

Promoting narrative competence through adult–child joint pretense: Lessons from the Scandinavian educational practice of playworld

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Abstract

This paper examines the effects of the playworld educational practice on the development of narrative competence in 5- to 7-year-old children. The playworld educational practice is derived from play pedagogy and the theory of narrative learning, both developed and implemented in Scandinavia. The playworld practice consists of joint adult–child pretense based in a work of children’s literature, discussion, free play, and visual art production. When compared to children under a control intervention (conventional school practices without pretend play), children who participated in the playworld practice show significant improvements in narrative length, coherence, and comprehension, although not in linguistic complexity. These findings provide further evidence concerning the role of pretense in the narrative development of young children. © 2005 Elsevier Inc. All rights reserved.

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1. Introduction

In recent years, a series of legislative and political measures have been undertaken in the United States to create educational activities that would enable all children to achieve state and national learning objectives. As a result of this legislation and the introduction of accountability policies, statewide testing has become mandatory for the survival of public schools. An important ramification of high stakes testing is a strong tendency for educators to focus on teaching content that is congruent, or even equivalent, to test materials, and to disregard, or pay less attention to, content that is not included in test batteries. Consequently, in preschool and the early elementary grades traditional activities for young children, such as art and pretend play, have been relegated

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to a marginal position despite the fact that these symbolic and representational activities are widely seen as beneficial developmentally (Goncü & Klein, 2001; Lillard, 2002; Piaget, 1962; Sutton-Smith, 1997; Vygotsky, 1982).

By contrast, in Sweden and Finland, countries with some of the highest rates of literacy, the emphasis has been placed in the opposite direction. In Sweden, the value of play in early childhood education has been recognized in educational policy and practice since 1946 (Nilsson, 2003). Recent modifications in Swedish preschool and elementary school educational curricula involve an even closer integration of play with other learning activities (Ministry of Education, 1998; Sandberg & Samuelson, 2003). For example, the new curricula focus on the development of the “whole child” and require that preschool and elementary school teachers work together in teams with mixed age groups, implementing activities that integrate play and learning (Sandberg & Samuelson, 2003). Lindqvist (1995, 1996, 2001) has developed an educational practice, “play pedagogy,” which addresses the demands of the new curricula. Play pedagogy is currently being used in a few teacher education programs and day care centers, and Nilsson (2003) suggests that play pedagogy should be used more widely, as it would satisfy the requirements of the new curricula.

In Finland, the value of play in early childhood education has also been recognized in educational policy and practice. In 1997, Pentti Hakkarainen started an experimental teacher-training program at the University of Oulu that was partly inspired by Lindqvist’s work. Using Hakkarainen’s educational theory of “narrative learning” (Hakkarainen, 1999, 2004), several schools across Finland have now implemented curricula closely related to play pedagogy.

In this paper, we first introduce some of the basic tenets of play pedagogy and narrative learning. We do this in order to describe the operation of a playworld, an educational practice that we created in the United States, and which is derived from Lindqvist’s play pedagogy and consistent with Hakkarainen’s narrative learning. We then present a study which investigates the effects of this practice on the narrative competence of young elementary school students.

1.1. Playworld in play pedagogy and narrative learning

Lindqvist (1995, 1996, 2001) grounds the educational approach of play pedagogy in a lesser-known work of Vygotsky, entitled “Creativity and fantasy in childhood” (in Russian: “Voobrazenie i tvorcestvo v detskom vozraste”). Vygotsky’s (1982) theory of play and fantasy implies that pretense is a way to interpret reality and to make it both more manageable and richer. This is congruent with anthropological (Bateson, 1972; Turner, 1982) and cognitive developmental accounts of pretense (Goncü & Klein, 2001; Lillard, 2002; Nicolopoulou, 1997; Sutton-Smith, 2001). Lindqvist (1995) also embraces Vygotsky’s cultural approach to children’s play and argues for a play-based pedagogy—an approach in which adults actively and jointly participate in children’s play. She claims that play has a close affinity with art and argues for a cultural approach to play rather than a psychoanalytic or cognitive approach. According to Lindqvist, the two latter approaches disregard the significant role of the adult in influencing children’s play. Either the child builds up his/her knowledge through play (cognitive approach) or processes inner conflicts (psychoanalytic approach), but in both cases the child is left alone with, and in, the play. In contrast, according to the play pedagogy doctrine, children and adults together can create space and possibilities for play.

