chapter 9

School "Performance": Improvisational Processes in Development and Education*

Jacquelyn Baker-Sennett University of British Columbia

Eugene Matusov University of California, Santa Cruz

Dr. Baker-Sennett and Dr. Matusov study the development of planning skills. With Barbara Rogoff and others, they have studied the collective improvisational skills that children employ while developing puppet and other theatrical performances. In this chapter, they describe this "playcrafting" work, and extend their discussion to emphasize a variety of ways that improvisational performances unfold in classrooms.

Classroom interactions are often improvisational encounters, and the teacher often acts as a sort of performer. But the application of performance to educational settings goes beyond the notion of "teacher as performer." Rather, contemporary research in education focuses on the *benefits* of collaborative, participatory learning, in which the students take an active role, in rich unstructured interactions with both the teachers and with other students. In this view, the classroom is a "community of learners." In this type of learning environment, the researcher must consider the joint performances of all of the participants, not only the teacher. A collaborating group can be considered to be conducting an improvised performance, since such interactions are not structured in advance.

^{*}This article is a revision and expansion of ideas presented in Baker-Sennett, J. (1995). Improvisacion, planificacion y el proceso creativo (Improvisation, planning, and the creative process), Infancia y aprendizaje, 70, 111-126. We would like to thank Barbara Rogoff for helpful suggestions on this paper and for her guidance and collaborative support.

The authors review a wide range of contemporary research on improvisational classrooms and on teaching as improvisation. For example, they argue that experienced teachers use a more improvisational style in their teaching, whereas the novice teachers plan ahead more and stick to the lesson plan more closely. Their discussion explores how both teaching and collaboration involve both structure and improvisation, how collaborative skills develop in childhood, and how improvisational teaching develops through a career.

The focus on the development of improvisational abilities is a theme linking this chapter to *Berliner's* and Henderson's chapters, since those authors analyze how a novice learns musical skills through participation in communities of practice. Their research on participation and collaboration in education is related to the chapters by Sawyer, Crease, and Silverstein on the improvisational qualities of everyday conversations.

I believe that our aesthetic sense, whether in works of art or in lives, has overfocused on the stubborn struggle toward a single goal rather than on the fluid, the protean, the improvisatory. We see achievement as purposeful and monolithic, like the sculpting of a massive tree trunk that has first to be brought from the forest and then shaped by long labor to assert the artist's vision, rather than something crafted from odds and ends, like a patchwork quilt.

-Mary Catherine Bateson, 1990

INTRODUCTION

This chapter explores the relationships between improvisation, performance, and developmental process in schools and during everyday sociocultural activities and practices. We argue that an important aspect of development involves creating and employing cultural, social, psychological, and physical means on the spur of the moment, and in response to problem-solving situations. Examining development within the context of a discussion of improvisational performance is compatible with contemporary perspectives on human activity that are guided by the assumption that individual's minds are not passive receptacles for knowledge, but rather that cognitive processes are developed through ongoing engagement in everyday activities (Baker-Sennett, Matusov, & Rogoff, 1992; Rogoff, Baker-Sennett, & Matusov, 1994).

Much of our discussion focuses on improvisational performance and development in an educational context. We believe that developmental psychologists and educators can learn a great deal from performance studies. While researchers and educators often emphasize the importance of memorizing, problem solving, and planning to guide actions, some dramatists counter that humans are too skilled in suppressing action. "All the improvisation teacher has to do is to reverse this skill and he creates very gifted improvisers. Bad improvisers block action, often with a high degree of skill. Good improvisers develop action" (Johnstone, 1979, p. 95). Along these same lines, we argue that development and improvisational activities are integrally interwoven. When educational opportunities for improvisation are blocked, children's opportunities to learn and develop are often limited. To explore these issues we draw on literature from psychology, anthropology, and education, as well as on a series of investigations of children's collaborative creation of classroom plays that explores the ways that children participate in dramatic activities with both peer and adult directors (Baker-Sennett, Matusov, & Rogoff, 1992, 1995).

