practice with a partner. You can also do this in person or online. Nominate one of you to be the leader and the other person as the follower. Face one another head-on and close enough to be able to reach one another. Begin with a simple clapping pattern, where you clap your hands together twice and then each reach forward, pressing your palms, physically or virtually, into contact with your partner's hands. Repeat the pattern of "clap-clap-press" as you build a rhythmic sequence. Once comfortable in the rhythmic connection, the leader can vary the actions, such as changing the clapping to clicking of the fingers, or patting the chest, or tapping on the thighs or even the face. Then start to play with the rhythm itself, changing its tempo, varying the cadence, or stretching and contracting the intervals between the motions. Continue the practice until you feel the motional, spatial and temporal changes are seamlessly conveyed and received.¹

Did you find that, as a leader and as you continued the practice, you had to think less and less about what actions to instigate? Did you find that, as a follower and as you continued the practice, you became progressively less concerned about keeping up and wondering what change was coming next? Did it feel to both of you that this practice was becoming more and more improvisational? Could you switch leader and follower roles without stopping the interaction?

¹ For further variations that involve more participants and interactive ideas, see the following guidelines for playing "Feel the Beat with your Hands and Feet" and "Rhythm of Life" on the Function2Flow.ca website. The following @IA4Lproject [Instagram reflection](#) gives a sense of how much fun may be had when playing this game virtually with a group of student-teachers where the leaders switched after they repeated their rhythmical pattern four times: https://www.instagram.com/p/CIY4ga9FnO1/?utm_source=ig_web_copy_link

As with the first example, we can ask if this interactive practice has not only animated you but also stirred your imaginative and creative juices. Were there moments when you felt more creative than others? When you were leading, did you get on a roll? When you were following, was there a moment when you became more open to try new things? Describe a moment in this interactivity when you became more animated and when the movement and rhythm took on a life of its own.

Let's now turn our attention to physical interactivities we might observe on playgrounds, ball courts, sports fields and in gymnasias. They could be rhythmic ones of, say, skipping, hacky sack juggling and ball passing practices, exuberantly cathartic rough-and-tumble play and agonistic fleeing and chasing games, as well as point-scoring and strategic sports. Each of these interactivities requires us to align ourselves posturally, positionally, gesturally, and expressively with one another to a greater or lesser extent. We mirror and match our motions, shifting synchronously and then contrapuntally when necessary to accentuate our physical differences and secure an advantage. Even the most competitive interactivities, where winning the point or subjugating the opponent is the premise of playing together, are founded on the shared intention to move and be moved by one another. It is in this way, this disposition to inter-act, that simple physical practices like following a leader's movement cues and clapping hands with a partner can provide an improvisatory foundation for the more skillfully cast dual and team activities that comprise Health and Physical Education curricula.

Common to these interactivities is that they require us to be motionally in the moment, in the now, and responsive to one another within the ever-shifting dynamics of the play form, game or sport at hand. We enjoy a kinaesthetic connection of "moving in concert" with one another

based on “our prereflective awareness of the foundational qualitative dynamics of movement and their variational possibilities” (Sheets-Johnstone, 2014, p. 259). We experience a synergistic “flow of creativity” (Csikszentmihalyi, 1996, pp. 107-126), a “productive experiential and actional flow wherein normal ego functioning is put in abeyance” (deRobertis, 2017, p. 107) and where, not only do we enter a different time consciousness and a magnified spatial awareness, but we also realize a more nuanced relational sensitivity (Sawyer, 2010; Walker, 2010). Most especially, these practices are lively, enjoyable and sustaining to the extent that they are not overly repetitive and instead allow for moments of joint improvisation. It is as if the key principle of improvisational theatre – saying YES – takes on bodily voice and in so doing a “universe of possibilities becomes visibly, tangibly larger, over a period of mere moments” (Nachmanovitch, 1990, p. 55).

We are, in this attention paid to such physically interactive practices, questioning the headiness of promoting imagination and creativity in education (ICE). We are drawing up the body into this headiness by stressing the postural, positional, gestural and expressive dynamics of improvisational interactivity. We are pointing to: actual body positions and the proximity of contact; physical postures whether, say, leaning into or away from a partner; movement gestures and how, for instance, hand gestures are realized more fully via coupled connection to the torso and core musculature; and how expressivity is about the very manner in which we face one another and the particular ways we hold this connection. What we are essentially drawing attention to is the intersubjective and intercorporeal realm into which we are born (Stern, 2004; 2010) and which lays the foundation of all subsequent behavior (Merleau-Ponty, 1962; 2010a; 2010b), including what we regard as being imaginative and creative. This realm of bodily interaction is essentially and necessarily improvisatory.