In a practical realization of this approach, Lindqvist and her students worked together with 3- to 8-year-old children to create playworlds, an educational practice that includes pretend play, dramatic performance of a text from children’s literature, and visual art production. A playworld

is a form of guided pretense in which children are intensively supported by adults who bring their culturally accumulated experiences to the play activity. The adults contribute interpretations and ways of dealing with different problems through live enactments of the text and subsequent discussions, as well as through the use of aesthetic forms (scripts, props, stage effects, costumes, and so on). Lindqvist and her colleagues carefully chose a text from children's literature as the narrative foundation for the creation of the playworld. As discussed by Bettelheim (1976), cultural narratives (e.g., folktales) are powerful because they include developmentally appropriate emotional conflicts and problems (e.g., separation problems, jealousy toward siblings, anger toward authority/parents) which are further accentuated by the hyperbolic contrasting of characters (e.g., good versus bad; brave versus cowardly). Lindqvist and her colleagues made these conflicts and problems even more real and engaging for children through the enactment of stories in which adults portrayed characters from the text and the children joined these characters to further the plot. The playworld enactment of stories was particularly engaging because of the poetic language of the story and its visual allure, through costumes, illustrations and props, which together created an appealing aesthetic experience (Lindqvist, 1995).

Lindqvist's ideas have influenced Finnish pedagogy Hakkarainen (1999, 2004). Working in the tradition of cultural–historical theory (El'konin, 1971; Engeström, Miettinen, & Punamäki, 1999), Hakkarainen (2004) sought to create a “transitory activity” that addresses the problem of a developmental crisis. El'konin (1971) suggested that 5- to 7-year olds experience a developmental crisis as they transition from the leading developmental activity of early childhood, i.e., play, to the leading developmental activity of middle childhood, i.e., school learning. In order to address this crisis Hakkarainen designed an educational intervention which he terms “narrative learning”. Narrative learning supports children during this critical stage by combining pretend play and elements of school learning.

Narrative learning includes elements of Lindqvist's playworld practice, such as the enactment of a narrative from children's literature; however, it places a stronger emphasis on concentrated problem solving by embedding a logical or curricular problem (e.g., helping the protagonist break a code or solve a math problem) into the narrative of the story. In contrast, Lindqvist is more interested in supporting children as they work to achieve resolutions to various emotional problems (e.g., fears, sibling rivalry, etc.). Although Lindqvist and Hakkarainen have different research agendas, our observations of their classrooms reveal that the overall structure of their educational practices is fairly similar.

Hakkarainen (2004) uses the concept of “lived-through” experience to discuss the developmental impact of the playworld practice. “Lived-through” experience, a descriptive translation of the Russian term *perezhivanie* introduced by Vygotsky (1999) and Stanslavski (1981), refers to the direct experience of another person's mental state. According to Hakkarainen (2004), it is the lived-through experience with the characters of the story that enables children to better comprehend the story. Stanslavski (1981) developed a method of acting in which he required actors to live through the role by utilizing their autobiographical emotional memory. In order to naturally portray the character, the actor is required to think of a moment in her own life when she felt a particular emotion and then relive the emotion while in character. Lived-through experience can be enhanced by multiple sensory and kinesthetic experiences. Therefore, acting or pretending (rather than just watching and listening) can yield possibilities for intense lived-through experiences.

Hakkarainen (2004) argues that the developmental effects of the playworld practice cannot be examined fully by testing changes in knowledge and cognitive skills outside of the practice itself. This aspect of Hakkarainen's approach makes it difficult to validate his claim that narrative learning is an educational practice that supports children's transition to school. Lindqvist has also

not experimentally evaluated the effects of the playworld practice. Due to the resulting lack of experimental evidence the dissemination of Lindqvist's and Hakkarainen's work in the U.S. has been rather limited. This limited exposure is regrettable, as this line of research can potentially expand our knowledge about the cognitive development of children, as well as inform the design of effective curricula for children in early elementary school.

1.2. *The present study*

The present study attempts to remedy this situation by providing experimental evidence about the developmental outcomes of the playworld practice. We created an experimental intervention consisting of a playworld practice which incorporates all the essential elements described by Lindqvist (1995) and Hakkarainen (2004): joint adult–child dramatization of a text from children's literature, general discussion, drawing, and free play. We used the text of C.S. Lewis's novel, *The Lion, the Witch and the Wardrobe*, as the foundation of this playworld practice. This is a multifaceted text featuring a complex plot that includes sibling rivalry, betrayal, and an ultimate struggle against evil, and the action in the text takes place in two imaginary worlds—one featuring a British country house during WWII and the other featuring Narnia, an imaginary world controlled by an evil White Witch.