Activity and Improvisation

Directors such as Charlie Chaplin (see Robinson, 1985), Konstantin Stanislavsky (1946, 1949, 1961, 1962), and Jacques Copeau (Rudlin, 1986), as well as musicians throughout history (see Bailey, 1980; Ferand, 1961) have been recognized for their facility with improvisational techniques. In the performing arts, improvisation is typically viewed as the "skill of using bodies, space, all human resources, to generate a coherent physical expression of an idea, a situation, a character; to do this spontaneously, and to do it *á l'improviste*: as though taken by surprise, without preconceptions" (Frost & Yarrow, 1990, p. 1). Improvisation in a theatrical or musical context provides important lessons for the social sciences and for an understanding of creativity (Randall, 1987; Schwartz & Ogilvy, 1979). During these performances meaning is collectively created. By understanding improvisational performance we may learn more about communication, risk taking, social relationships, and how order derives from seeming chaos.

The study of dramaturgy in sociology and some studies of performance in anthropology and education have relied on the metaphor of life as drama (Brissett & Edgley, 1990; Goffman, 1959; Schechner, 1985). Bruner has argued that, like drama, "so too a life can be described as a script, constantly rewritten, guiding the unfolding internal drama" (Bruner, 1973, p. 216). Rather than viewing people as objects that are shaped and influenced by outside forces, dramaturgical analyses view humans as creators. Meaning is found in the manner in which individuals express themselves in interaction with others (Burke, 1966; Engestrom & Kallinen, 1988; Heathcote & Herbert, 1985). Improvisations are not simply by-products of goal-directed actions, but rather improvisation is the process of creating meaning.

The use of performance as a metaphor for development is compatible with contemporary perspectives on human activity (Leont'ev, 1978; Meacham, 1984; Wertsch, 1991). Sawyer (1995) distinguishes between improvisational performance and product creativity. He defines improvisational performance as a collective creative synchronous process that constitutes the creative product: an ephemeral public performance. Thus, in improvisational performance, the process is product (see also Rogoff, 1990; Wertsch & Stone, 1979). Product creativity involves the process of creating products over time "with potentially unlimited opportunities for revision by the creator before the product is displayed" (Sawyer, 1995, p. 172). It is characterized by a diachronic interaction between public and audience. However, in product creativity, improvisational processes are also involved. To be able to "use" the author's product, the audience must initiate an interactive process with the historically distant author mediated by the product. Because direct feedback from the audience is not typically available for the author's creative process, the collective and dynamic character of product creativity is often overlooked. Sawyer stresses that in Western white middle-class culture (and in current research), product creativity is overemphasized while improvisational performance is underemphasized. However, it is probably fair to say that improvisational performance and product creativity are aspects of any sociocultural activity. Sociocultural activities with strong improvisational performance aspects still create strong experiences and memories that can be referred to in future activities and hence, in this sense, they demonstrate diachronic product creativity (e.g., successful jazz improvisations can be used in future compositions or even recorded with musical scores). Similarly, sociocultural activities with strong product creativity (e.g. reading a classic novel or analyzing a museum masterpiece) involve synchronic improvisational elements during both the author's creation of the product and the audience's consumption or use of the product.

Improvisation, Performance, and Education

In his study of Portuguese immigrant students attending a Catholic school in Toronto, Peter McLaren (1986/1993) describes how students negotiate activity in home and school contexts. Before class each day students congregate on the playground and streetcorners. Activity in this "street corner state," according to McLaren, is filled with improvisations and spontaneous verbal and physical expression:

IMPROVISATION IN DEVELOPMENT AND EDUCATION 20 I

[It] embraces fantasy, experiment, hypothesis, and conjecture . . . metaphors flourish and promote novel cultural forms. . . . There is apt to be more "flow" (after Csikszentmihalyi, 1990) in the matching of skills and abilities since students do things at their own pace. Students spend time experimenting with different roles-playing "as if' they were others. (p. 88)

When the school bell rings and students move in to the classroom, this spontaneous state is terminated. Students adjust by altering their behavior to a more formal "student state" where they participate in activities that are organized and preplanned.

Students move "offstage" from where they are more naturally themselves to the proscenium of the suite where they must write their student roles and scenarios in conformity to the teacher's master script; they move from the "raw" state of streetcorner life to the more "cooked" or socialized state of school existence. (McLaren, 1993, p. 90)

Any attempt by students to remain in the streetcorner state in the classroom, according to McLaren, is thwarted by educators through pointed stares or direct reprimands. Similarly, Zukerman (1993) remarks on the "double life" that children lead in Russian mainstream schools: They are involved in creative interaction and improvisational self-directed joint activities during recess time, whereas individual activities are controlled and monopolized by the teacher during classroom time.