Moving Interactively

Our bodies are designed to be interactive. Actions of pulling and pushing, bending and stretching are basic contraction and extension pairings that develop from our earliest interactions with the world (Smith & Lloyd, 2006, pp. 259-262). These “contractions and extensions, pushes and pulls, pressures and releases along with the activity-specific postures, stances, shapes, patterns and movement sequences can be taught as the functions and forms of an interactive liveliness” (Smith, 2020, p. 158). And rather than reverting to reductive talk of “fundamental movement skills” of an individually-focused “physical literacy” (e.g. Edwards et al., 2018; Robinson & Randall, 2017), we can regard this interactive design as “the mutual and reversible means of realizing a shared life” (Smith, 2020, p. 158).

Our own explorations of improvisational interactivity have involved paying close attention to the practices of acknowledged experts in particular disciplines. Through our SSHRC-funded [InterActive for Life project](#), we have observed, interviewed and, in certain cases, practiced with experts who include: Heather Crawford, a leading teacher and stage performer in Improvisational Tap Dance; Sam Masich who is a Tai Chi Master and teacher of Push Hands partnered practice; Anya Katsevman, a two-time World Salsa Dance champion; Jessica Goldberg and Eugene Polku who originated AcroYoga and are the directors of AcroYoga Montreal; and Paul Dufresne, a professional horse trainer and equestrian show performer (all featured in documentaries on our [learning from experts](#) tab on the Function2Flow.ca website). In this research we build upon earlier interest in “contact improvisation” wherein “glances are felt in fleeting, floating bodily brushes. Postures push against, with and through forms of flesh that resist, melt, merge and reform from one moment to the next” (Smith, 2014, p. 234). Here we focus on the “interactive

flow” (Lloyd & Smith, 2021) experienced through the improvisatory process of moving in response to another through kinaesthetic listening.

Crawford (2018) tells us of how improvisation between tap dancer and musicians, or between the dancers themselves, involves intense listening. She emphasizes “needing to be open in your listening and not closing off and only listening to yourself.” She compares this to dancers who seem more concerned about their own performances and tend to shut themselves off from what is happening around them right here and now. We can sense that listening is happening as it should when, as a performer, “you’re going to feel good and, if not, it’s going to feel awkward and probably not such a happy place to be in” (H. Crawford, personal communication, August 2018). Crawford insists that improvising means being “emotionally present,” not judging what you are doing, but getting “into a flow state” where you no longer need to think about what you are doing.

To get into a flow state in improvisation, dancers need to have such an enhanced skill set that they no longer need to think about what they’re doing. You go through this process of using every bit of technique that you have to get to this place, and once you get there you find out that you actually don’t need it at all. My mentor, Cookie Cook, went on stage, threw his hat in the air, didn’t catch it, and got more applause than our company did after 5 minutes of really hard-core dancing. It takes years and years of practice to get to the place where you can forget everything you know, simplify it all, and just listen” (H. Crawford, personal communication, August 2018).

Katsevman (2018), speaking at a workshop at the 2018 Montreal Salsa Convention, confirms the listening that is needed to “build an instinct” for the dance that not only takes you from one

learned figure to the next but also allows for “improvised movement” where “you’re listening and matching what you’re doing to the music.” She goes on to say that “the more you practice in this way, the more you develop the instinct, and the more confident you become, the more musical your dancing gets.” It is in this intense kinaesthetic listening that one feels the heartbeat of improvisation (A. Katsevman, personal communication, May 2018).

Masich (2018) refers to "the listening bell" or the tensegrity of the "fascial structure" that binds the muscles, ligaments and joints together and allows tension in one part of the body to be felt throughout. When one moves in response to this sort of listening, one learns to accept and say “YES” to whatever force comes your way. He relates to us in an interview that:

As with the normal bell, if you strike it anywhere, the whole bell rings. We want to create conditions where, if the partner touches us here, or pulls us here, or grabs us here, or punches us here, no matter what they do, the whole body becomes connected to the felt reaction. Tai Chi training is intended to make this response more and more efficient and more and more about the whole body so it is no longer something that comes at me and I bat it away as a reflex, in a fight or flight response. Something touches me and I need to connect with it by listening in the fascial bell (S. Masich, personal communication, October 2018).