We contrasted this playworld practice with a control intervention. Our control intervention made use of the same novel, but consisted solely of practices which the teachers in this school traditionally implement when reading a text to the whole class. These practices include reading, writing, and discussion as a whole class, in pairs and individually, and occasionally drawing as well. The intention here was to create a school activity around a certain text enhanced by outside adult participants, but lacking dramatization and play. The two interventions were thus matched in that they consisted of the same number of sessions, the same number of adults and children, and the use of the same text, allowing us to isolate the effects of play and dramatization, the central aspects of the playworld intervention.

As pretense is a crucial aspect of the playworld practice we are able to link the playworld practice to a body of work on children's pretend play and narrative development (Bruner, 1990; Groth & Darling, 2001; Heath, 1986; Nicolopoulou, 2002; Pellegrini & Galda, 1988). Some research in this area has established that pretend play promotes narrative competence (Pellegrini, 1985; Pellegrini & Galda, 1982; Saltz, Dixon, & Johnson, 1977; Saltz & Johnson, 1974), suggesting that narrative competence is a relevant area of focus for an experimental verification of the effects of the playworld practice. Narrative competence has two aspects: "narrative comprehension", i.e., the understanding of story events and actions as temporally sequenced and causally motivated, and "narrative production", the ability to produce longer, more coherent, and more linguistically complex stories (Cain, 2003; Pellegrini, 1985; Groth & Darling, 2001; Shapiro & Hudson, 1997).

Extrapolating from this line of research and in congruence with play pedagogy and narrative learning we predict that participation in the playworld intervention will significantly improve children's narrative competence. Our specific hypotheses are the following:

1. There will be a significant increase in the narrative comprehension measure between the pre-test and the post-test narratives in the experimental group, as compared to those in the control group.
2. Children in the experimental group will produce significantly longer narratives in the post-test than in the pre-test, as compared to those in the control group.

3. There will be a significant increase in the measure of linguistic complexity between the pre-test and the post-test narratives in the experimental group, as compared to those in the control group.
4. There will be a significant increase in the narrative coherence scores between the pre-test and the post-test narratives in the experimental group, as compared to those in the control group.

2. Method

2.1. Research site

The experimental class and the control class came from the same elementary public school in Southern California. This school is located on a large military base and only 20% of the student population comes from non-military families. The majority of military parents are low-ranking marines and 50% of the students qualify for free or reduced-cost lunch. The mobility rate at the school is high (46% for the 2004–2005 school year) as the marines are often transferred to other military bases. The ethnic make-up of the school is rather diverse, with 42% European American, 20% African American, 31% Latino, 2% American or Alaska Native, 2% Filipino, 1% Pacific Islander and 1% Asian students.

2.2. Participants

The participants in the experimental group included the entire class, 20 children, 13 girls and 7 boys: 12 kindergarteners and 8 first graders (M age = 5.7, age range 5.3–7.2 at the time of pre-test). The ethnic make-up of this classroom was not representative of the overall make-up of the school, as there were no African American children and as the majority of the children were Latino: 12 Latino, 5 European American, 2 mixed ethnicity, and 1 Pacific Islander. The teacher, a 30-year-old male, had been teaching for 7 consecutive years.

The participants in the control group also included an entire class, 18 children, 9 girls and 9 boys: 8 kindergarteners and 10 first graders (M age = 5.9, age range 5.1–7.3 at the time of pre-test). The ethnic make-up of the classroom was more representative of the overall make-up of the school than the experimental group: 10 European American, 5 African American, and 3 Latino children. The teacher, a 43-year-old female, had been teaching for over 10 years.

Because of high mobility in the school, we did not obtain post-test measures for 3 of the 20 children in the experimental group (15%), and 6 of the 18 children in the control group (33%). Thus, these children were dropped from the analyses, resulting in 17 children for the experimental class and 12 children for the control class. The mean ages of the remaining children were comparable: $M = 5.5$ (age range 5.3–7.2 at the time of pre-test) for the experimental group, and $M = 5.6$ (age range 5.1–7.1) for the control group.

2.3. Research design

The study was designed as a pre- and post- quasi-experimental intervention in combination with weekly ethnographic observations. Experimental and control classrooms were selected non-randomly, as we selected these teachers because they were willing to commit to a year-long research study. We made sure that the teachers understood the procedure of the intervention and their roles in it. Both teachers agreed on the use of *The Lion, the Witch and the Wardrobe* as the central text in the playworld. Neither teacher was aware of the exact purpose of the study, nor the nature of the assessments.