Our own research (conducted in collaboration with Barbara Rogoff) also explores the contextualized nature of improvisational and preplanned activities as they unfold in the classroom. Over the course of a year we observed and videotaped elementary school children as they planned and performed school plays (Baker-Sennett et al., 1992, 1995). In one series of analyses we compared plays that were produced in small groups in a public elementary school classroom under the direction of parent volunteers with plays that were produced under the direction of first- and second-grade student volunteers.

Baker-Sennett et al. (1995) found that when children directed plays without overt intervention on the part of a teacher or adult volunteers, the resulting *playcrafting* sessions-the play planning and production—were filled with instances of spontaneous planning and improvisation. During child-directed playcrafting, very few decisions were made prior to the sessions. Rather, children often began by trying on costumes and using props in ways that led to the development of germs of ideas and lines of dialogue that were developed through improvisational processes. Once themes were recognized by the children, groups often

moved to more global and meta-planning activities necessary to reconcile individual children's understandings and thematic differences.

Conversely, during adult-directed playcrafting sessions, adults did most of the planning prior to entering the classroom. Parent volunteers typically presented their ready-made play plans and/or scripts to small groups of children who carried out these plans during the course of rehearsals and the final performance. During these adult-directed **play**crafting sessions, children were encouraged to contribute to the play's minor details such as what type of costume to wear or the design of a particular puppet. However, themes, scripts, and other types of **meta**cognitive decision making were typically controlled by the adult volunteers and decided upon before the adults entered the classroom.

Baker-Sennett, Matusov, and Rogoff (1995) argued that adults' efficiency was achieved at the expense of children's opportunities for learning and participation in planning and acting. Adults' planning processes were, for the most part, closed to the children. The adult volunteers in this classroom did not treat classroom time as an opportunity to plan together with the children and guide them through the process of planning, nor did they encourage child participants to engage in improvisations.

Adults never elected to perform or work as collaborative players in the productions. Instead, they took on the roles of directors and play-wrights, by sharing their ready-made plans with the children. By monopolizing the planning process, adults were faced with the problem of revitalizing their plans for the children as prospective actors. According to the theater theoretician Konstantin Stanislavsky, in order to act the play, actors must understand the playwright's intentions and goals. The actors have to join the playwright's planning process.

Need one point out that while the actor is on the stage all these desires, aspirations, and actions must belong to him as the creative artist, and not to the inert paper words printed in the text of his part; not to the play-wright, who is absent from the performance; nor yet to the director of the play, who remains in the wings? . . . An actor can subject himself to the wishes and indications of a playwright or a director and execute them mechanically, but to experience his role he must use his own living desires, engendered and worked over by himself, and he must exercise his own will, not that of another. The director and the playwright can suggest their wishes to the actor, but these wishes must then be reincarnated in the actor's own nature so that he becomes completely possessed by them. For these desires to become living, creative desires on the stage, embodied in the actions of the actor, they must have become a part of his very self. (Stanislavsky, 1961, p. 50)

In Stanislavsky's improvisational method, planning and acting are two aspects of one process. During classroom playcrafting, however, the adults' way of sharing the plan and guiding children through the playcrafting process did not facilitate social and cognitive opportunities for children's creative involvement. In the final production, the child participants were enacting the adults' plans rather than planning or improvising creatively. Based on the dramatic sensibilities of adult Western white middle-class mainstream culture, the adults may have created more coordinated and coherent performances than were created during childdirected playcrafting sessions. However, the adults did not usually contribute to children's development as planners or creative improvisers, participating in the planning process.

In contrast, playcrafting directed by child volunteers required the children to plan and improvise themselves. The planning process was open for participation and socially distributed among the children. In the child-directed playcrafting sessions the final performance was only a part of the playcrafting process. During the child-directed playcrafting sessions, the children's individual mastery of planning activity, as well as their collaborations with each other, seemed to be organic parts (and moments) of the unfolding sociocultural playcrafting activity.

Improvisational Classrooms

The British director Keith Johnstone writes of the "watcher at the gates of the mind" who examines and edits ideas. In the case of our playcrafting example, adult volunteers were the gatekeepers for children's creativity. Johnstone and other dramatists argue that in the case of improvisation, "the intellect has withdrawn its watcher from the gates, and the ideas rush in pell-mell, and only then does it review and inspect the multitude" (Johnstone, 1979, p. 79). Is there some merit to this metaphor?