Dufresne (2018) stresses not only watching but also listening to his horses. Such listening involves outwardly focusing on the horse while inwardly “listening to yourself.” Similar to the way a teacher might deviate from a pre-planned lesson, whatever movement or pattern he cues next is inspired by whatever he feels in the moment coming from the horse. He says:

I have an idea and then it's a matter of seeing what we get, as opposed to running a set pattern. When we run a set pattern we suck the life out of it, rather than encouraging interaction in a much more delightful way. The funny thing is that as I can get the horses to be more expressive and invested in what they are doing, I become much more engaged. All of a sudden everything picks up this life (P. Dufresne, personal communication, August 2018).

Goldberg and Poku (2019) express, too, the giving and receiving of energy and “softening into reciprocity” when balancing dynamically in AcroYoga. Whether “flyer” or “base,” it's a matter of giving and taking energy in this synergistic improvisation. Goldberg describes the practice of moving into a relational balance as “finding the sweet spot” where “the flow comes.”(J. Goldberg, personal communication, December 2019).

What we learn about kinaesthetic listening from these experts in Tap Dance, Salsa, Push Hands Tai Chi, Equestrian Arts, and AcroYoga is not just about the function and form dynamics that make these disciplines distinctive, but also about how to cultivate the relational feelings and flows of a much wider range of interactive practices. These feelings and flows of synchronized and synergistic ‘listening’ apply to practices that certainly differ mostly in their observable kinetic functions and aesthetic forms. In our research, however, we have found that these movement functions and forms become evidently improvisatory the more the kinaesthetic feelings and energetic flows are accentuated. In turn, it is possible, as some dancers say, to have “the feeling of seeing” (Lloyd, 2017) and imagine, on the basis of these felt images, where the dance might go. This “[f]eedback-sensitive coaction,” as Kimmel (2019) put it in studying Tango dancers, “creates much greater potential for creativity, which often emerges from subtle

interbody synergies” (p. 571). The “magic moments” in which “partners ‘click’ effortlessly without disrupting fluency” happen to the extent that they experience the “interpersonal synergy” of “going with the flow” and thereby discover “subjectively unknown energy optimal states” (p. 282). These are the moments we have described elsewhere as instances of “interactive” and “relational flow” (Lloyd, 2020; Lloyd & Smith, 2006; Smith & Lloyd, 2019) and that we wish for teachers and students to co-create in Health and Physical Education (HPE) curricula.

Curricular Applications

We draw attention to the interactive dynamics of kinaesthetic ‘listening’ to provide a basis for promoting ICE in a variety of more recognizable games and activities that inform HPE curricula. Rather than, say, prescribing certain fundamental movement skills of throwing and catching to reproduce in sending and receiving actions with a partner, playing games like *Guess the Leader/Copy Cat* or *Feel the Beat with your Hands & Feet* or other relationally-oriented [interactivities](#) as listed on the [Function2Flow.ca](#) website, shifts our attention from the objectification of movement to the sensorially-lived experiences of moving in response to others right here and now.

The games [Mirror Cone Touch](#) or [Fake Out Race Out](#), for example, were created by teacher education candidates [Anika Littlemore](#), an avid soccer player, and [Christina Nyentap](#), a fitness enthusiast. Both games showcase elements of moving synchronously with a partner, with the caveat that when they become competitive, the leader is to discern moments to suddenly shift or change direction to score a point, similar to the way a defender aims to match the moves of the player in possession of the ball. Both spoke about their experiences playing these games. Nyentap said that in playing these games she and her partner “had to try and stay together and

touch all the cones for the cooperative version of game while for the competitive version we had to try and lose each other” (C. Nyentap, personal communication, April 2021). It was necessary in doing so “to either stay with her or lose her.” While “there was no physical contact,” they realized that “it’s all about positionality or eye contact and reading body language, which connects to most sports.” Littlemore related these matching motions specifically to playing soccer.

If you're playing as a defender you want to stay with them, so you're going to want to know how they're moving, and anticipate where they're going to go next. I'm going to match them. And as an offensive player you want to get away from them. So you're going to imagine, “Okay, this is where this person is. I'm going to go this way to try to get away from them.” Really, that's what that game is all about. The leader is the offensive player trying to deke out the other one. The follower is the person who the defender is basically trying to mirror and make sure they don't get away (A. Littlemore, personal communication, April 2021).