The study was divided into three phases: pre-treatment, treatment, and post-testing. In the pre-treatment phase, we conducted assessments of the children's baseline narrative competence, as well as of the teaching approaches adopted by each teacher in their presentation of the narrative to the children. The treatment phase lasted for 14 weeks. During this time the experimental group engaged in the playworld practice, consisting of joint adult–child dramatization of the text, general discussion, drawing, and free play. During this time the control group engaged solely in practices which the teachers in this school traditionally implement when reading a text with the whole class: the teacher reading a portion of the text aloud to the class, class discussion of the text which has been read aloud, the children reading level-appropriate picture books to a partner and then to themselves, the children writing individually on a topic of their choice and drawing a picture to accompany this writing. In the post-testing phase we conducted assessments of the children's narrative competence.

2.3.1. *Pre-treatment condition*

In November 2004, both the experimental and control groups were put in the same pre-treatment condition, consisting of classroom observations and the pre-test of narrative skills. In December, after the preliminary test measurements, both teachers started to read the *The Lion, the Witch and the Wardrobe* aloud to their entire class for a period of 10–20 min, three times a week. We established that both teachers were handling the reading activity in a similar manner: first they would read small portions of the text, reading dialogue using particular voices for each character, and usually reading in an exaggerated emotional tone. After each reading they engaged the children in a question-asking activity, either about the text read or about the children's speculations concerning the next portion of the story.

2.3.2. *Experimental intervention: playworld practice*

There were 14 sessions of the experimental intervention. These sessions also took place once a week and lasted approximately 2 hours. Each session consisted of an enactment of the text followed by discussion and then free play or art activities.

During these sessions the teacher did not read from the book. Each session started with the four researchers' enactment of portions of the text. During the seventh session the teacher joined the researchers in the enactment, and during almost one third of the sessions both the teacher and the children joined the researchers in the enactment. The enactments involved not only props and costumes, but also some combination of staging that appealed to the children's senses of touch, smell and sound. Examples included ice chips on the floor to represent the coldness of snow, pungent moth balls in the wardrobe when mothballs are mentioned in the text, and a recording of a thunderstorm when it was raining in the scene being portrayed.

After the enactment of the text, there was a general discussion that lasted approximately 30 min. During this discussion children were asked what the acting was about and they were also invited to share their experiences and comment on what they had observed. The children often raised questions, and offered answers as well. The teacher guided the discussions and the children, sitting in a circle, spoke in turn. Next, the children were able to choose between either drawing, painting or pretend play with the props that the actors had left around the classroom. During the drawing sessions the researchers joined the activity, drawing their own pictures, but they did not instruct the children on how to draw. During free-play, the children, the teacher, and the four researchers took the costumes and props from the performance and used them either for pretend play that related to the book and the performance, or for pretend play that related to other topics. In all the sessions the teacher was in charge of the classroom, either in the role of the teacher or as a character in play.

2.3.3. *Control intervention: conventional school practices*

Concurrent with the experimental intervention, there were 14 sessions of the control intervention. These sessions also lasted approximately 2 hours. The key difference between the experimental and the control classes was the lack of pretense and dramatization in the control class. In the control class, the teacher continued to read the book in a way similar to that of the pre-treatment phase, reading for a period of 10–20 min per session. After this, there was a teacher-guided discussion about the text and/or other related matters that lasted approximately 20–30 min. Next, the children engaged in silent or partner reading, according to their reading levels, for 20–30 min. During the final portion of each session the children drew pictures and wrote stories. During each session four undergraduate research assistants from the university participated in the activities, interacting with the children in a friendly and supportive manner. In all the sessions the teacher was in charge of the classroom.

2.3.4. *Pre- and post- narrative testing*

Pre- and post-tests, measuring narrative competence, were administered to the experimental and control groups. The testing procedure was adapted from Shapiro and Hudson (1997) and Cain (2003). Graduate students who were not involved in the project tested the children individually in an empty classroom. Each child was presented with five black and white pictures that depicted a specific story when arranged in a particular sequence. The story was taken from a picture book which none of the children had seen before, and the five pictures depicted a problem situation about a man whose house became flooded. The pictures were placed out of sequence and the child was asked to arrange them in order (comprehension phase). The child's arrangements were recorded. After this the tester asked the child to tell a story based on the order the child had provided (production phase). Each testing session was videotaped.