Baker-Sennett and Ceci (1996) found developmental declines in ideational fluency, flexibility, and improvisational problem solving during the middle elementary school years. To date, there has been little research that examines why children show developmental declines in the uses of improvisational and creative processes during the elementary years. It has been suggested, however, that most North American children are discouraged from creating and improvising as they proceed through the educational system. The philosopher Robert Root-Bernstein argues that

Students are evaluated on their ability to reach correct accepted conclusions. This sort of education is necessary, but it is also insufficient, serving only to verify what we know, to build up the edifice of codified science without suggesting how to generate ideas of the sort that lead to new discoveries. (Root-Bernstein, 1988, p. 34)

In his work with Australia's Theatre in Education Programme, O'Toole (1992) points out that "teachers normally appropriate the functions of playwright and director, and they may also take role as a player and devolve some aspects of 'playwright' or 'director' to the other participants" (p. 38). By facilitating classroom activities that allow children to co-create roles and distribute responsibility across participants, we argue that opportunity arises for the development of active learning and creativity.

The educator Viola Spolin (1963) argues that a major difference among the many classrooms she encountered in her career can be attributed to their differential reliance on the use of improvisation as a context for instruction. Improvisational classrooms, according to Spolin, have three important features: Learning is a shared social activity, is self-regulated, and has a "point of concentration." Spolin and others argue that cooperation is a prerequisite for spontaneity and improvisation (Donmoyer, 1983). The social nature of improvisation sets the stage for cooperative activity. In theatrical improvisation this social emphasis promotes ensemble creations as opposed to a star system (Spolin, 1963). Extending this metaphor to a classroom setting translates to an emphasis on the successful completion of group projects as opposed to individual grades as a motivator for activity.

An improvisational classroom also de-emphasizes external authority over classroom activity. Echoing the ideas of Dewey (1963), Spolin argues that external authority inhibits spontaneity because students and teachers are constrained by predetermined possibilities. However, improvisational classrooms shift the burden of responsibility from the teacher, also relying on the class to keep the activity on track.

Finally, according to Spolin, improvisation provides a focus or a "point of concentration" that allows for learning efficiency as opposed to unbridled chaos. The point of concentration

Gives the control, the artistic discipline in improvisation, where otherwise unchanneled creativity might become a destructive rather than a stabilizing force. It provides the student with a focus on a changing, moving single point ("Keep your eye on the ball") within the \ldots problem and this develops his capacity for involvement with the problem and relationship with his fellow players. (1963, p. 22)

This point of concentration functions as a boundary within which students operate and within which constant crises must be met. "Just as a jazz musician creates a personal discipline by staying within the best while playing with other musicians, so the control in the focus provides the theme and unblocks the student to act upon each crisis as it arrives" (p. 23). This point of concentration provides a focus and direction for experience without inhibiting spontaneity nor dictating the course of behavior. It also refers to the interplay of improvisational performance and product creativity discussed by Sawyer (1995).

Teaching as Improvisation

Dewey describes the impact of moving from an educational system that focuses on recitation to one that encourages improvisational communication:

This change of the recitation, from an examination of knowledge already acquired to the free play of the children's communicative instinct, affects and modifies all the language work of the school. Under the old regime it was unquestionably a most serious problem to give the children a full and free use of language. The reason was obvious. The natural motive for language was seldom offered. In the pedagogical textbooks language is defined as the medium of expressing thought. It becomes that, more or less, to adults with trained minds, but it hardly needs to be said that language is primarily a social thing, a means by which we give our experiences to others and get theirs again in return. When it is taken away from its natural purpose, it is no wonder that it becomes a complex and difficult problem to teach language. (1990, p. 55)

Like improvisational actors, who arrive onstage with a set of guiding principles rather than a written script, interactive teachers are also improvising performers. Yinger (1980, 1987) argues that when improvising, a teacher begins with an outline of the classroom activity. Details are filled in during the class session as the teacher creates the lesson in the process of figuring out what students can do and what they know. Unlike traditional lesson plans that outline objectives and the steps necessary to meet these objectives, improvisational teaching involves creating general guidelines and then improvising on-site when unpredictability occurs.

