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Introduction

Certainly one of the most wonderful opportunities that teaching has afforded me is the stimulus to reflect on my own childhood. In teaching, I am constantly reminded of thoughts, games, rationales, belief systems, and special moments from my childhood. Many of the most significant memories that have surfaced took place not in the classroom, but rather at home, during playtime, and at recess. The social and rationalizing skills that are learned and developed during these times are not more or less important than, but rather inextricably linked with, the learning that happens in the classroom.

I attended public school in Oakland, California from kindergarten through third grade. Although I had outstanding teachers, the part of school that I most remember was our recess time. It took up a small part of our day, but we used that time to the fullest: we organized games of tag; we formed club and secret societies; we thought up and ran imaginary businesses (perfume manufacturing, magazine publishing, etc.); we sang and played hand-clapping games; we played double-dutch. During recess, we formed and experimented with social relationships: we toyed with gender roles, issues of fairness and leadership, and sportsmanship. Often, through play, we experimented with concepts we were learning. (A unit on marine mammals, for example, spurred a few weeks' worth of playing "dolphins".) The time after school was set aside for play; usually I would come home, have a snack, and go outside to play. After-school care afforded me time to play as well.

One of the first things that struck me when I began teaching in New York City was that the students' schedules are noticeably devoid of time to play. The climate of education in New York City is incredibly different from the climate in which I grew up. In fourth grade, the children take an English language test and a math test. High-stakes testing determines whether or not children will "pass grade," as well as determining the amount of funding that schools receive. Administrators are under extreme pressure to, above everything else, raise test scores. While districts may choose any number of curricula for their schools, the test remains the central factor of how children are educated. Starting from kindergarten, students are taught test-taking skills and the pedagogy and instructional methods of classrooms does not change from grade to grade.

I teach at a public school in the Bronx. In 2003, only 31.3 percent of our fourth graders passed the New York State English Language Arts test with a "3" or "4" score¹, as opposed to 52.9 percent of students citywide. The focus of instruction in fourth grade is test preparation for the majority of the year. The students at my school do not have regularly scheduled recesses or other outdoor play times, although there are those times after lunch when they might be allowed outside to play. Whether they play, though, depends on whether there is time, if the weather allows, and if the lunch aides think the class has behaved in a way that they deserve to go

¹ Students can receive one of four scores on state standardized tests: 1, 2, 3, or 4. Here are the descriptions of the scores that can be found in the 2002-2003 Annual School Reports for the New York City Department of Education. " Level 4: Students exceed the learning standards for English Language Arts. Their performance shows a superior understanding of written and oral text. Level 3: Students meeting the learning standards. Their performance shows thorough understanding of written and oral text. Level 2: Students show partial achievement of the standards. Their performance shows partial understanding of written and oral text. Level 1: Students do not meet the standards. Their performance shows minimal understanding of written and oral text."

outside. Needless to say, the differences in play opportunities during my childhood and that of my students are vast.

This study arose out of my curiosity about whether allowing children time to play during the school day can affect their achievement in the classroom. I started the school year with the same plans and expectations of most other first-grade teachers in my school. I had volunteered to teach the inclusion class for first grade, and my co-teacher and I had planned a busy first month full of community building, assessments, and rich literacy activities. We marveled together about our class roster: we were going to have 17 boys, six with Individualized Education Plans (I.E.P.'s) for learning and behavior disabilities, and six girls. Because of its composition, we anticipated that the group would be active and challenging; we had no idea just how active and challenging it would be.

We set up an inviting “meeting area” with a carpet, a whiteboard, and chart paper. Close at hand were miniature chalkboards, magnetic letters, letter cards, and lots and lots of books, all leveled and sorted into genres. The first morning of school, we picked up our attendance roster, straightened the rug, made sure we had all of the supplies that we would need for the next few days, and headed out to pick up our new class. We were ready to hit the ground running.

By the second day, two very obvious and potentially disastrous complications presented themselves. The first was that out of 23 students, only 5 or 6 knew the alphabet and could recognize letters, much less generate the sounds those letters made. Many of them could not retell a simple story or contribute relevant comments in conversation. Not only was my class behind in their phonetic development; they

were also behind in their ability to verbally express themselves. The second complication was somewhat more alarming. It became clear that regardless of any great lesson we planned, our students had a very hard time sitting on the carpet to be a part of it.

The new New York City Department of Education curriculum mandated teaching in a workshop style; delivering direct instruction for ten to fifteen minutes with the children sitting on the carpet; assigning them an activity to let them practice the skill they were learning; then bringing them back to the carpet to sit for a ten minute “share time.” My children’s inability to sit on the carpet was especially distressing because as long as they couldn’t sit, I couldn’t teach the way my administration was requiring me to. While everyone told me, “Relax. All first graders are active,” I still noticed a dramatic difference between my class and the other first grade classes. In the first month of school, I tried a number of techniques to take advantage of their activity level in order to make instruction happen but to no avail. The more activities, instructional methods, room arrangements, and scheduling changes I tried, the more the solution seemed to be to just let them run around and expend some of that energy.