2.3.4.1. Narrative transcription and coding. Undergraduate research assistants transcribed the children's narrations from the video recordings of the testing sessions. The transcripts included speech only, as transcription of non-verbal behavior was left for further analysis. The transcripts were coded by two researchers who did not know the identities of the children who had produced the narratives. Children's narrations were coded for length, complexity, and coherence. Their recorded comprehension of the order of events was also coded.

To measure *comprehension* of the order of events, we recorded whether or not the child placed the picture cards in the order that matched the canonical order. The *length* of the child's narration was measured by recording the number of words used to explain the events in the pictures. Each and every word was counted, except for questions, references to the testing material and self-regulatory speech (e.g., "umm . . . hmm"). *Linguistic complexity* was measured by the number of subordinate clauses included in each narration. We defined a subordinate clause as any grammatical unit containing a subject and a verb, and depending on a main clause within the same utterance to complete its meaning (e.g., "because there is a flood in his house", "so that the water could not fall on him"). *Narrative coherence* was measured according to the type of event structure depicted in the child's description of the pictures (adapted from Cain, 2003). Each narrative was given a score from 1 to 3. A score of 1 was given to descriptions that simply described events in the pictures without any indication of a sequence of events. Descriptions which showed a causal and temporal relationship between 2 pictures were given a score of 2. Descriptions which included more than one causal and temporal relationship between 2 or more pictures received a score of 3.

2.3.4.2. *Reliability.* Inter-coder reliability was calculated for all measures of narrative competence on 50% of the randomly selected cases. Given the nature of each narrative measure, we calculated the percentage of agreement and kappa coefficient for linguistic complexity and coherence measures, and Pearson correlation for length measure. Good levels of reliability were obtained for all measures: length ($r_{xy} = .996$), linguistic complexity ($P = 84.75$; kappa = .812) and coherence ($P = 86.67$; kappa = .794). Scoring disagreements were settled by discussion and consensus between the two coders and a third researcher.

2.3.5. *Ethnographic data*

Ethnographic observations were recorded in order to document the implementation of each intervention. In the experimental intervention as much ethnographic data as possible was collected, as we planned to conduct a microanalysis of the playworld process. For the control intervention we only collected enough ethnographic data to make sure that the control intervention was being implemented as designed. Three types of ethnographic data were collected. First, we obtained detailed field notes from each of the four participating researchers and from the external observer. Both the experimental intervention and the control intervention were documented by an external observer, a graduate student whose task was to provide an outsider's perspective on what was going on in the classrooms through regular field notes. Second, we obtained video- and audio-video footage of all classroom activities and the children's artwork. All activities, including rehearsals and research team meetings, as well as sessions in both classrooms, were video- and audio-taped. Often one of the researchers videotaped using one camera and a second camera remained on a tripod, but frequently more than one video camera was passed between all of the researchers. At times the children also videotaped the proceedings. For the purposes of the current presentation most of these data were not analyzed.

3. Results

Our overall hypothesis was that the playworld activity would promote the narrative competence of the children in the experimental group. To test our hypothesis, we examined pre- and post-test measures of narrative comprehension and narrative production (length, linguistic complexity, narrative coherence) in the experimental and control groups.

3.1. *Narrative comprehension*

To examine narrative comprehension we recorded the picture order suggested by each child after they were prompted by the tester to place the pictures in sequence. We recorded whether or not the children's responses matched the canonical order. Our first hypothesis was that there would be a significant increase in the number of correctly sequenced narratives between the pre-test and the post-test narratives in the experimental group, as compared to those in the control group. During the pre-test condition 4/17 (24%) children in the experimental group placed the pictures in the correct sequence, while 11/17 (65%) did so in the post-test condition. Three of the 12 (25%) children in the control group constructed the appropriate sequence in the pre-test condition, while 6/12 (50%) did so in the post-test condition. We analyzed the change in the number of correct responses before and after treatment. To contrast the statistical significance of these changes, we applied the McNemar test for nominal data from related samples (see Bartz, 1998) for the experimental and the control groups. The experimental group exhibited a significant change in the number of correct responses ($\chi^2 = 3.6, p < .05$) from the pre-test to the post-test condition. The

control group did not exhibit a significant change in the number of correct responses ($\chi^2 = 1.125$, $p < .125$). These results suggest that participation in the playworld improves the children's narrative comprehension.

3.2. Narrative production

Each measure of narrative production was subjected separately to an analysis of covariance (ANCOVA). An ANCOVA was deemed necessary to correct for the fact that neither the experimental class nor the control class were randomly selected or assigned (Reichardt, 1979).