Improvisational teaching seems to be based on a teacher's skill in planning and collaborating "on the fly" (Tharp & Gallimore, 1988). This skill is based on an educational philosophy of mutuality and collaboration in providing guidance that avoids traps of either an adult-run philosophy of teaching when classroom activity is monopolized by the teacher, or a children-run philosophy of teaching when the teacher only follows children's interests (Matusov & Rogoff, in press; Rogoff, 1994; Rogoff, Matusov, & White, in press). Improvisational teaching takes the form of "a transactional dialogue, in which the comments and contributions of the participants build organically on each other's views and in which alternative viewpoints, differing interpretations, and criticism are elements essential to the encounter" (Brookfield, 1986, p. 23). It involves bridging inquiries of students and the teacher and creating a "community of learners" that extends the walls of school, the time frame of the lesson, and children's participation in classroom activities. Tharp and Gallimore (1988); Moll and Whitemore (1993); Palincsar, Brown, and Campione (1993); Wells, Chang, and Maher (1990); and Rogoff, Matusov, and White (in press) provide many examples of transactional dialogue and improvisational teaching in classrooms functioning as a community of learners. Gallimore describes improvisational teaching as being the end and the means to that end in the following way:

Historically, teachers have tended to control discourse in ways that greatly restricted students' participation. Efforts to diversify classroom discourse have often sought a more conversational, discursive style found in teaching/learning activities outside of school. Certain kinds of literacy functions cannot be taught through disjointed, question-answer sequences. In more conversational exchanges, children learn to critique multiple interactions of texts, to take multiple perspectives, and marshal and weigh evidence. As long as involvement in the activity is high, even silent participants get a "cognitive work-out." They are "participant-observers in the activity," a stage that precedes actual practice. (Gallimore 1984, quoted in Rogoff, Matusov, & White, in press)

To explore improvisational teaching, Borko and Livingston (1989) observed experienced and inexperienced teachers during mathematics classes throughout an entire week. They found that while experienced teachers created long-range planning blueprints of course content and sequencing, much of their teaching strategy was improvisational. That is, during interactive teaching they made final decisions about the specifics of instruction. Experienced teachers reported that much of their planning occurred outside of formal planning times and was never written down. One teacher described his planning in the following way, "A lot of times I just put the objective in my book, and I play off the kids." He viewed his improvisational teaching as comparable to a tennis match, "I sort of do a little and then they do a little. And then I do a little and then they do a little. But my reaction is just that, it's a re-action. And it depends upon their action what my reaction's going to be" (p. 485).

In contrast to experienced teachers, the inexperienced teachers in Borko and Livingston's study relied on short-term (as opposed to longterm) planning. Inexperienced teachers reported planning ahead a few pages or a section in the text. Plans were created for tomorrow. These teachers typically wrote down written scripts that included introductions and conclusions. They were aware of the impact that their inexperience had on their ability to plan and improvise. According to one inexperienced teacher,

This is all so new to me that thinking up, I have to do a lot of thinking ahead of time. I really do. I have to think out what kind of questions to ask. I have to think out the answers to the questions . . so that my answers are theoretically correct and yet simple enough to make sense. And I have to really think in math. I love it. But I have to really think carefully about it. I can't ad-lib it too well. (Borko and Livingston, 1989, p. 48'7)

When inexperienced teachers' lessons deviated from their a priori plans these teachers often ran into difficulty. For example, some teachers provided factually incorrect responses to student questions, others had difficulty relating their lesson to the curriculum, and still others had difficulty keeping the lesson on track when responding to students' questions. These experiences resulted in some of the inexperienced teachers deciding to minimize improvisation by eliminating the opportunity for students to ask questions. One teacher explained,

It's better to cut off the questions, just go through the material, because it'll be much clearer to them if they just let me go through it. . . . I don't want to discourage questions, but there are times I'd rather get through my presentation and then get to the questions. (p. 488)

These examples suggest that improvisation may benefit from experience. For novice teachers with little experience, it was difficult to improvise. Experienced teachers were able to sketch a teaching plan and then improvise according to student needs and interests during the course of each lesson. It also appears that the difference between the teachers is not only characterized by length of time spent in teaching or quantitative adjustments of teaching skills but a "paradigm shift" in their teaching philosophy that involved relinquishing control of the educational process and re-viewing teaching and learning as a collaborative endeavor.