We can apply what is sensed and felt in these and other interactive practices to classrooms, gymnasiums and fields where scoped and sequenced interactive practices drawn from games and sports, dance, gymnastics, alternative environment pursuits and even meditative and martial arts can be taught. Improvisation then becomes a curricular and pedagogical aspiration for children and youth to experience the feelings and flows of "interactive ‘we-ness’" (Smith, 2020, pp. 156-159) through simple and accessible interactive practices that fit within the K-12 curricula.

What is interesting to note is that, in these curricular applications, we are challenging the prevailing pedagogy of HPE with its cognitive, decision-making underpinning (e.g. the decision-making emphasis in the [*Teaching Games for Understanding*](#) conceptual model or the emphasis on who is making most of the decisions in the widely-referenced [*Spectrum of Teaching Styles*](#)). Rarely are students encouraged to develop skills to read and respond to others in and through movement despite the recent addition of *Social Emotional Learning* (SEL) outcomes in HPE curricula across Canada. Asking students, for example, if they made a good decision to create or move toward open space is very different than providing them with interactive practices that help them feel their way toward being in the right place at the right time.

These few examples will need to suffice for you to consider your own teaching of HPE in ways that are physically interactive, involve kinaesthetic listening, and cultivate the functions, forms, feelings, and flows of ICE sensitivities. What you choose to teach and how you teach as affording an improvisational interactivity is dependent on your own “YES and…” responsiveness within the practices comprising current HPE curricula.

Conclusion

Our over-arching goal is not necessarily to fixate on HPE curricula but to cast the improvisatory practices we have described as the inter-embodied fundamentals of a wider agenda for imagination creativity education. This agenda need not be focused on the achievements of individual students with their own powers of imaginative and creative thought. By summoning bodily resources, the imaginative and creative aspirations we hold for students can be rooted in free-flowing and dynamic interactions that occur between players of games and sports and, particularly, between partners in physical disciplines and artistic practices where attention can be

drawn to the postures, gestures, and expressions of improvisational interactivity. We have emphasized in this chapter, in particular, the sensory interplay of kinaesthetic feeling and energetic flow within certain kinetic functions and aesthetic forms that frame disciplinary practices of improvisation yet can be cultivated in both very simple as well as highly skilled interactive exercises.

Improvisation has close ties not only to imagination and creativity but also to *innovation*. What we stress in *improvisational interactivity* are the kinaesthetic and energetic sensibilities, as revealed through our "motion-sensing" inquiries (Lloyd & Smith, 2015; 2021), that are the basis of innovatory curricula. Health and Physical Education curricula across Canada currently advocate "physical literacy" based on individually-referenced practices of "fundamental movement skills" (Lloyd & Smith, 2014). These curricula are largely comprised of what David Kirk (2010) called "physical-education-as-sport-techniques" and that are, at best, the basic functional patterns of "blind improvisation" (Gosetti-Ferencie, 2021). We are advocating instead the development of innovatory curricula premised on not just the teaching of functional bodily motions and habitual forms of physical play, but also on how the kinaesthetic feelings and energetic flows of interactive improvisation can be enhanced. Certain innovatory examples have been provided in this chapter and we urge you to go to the InterActive for Life (IA4L) Resource for Teachers and Coaches for further curricular inspiration.

To educate children and youth to be imaginative and creative in ways that are now called for may well require grounding in realms of physical interactivity that our hyper-technologized and socially-mediatized world tends to marginalize. We find ourselves living in "simulacra" of sociality (Beaudrillard, 2001, pp. 168-187). The very inter-corporeality into which we are born is

subject to the simulations of gaming, social media and on-line teaching platforms. Yet just below the surface of this representational matrix is bodily life, breathing, pulsing, attuning to other bodies, and moving beneath the ICE. What we may ultimately learn, and teach children and youth, is how to be present, engaged and imaginatively and creatively responsive to one another at a time when educational agendas stressing “self-regulation” and “socio-emotional” control (Smith, 2020) are merely scratching the surface of the ICE.

In emphasizing the sensorial and relational depths to the educational ICEberg, it is our hope that you may incorporate in your own teaching practices these fundamental precepts of improvisational interactivity. The precepts are, as we have tried to show in this chapter, ones to live by. They are the functions, forms, feelings, and flows we can pursue from simple mimetic practices to more physically-skillful partner disciplines. In so doing we can sense how our everyday interactions with one another and, specifically, how teaching and learning can be enhanced by moving interactively and improvisationally beneath the ICE.

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