3.2.1. Length

Our second hypothesis was that children engaged in the playworld would produce longer narratives in the post-test than in the pre-test, and that this increase would be significantly greater than that of the stories produced by the children in the control group. The average length of the stories produced by the children in the experimental group increased from an M of 68 (S.D. = 7.37) words in the pre-test condition to an M of 94 (S.D. = 8.81) words in the post-test condition. In contrast, the average length of the stories produced by the children in the control group showed little change in the average number of words from the pre-test condition ($M = 63$, S.D. = 8.77) to the post-test condition ($M = 61.83$, S.D. = 10.48). ANCOVA showed a significant difference in length measures between the two groups ($F(1,26) = 5.025$, $p < .05$) controlling for pre-test scores as a covariate (see Fig. 1).

3.2.2. Linguistic complexity

Our third hypothesis was that there would be a significant increase in the number of subordinate clauses between the pre-test and the post-test narratives in the experimental group, as compared to those in the control group. The average number of subordinate clauses for the experimental group was $M = .23$ (S.D. = .56) for the pre-test condition and $M = .72$ (S.D. = .96) for the post-test condition, whereas the mean number for the control group was $M = .22$ (S.D. = .4) for the pre-test condition and $M = .23$ (S.D. = .6) for the post-test condition. ANCOVA showed a marginally significant difference ($F(1,26) = 3.354$, $p < .08$) in measures of linguistic complexity between the experimental and control groups (see Fig. 2). The interpretation of this finding is unclear. One

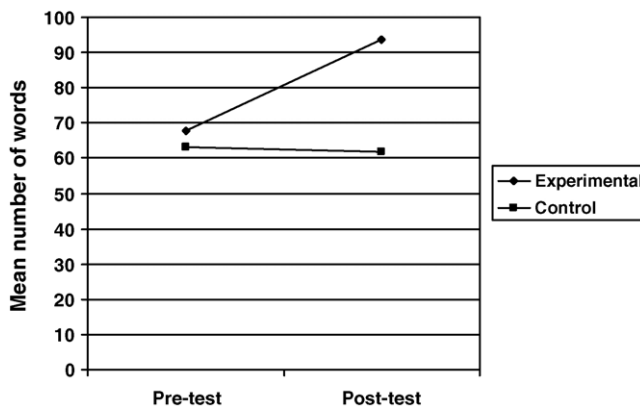


Fig. 1. Mean number of words (narrative length) for experimental and control group at pre- and post-test.

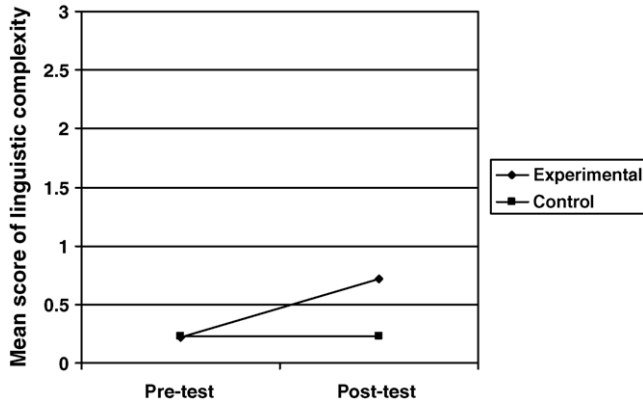


Fig. 2. Mean number of subordinate clauses (linguistic complexity) for experimental and control group at pre- and post-test.

possibility is that the measure of linguistic complexity, i.e., the number of subordinate clauses, may not be appropriate here as it produced high standard deviations, especially in the experimental group.

3.2.3. Narrative coherence

Our final hypothesis was that there would be a significant increase in the narrative coherence scores between the pre-test and the post-test narratives in the experimental group, as compared to those in the control group. The average score for narrative coherence for the experimental group was $M = 1.58$ (S.D. = .21) for the pre-test condition and rose to $M = 2.53$ (S.D. = .18) for the post-test condition, whereas the mean scores for the control group remained largely unchanged (pre-test $M = 1.83$, S.D. = .25; post-test $M = 1.67$, S.D. = .21). ANCOVA showed a significant difference in narrative coherence scores between the two groups ($F(1,26) = 8.95$, $p < .01$) controlling for pre-test scores as a covariate (see Fig. 3).