Does Improvisation Benefit From Structure and Experience?

While this question has never been thoroughly examined, we began to get a glimpse of how improvisation is used as a tool for creativity and communication in our studies of children's playcrafting (Baker-Sennett et al., 1992). While volunteering and conducting research for a different study of children's playcrafting at the same innovative public school described earlier, we also had the opportunity to observe and videotape a group of six second- and third- grade girls over the course of ten halfhour sessions as they collaborated on the planning and production of their version of the fairy tale "Snow White." With intermittent assistance from the classroom teacher the group spent 1 month planning and rehearsing their play. The sessions were transcribed and then examined for evidence of both advance and improvisational planning.

Five levels of planning were identified that ranged from considering such metacognitive issues as deciding how to plan the planning process, to more concrete and detailed decision making about specific words and actions. Over the course of the month the girls spent a good deal of time during the early sessions considering many of the meta-planning issues that would form the foundation for later concrete planning decisions. They discussed how to develop strategies and rules for handling disputes during the planning process and considered alternatives for deciding how to go about planning the play. During these early sessions they also spent time deciding on the main theme and events of the play and how to divide and distribute roles. Throughout these early sessions the group spent most of their time planning in advance "out of action," not enacting any roles. However, during the fourth session a shift in activities occurred. At this point the group began to create by improvising in character and planning opportunistically. They began to both improvise and modify preplanned actions, dialogue, and scenes. At the same time they created new plans while enacting portions of the play.

Baker-Sennett et al. (1992) argue that during the early sessions the group was building a social foundation that allowed them to both work effectively as a social group and to meet the cognitive challenges of their playcrafting task. For example, the solution to one interpersonal problem involved a student's suggestion to "mix ideas" and thus to welcome contributions of all participants. This resulted in a humorous modification of the traditional fairy tale "Snow White," based on reversing ideas, themes, and characters, which was reflected in the children's new play title, "Blue Night." The processes of solving interpersonal and taskoriented problems developed in parallel and resulted in a single playcrafting process that we describe as the creation of a social foundation. The social foundation was built through direct verbal communication and explicitly stated plans. Once this social foundation was developed, the group was able to communicate in a more indirect, implicit, and abbreviated fashion. Plans did not need to be explicitly stated; rather the group was able to communicate and plan improvisationally, often retaining the voice and mannerisms of the particular character they were assuming.

Children's playcrafting is a problem-solving situation that necessitates both creativity and flexibility. There are an infinite number of ways of negotiating the process and creating the final product. Besides openended goals related to the playcrafting activity itself, children also seem to pursue many specific goals in playcrafting, including building their friendships, managing interpersonal relations for their own gains, having fun, securing approval of the teacher and the classroom, and so on. The goal-development process was embedded in the activity and problem solving, and was bounded by the activities and relations outside the playcrafting.

Rogoff, Gauvain, and Gardner (1987) have suggested that for problems that have a number of potential solutions rather than a single "best" solution, it may be more efficient to plan improvisationally, in order to take advantage of circumstances and to avoid the mental effort and delays required to formulate an advance plan. This seemed to be the case with the creation of "Blue Night." In this example, the problem was open-ended, not all of the final outcomes of planning decisions could be foreseen, thus the group's decision to leave some aspects of the plan open to improvisation allowed for greater flexibility and creativity.

CONCLUSION

Learning how to improvise may be rather more than just getting used to botching things up, or doing something "on the spur of the moment." It may even be something like a skill for living. Not just doing anything in the moment, but learning how to make use of as much of ourselves and as much of the "context" as possible; learning how to fill the moment. (Frost & Yarrow, 1990)

As Frost and Yarrow argue, improvisation is more than acting in the moment and working with the imperfections that spontaneity brings. Improvisation is the intersubjective process of creating meaning. Schools do not typically teach students how to improvise, nor are the everyday failures that result from risky improvisations dealt with in the educational arena. In North America teachers are skilled at helping individual students become efficient at solving text-based, algorithmic problems. Although the problems of everyday life require opportunistic planning, school activities typically separate problem solving from problem defining and inquiry development (Lave, 1988).

In this chapter we have pointed to the importance of improvisational performance for development and educational practice. We have argued that it does not always make sense to follow a preplanned trajectory.

2 IO BAKER-SENNETT & MATUSOV

Rather, it is through improvisation that we weave familiar and unfamiliar activities and ideas in response to social, contextual, and individual needs. Traditional studies of 'learning in school settings have emphasized adult-directed, text-based learning. It has been interesting for us to explore what takes place when the text is gone and when students and teachers have the opportunity to improvise. By exploring the drama in everyday activities we are able to reevaluate existing perspectives on child development. We find that not only does improvisational performance provide children with opportunities to engage in sophisticated, collaborative problem-solving processes, it also serves as a tool that revitalizes the way we think about the relationships between teaching, learning, and development. As we have argued, the fields of education and developmental psychology have much to learn from drama. French director Jacques Copeau foreshadowed this article's conclusion more than 80 years ago when he argued; "Somewhere along the line of improvised play, playful improvisation, and improvised drama, real drama, new and fresh, will appear before us. And these children, whose teachers we think we are, will, without doubt, be ours one day" (Copeau, 1916, guoted in Rudlin, 1986, p. 44).

REFERENCES

- Bailey, D. (1980). *Improvisation: Its nature and practice in music.* Ashbourne, Derbyshire, U.K.: Moorland Publishing.
- Baker-Sennett, J., & Ceci, S. (1996). Cognitive insights: Examining clue-efficiency and strategies related to discovery. *Journal of Creative Behavior*, 30, 153-172.
- Baker-Sennett, J., Matusov, E., & Rogoff, B. (1992). Social processes of creativity and planning: Illustrated by children's playcrafting. In P. Light & G. Butter-worth (Eds.), *Context and cognition: Ways of learning and knowing*. Hertfordshire, U.K.: Harvester-Wheatsheaf.
- Baker-Sennett, J., Matusov, E., & Rogoff, B. (March 1995). Collaborative planning of classroom plays with child and adult direction. Paper presented at the meetings for the Society for Research in Child Development, Indianapolis, Indiana.
- Bateson, M. C. (1990). Composing a life. New York: Penguin Books.
- Borko, H., & Livingston, C. (1989). Cognition and improvisation: Differences in mathematics instruction by expert and novice teachers. *American Educational Research Journal, 26, 473-498.*
- Brissett, D., & Edgley, C. (1990). Life as theater: A dramaturgical sourcebook. New York: Aldine de Gruyter.
- Brookfield, S. D. (1986). Understanding and facilitating adult learning. San Francisco: Jossey-Bass Publishers.

IMPROVISATION IN DEVELOPMENT AND EDUCATION 211

- Bruner, J. (1973). Beyond the information given: Studies in the psychology of knowing. New York: Norton & Company.
- Burke, K. (1966). Language as symbolic action: Essays on life, literature, and method. Berkeley: University of California Press.
- Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper and Collins
- Dewey, J. (1963). Experience and education. New York: Collier Books.
- Dewey, J. (1990). The school and society. Chicago: University of Chicago Press.
- Donmoyer, R. (1983, January). Pedagogical improvisation. *Educational Leadership*, 39-43.
- Engestrom, Y., & Kallinen, T. (1988). Theatre as a model system for learning to create. The Quarterly Newsletter of the Laboratory of Comparative Human Cognition, 10, 54-67.
- Ferand, E. T. (1961). Improvisation in nine centuries of Western music. Koln, Germany: Arno Volk Verlag Hans Gerig KG.
- Frost, A., & Yarrow, R. (1990). *Improvisation in drama*. London: Macmillan Education Ltd.
- Goffman, E. (1959). *The presentation of self in everyday life.* New York: Doubleday & co.
- Heathcote, D., & Herbert, I? (1985). A drama of learning: Mantle of the expert. Theory into Practice, XXIV (3), 173–180.
- Johnstone, K. (1979). Impro: Improvisation and the theatre. London: Faber and Faber.
- Lave, J. (1988). Cognition in practice: Mind, mathematics and culture in everyday life. New York: Cambridge University Press.
- Leont'ev, A. N. (1978). Activity, consciousness, and personality. Englewood Cliffs, NJ: Prentice-Hall.
- Matusov, E., & Rogoff, B. (in preparation). Educational philosophy differences related to parents' experience volunteering in a community of learners school.
- McLaren, P. (1986/1 993). Schooling as a ritual performance: Towards a political economy of educational symbols and gestures. London: Routledge.
- Meacham, J. A. (1984). The social basis of intentional action. Human Development, 27, 119-123.
- Moll, I., & Whitmore, K. (1993). Vygotsky in classroom practice: Moving from individual transmission to social transaction. In E. Forman, N. Minick, & C. Stone (Eds.), Contexts for learning: Sociocultural dynamics in children's development. New York: Oxford University Press
- O'Toole, J. (1992). The process of drama. London: Routledge.
- Palincsar, A. S., Brown, A. L., & Campione, J. C. (1993). First-grade dialogues for knowledge acquisition and use. In E. Forman, N. Minick, & C. Stone (Eds.), Contexts for learning: Sociocultural dynamics in children's development. New York: Oxford University Press.
- Randall, R. A. (1987). Planning in cross-cultural settings. In S. L. Friedman, E. K. Scholnick, & R. R. Cocking (Eds.), *Blueprints for thinking* (pp. 39-75). New York: Cambridge University Press.