In summary, the significant increases in children's narrative comprehension and the two measures of narrative production (narrative length and coherence) suggest that the playworld intervention promoted the development of these three aspects of narrative competence. Although

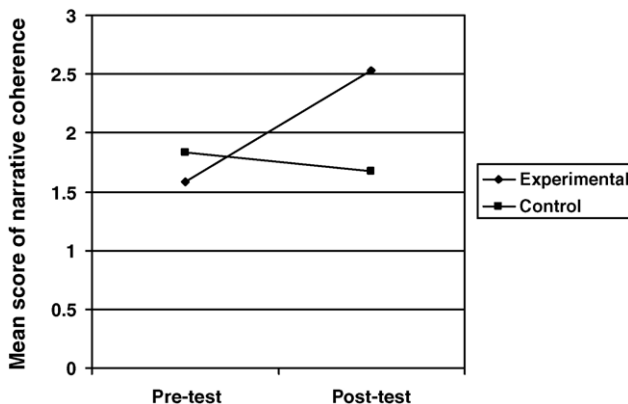


Fig. 3. Mean score on narrative coherence for experimental and control group at pre- and post-test.

we have not obtained statistical significance for the improvement of linguistic complexity, it is important to note that taken together the four measures show a consistent improvement across different aspects of narrative competence for the children in the experimental group. This converging evidence confirms our overall hypothesis that the playworld practice promotes the development of narrative competence.

4. Discussion

The purpose of this study was to investigate the effects of the playworld practice on narrative competence. We created an experimental intervention consisting of a playworld which incorporated joint adult–child dramatization of a text from children’s literature, general discussion, drawing, and free play. We contrasted this playworld practice with a control intervention. Our control intervention lacked pretend play and consisted of conventional school practices. We predicted that participation in the playworld intervention would significantly improve children’s narrative competence and our results appear to corroborate this prediction. The analysis of narrative competence, pre- and post-test scores in the experimental and control groups, indicates significant increases in measures of narrative comprehension, narrative length and coherence for the experimental group. We conclude from these findings that the playworld practice promotes the development of narrative competence in at least these three areas.

While our experimental data demonstrate that a significant change in narrative competence took place for children in the experimental group, they do not lend insight into the mechanisms through which this change occurred. One way to uncover these mechanisms is to examine our qualitative data. For instance, our observations of children’s non-verbal behavior in the test situation indicate that differences in the test scores between the control group and the experimental group were not the only differences between the two groups. There also appeared to be differences in the ways that children approached the test situation and constructed their stories. In the narrative post-test situation several children from the experimental group—but none from the control group—inserted elements from their own experience into their story (e.g., by suggesting that the man in the pictures is worried about his homework). Some of these children also manifested identification with the character in the story by using their bodies to act out events in the story. For example, one child touched his own nose while telling that a raindrop fell on the character’s nose, looked over his shoulder while describing how the character in the story was looking back, and so on.

To understand these interesting behaviors during the post-test situation, we will return to the concept of lived-through experience (Hakkarainen, 2004; Stanslavski, 1981; Vygotsky, 1999). As discussed above, lived-through experience refers to the direct experience of another person’s mental state (Stanslavski, 1981). Stanslavski argued that inner emotions and feelings are aroused by physical action, and that by imitating another’s physical actions we are able to experience the emotions of the other because these physical actions stimulate autobiographical emotional memories (Stanslavski, 1981). Consequently, when the boy touches his nose and turns back his head, these sensory and kinesthetic experiences activate the boy’s emotional memory of how it feels to have rain fall on one’s nose, which potentially informs his meaning-making of the picture in the test task. As live-through experience is stimulated by multiple sensory and kinesthetic input (Stanslavski, 1981), lived-through experience is more likely to happen under the playworld intervention due to the live enactment and the use of use of stage effects and props. Preliminary analyses of our ethnographic data reveal multiple instances of lived-through experience in the playworld practice.

One particularly illustrative example occurred on the day the children's teacher appeared as the evil character of the story, the White Witch. One child physically manifested his lived-through experience in a manner which was quite explicit. On this day the teacher moved to the front of the room, took out a basket with his costume in it, and asked the children, "Do you know who is going to be the White Witch?" There was a pause, and then most of the children pointed to their teacher and smiled. One child, Jeremy, however, pointed to his teacher and then to himself.

Jeremy's eyes were fixed on his teacher, who was taking the costume out of the basket. As the teacher pulled a white skirt over his pants and tied the skirt around his waist, Jeremy's hands started to move in imitation of his teacher's hand movements, tying a knot in the air. Next the teacher started to put on white gloves, and as he put on the right glove, while facing Jeremy, Jeremy reached up his left hand and spread his fingers. Jeremy then reached out to his teacher with both hands as his teacher reached down with both hands to pick up a fur coat, which was lying at Jeremy's feet. Next Jeremy moved his hands as if he was buttoning coat buttons as his teacher buttoned the coat. The teacher, now dressed, asked the class, "Who is the witch?" The children said, "You", pointing at the teacher, but Jeremy said nothing, and did not point, but just stared.