Robinson, D. (1985). Chaplin: His life and art. New York: McGraw-Hill.

Rogoff, B. (1990). Apprenticeship in thinking: Cognitive development in social context. New York: Oxford University Press.

- Rogoff, B. (1994). Developing understanding of the idea of communities of learners. *Mind, Culture, and Activity, 1, 209-229.*
- Rogoff, B., Baker-Sennett, J., & Matusov, E. (1994). A sociocultural perspective on the concept of planning. In M. Haith, J. Benson, B. Pennington, & R. Roberts (Eds.), *Future-oriented processes* (pp. 353-373). Chicago: University of Chicago Press.
- Rogoff, B., Gauvain, M., & Gardner, W. (1987). The development of children's skills in adjusting plans to circumstances. In S. L. Friedman, E. K. Scholnick, & R. R. Cocking (Eds.), *Blueprints for thinking* (pp. 303-320). New York: Cambridge University Press.
- Rogoff, B., Matusov, E., & White, C. (in press). Models of teaching and learning: Participation in a community of learners. In D. Olson & N. Torrance (Eds.), *Handbook of education and human development: New models of learning, teaching, and* schooling. London: Basil Blackwell.

Root-Bernstein, R. (1988, May/June). Setting the stage for discovery. *The Sciences*. Rudlin, J. (1986). *Jacques Copeau*. New York: Cambridge University Press.

- Sawyer, R. K. (1995). Creativity as mediated action: A comparison of improvisational performance and product creativity. *Mind, Culture, and Activity, 2,* 172-191.
- Schechner, R. (1985). *Between theater and anthropology.* Philadelphia: University of Pennsylvania Press.
- Schwartz, P., & Ogilvy, J. (1979). The emergent paradigm: Changing patterns of thought and belief. Menlo Park, CA: Stanford Research Institute International.
- Spolin, V. (1963). Improvisation for the theatre. Evanston, IL: Northwestern University Press.
- Stanislavsky, K. (1946). An actor prepares. New York: Theatre Arts Books.
- Stanislavsky, K. (1949). Building a character. New York: Theatre Arts Books.
- Stanislavsky, K. (1961). Creating a role. New York: Theatre Arts Books.
- Stanislavsky, K. (1962). Stanislavsky on the art of the stage. (trans. by D. Magar-shack). New York: Hill & Wang.
- Tharp, R. G., & Gallimore, R. (1988). Kousing minds to life: Teaching, learning, and schooling in social context. New York: Cambridge University Press.
- Wells, G., Chang, G. L., & Maher, A. (1990). Creating classroom communities of literate thinkers. In S. Sharan (Ed.), *Cooperative learning: Theory and research. New* York: Praeger.
- Wertsch, J. (1991). Voices of the mind. Cambridge: Harvard University Press.
- Wertsch, J., & Stone, C. A. (February, 1979). A social interactional analysis of learning disabilities remediation. Paper presented at the International Conference of the Association for Children with Learning Disabilities, San Francisco.
- Yinger, R. J. (1980). A study of teacher planning. The Elementary School Journal, 80, 107-127.
- Yinger, R. J. (1987). By the seat of your pants: An inquiry into improvisation and teaching. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.
- Zukerman, G. (1993). Wdy obsrhenia v obuchenii (Types of interaction in the class-room). Tomsk, Russia: Peleng.