As Jeremy felt what it was like to be the White Witch himself, moving his arms in synchrony with his teacher, pointing to himself when his teacher asked, "Who is the White Witch?" he was having lived-through experience. For Stanislavski, lived-through experience is a useful technique for actors creating a character in dramatization. While implementing the playworld practice we have observed behaviors, such as Jeremy's, that suggest that lived-through experience may also be a method through which we are able to interpret the motives and emotional states of characters when we are audience members, or readers. Narrative competence is essentially bound to the ability to make interpretations about the mental states of others, as we cannot understand a narrative without some understanding of the emotional states and motives of the characters (Bruner, 1990). Therefore it follows that being able to have lived-through experience while being an audience member or a reader might improve one's narrative competence.

These assumptions about the importance of lived-through experience for narrative competence are very tentative and require further examination. We suggest that researchers interested in studying this topic make use of multiple and diverse methods of investigation in their design (e.g., experimental, ethnographic, micro-genetic case studies, etc.).

Our findings have obvious implications for play pedagogy and narrative learning interventions as we provide supporting evidence that the practice of playworld enhances narrative competence, and therefore of the value of the playworld practice for schools. Through our ethnographic data we provide tentative insight into the process of lived-through experience, one of the central concepts of the theory of narrative learning.

Our findings may also have implications for understanding the ways in which adults can support children's play. The playworld practice is an activity in which adults and children play together in an organized manner around educational topics. There is a large body of research examining adults' contribution to children's play (e.g., Bondioli, 2001; Howes, Unger, & Matheson, 1992; Smilansky & Shefatya, 1990), but most of this research was conducted in preschool and home environments. Our study contributes to this area of research by providing a model practice which fosters both children's pretend play and their narrative competence during the early grades of elementary school.

Finally, our findings may contribute to the design of a new and useful method for teaching literacy in American elementary schools. The typical presentation of children's literature in

American classrooms consists of reading stories aloud and showing illustrations. However, we have learned from our Swedish and Finnish colleagues that there is a radically different way to introduce literature to children. Following Lindqvist (1995, 1996) and Hakkarainen's (2004) playworld pedagogy and theory of narrative learning we have introduced a classic piece of literature into an activity that encompasses play, drama and art—those very activities that are currently marginalized in public schools in California, as they are currently viewed as nonessential for the development of academic skills. By enacting the text of a novel with children we created a space into which children could freely enter to actively explore different aspects of the novel, including the characters and their goals, setting, plot and actions (Groth & Darling, 2001).

The powerful narrative of *The Lion, the Witch and the Wardrobe* was central to the playworld, motivating both adults and children to commit themselves fully to this joint pretense. The themes from the novel permeated all of the activities of the playworld practice (drawing, discussions, free play, etc.) and apparently made their way out of the classroom as well, as we heard from parents that the children continued to play “Narnia” at home with their siblings. One reason that this particular novel was powerful for this population of students was that the four main characters were siblings who had left their parents in a war-affected area, just as many of the students in the class had parents who were deployed, or waiting to be deployed, in Iraq. However, the novel depicts an historical time, climate, and culture which are foreign to this student population. None of the children in this study were familiar with sardines or Turkish delight, and few had ever seen snow. A narrative text from the children's popular culture or historic heritage may have proven even more powerful, and this is particular interesting to speculate upon considering the socio-cultural diversity of narrative forms (Heath, 1986; Hicks, 1991).

The main limitation of our study is that we had only one classroom per condition and thus a relatively small pool of cases. Also, due to the high mobility rate on the base we lost nine children (24%), and this loss was selective, as six of the nine were from the control group. Furthermore, the experimental and control groups were nonequivalent with regards to gender and ethnic composition, and, due to circumstances beyond our control we were unable to test for comprehension of the specific text we used in this study.

In light of these limitations our findings should be consider as suggestive rather than conclusive. Further research should address these limitations and replicate the results of the study. However, we hope that our finding that playworld practice promotes development of narrative competence, an important literacy skill that is highly predictive of academic success (National Reading Panel, 2000; Neuman & Dickinson, 2001; Panofsky, 1995; Whitehurst & Lonigman, 1998), will bolster attempts to keep play and art in the elementary school curricula.

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