As my co-teacher and I struggled to develop and maintain a structure that our students could adhere to and abide by while still meeting the New York City Department of Education’s mandates, my administration took notice of both the chaos that seemed to be taking over and my co-teacher’s and my increasing frustration with our situation. When they asked what they could do, the request we came up with was a simple one at first: let the children play outside after lunch. Up until that point,

their lunch teacher had only taken them outside sporadically---if she felt like they “deserved it” or if she felt they had time after eating. We pleaded with her to take them outside regardless. But she said that there were numerous obstacles to her taking the class outside. Time was the biggest obstacle- almost all of the students in the lunchroom ate the school lunch, and therefore spent about 20 minutes waiting in line for lunch. If my class was at the back of the lunch line, they might not be done eating until it was time to come back up to the classroom. There was also the issue of behavior. Time outside was seen as a reward by lunch aides, and therefore classes with “behavior problems” were not given time to play outside because they “didn’t deserve it.”

On the days that they did go outside, we were not surprised to find that our class seemed much more ready to learn when they came back to the classroom and much more able to sit for longer than two or three minutes. I began to wonder if letting my students play might positively affect their literacy development? It was obvious that letting them run around gave them a chance to burn extra energy, but was something else happening that would help them develop as readers and writers? In order to answer these questions, I decided that I would have to schedule a time in the day to take my students outside. My co-teacher and I sat down with our principal to propose taking them outside for 20 minutes each day. The hardest part was not convincing my principal to let us go outside, but rather finding a time in the mandated schedule when we could do so.

After thinking through at least ten different scenarios in which we could provide outside time, we decided on a slot right after lunch. As the children started to

play outside more, and as the structure that we had imposed settled in, they started to calm down, and could finally were able to sit on the carpet long enough to listen to a story. Our readers' workshop started to take place. Because none of our students were reading yet, much of our reading instruction focused on exposing our students to wonderful stories and rich literature. We started reading aloud to them at least two times per day. On days that we went outside, my students were certainly more focused on listening to the story than when they were indoors all day. I also found myself wondering about my students' ability to take part in a discussion about the read aloud: would taking them outside affect the dynamics of conversation in my readers' workshop?

In the introduction to Play and Early Literacy Development (1991, p.8), Nigel Hall asserts that "play as a fundamental cognitive activity is preparation for more complex cognitive activities such as literacy." Could a lack of play time be affecting more than just my students' abilities to sit still? I was curious about how much play time my students were getting at home, so I sent home a survey. Out of all the time students spend doing homework, watching TV, doing chores, playing inside and playing outside, their play time (inside and outside combined took up only 16.3 percent. Outside play alone constituted only 1.8 percent of their time. Watching television took up 74.5.

Because of the neighborhood in which the school was located, parents were hesitant to send their kids outside to play unsupervised. High crime rates, drug dealers, and fast traffic all presented dangers to unsupervised children. Many of my students' parents worked at more than one job in order to support their families.

Their long hours often prevented them from seeing their kids during the daytime, and therefore prevent them from taking the children outside to play.

Giving my students some time to play outdoors, I thought, could make up for some of the time that they did not get to play outdoors after school hours. I decided to conduct an action research study in my classroom over the course of the year in order to explore the impact that outdoor playtime might have on my students' participation in literacy activities.

Literature Review

Article 31 of the United Nations Convention of the Rights of the Child (UNCRC) frames play and leisure time as an unalienable right of children. Children, it says, have the right “to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.” Furthermore, the UNCRC holds adults responsible to “respect and promote the right of the child to participate fully in cultural and artistic life and ... encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.” I doubted that I would find convincing arguments against play as an activity for children. Not surprisingly, a search using google.com, an internet search engine, for the phrase “children should not play at all” returned no hits. If there is a general consensus about the value of play, it is incumbent upon those responsible for children's education and development to ensure that children are afforded opportunities to engage in play.

Yet in the face of “failing school” labels and concerns about underachieving students, many administrators throughout the country have chosen to eliminate recess, a time when children are traditionally encouraged to play freely, in favor of more instructional time during the day. According to the American Association for the Child’s right to play, “40 percent of public schools have already cut or are planning to cut at least one recess period from the school day.”(Education Reporter, 2001) Gloria Goodale (1998), a writer for *The Christian Science Monitor*, reported on the loss of recess in schools. For her report, she interviewed Charles Doyle, Assistant Dean of the School of Education at Chicago's DePaul University. "It all began with the 'Nation at Risk' report in 1983," Doyle is quoted as saying. Goodale elaborates, “This federal call to action, highlighting American schoolchildren's poor standing internationally, led to a push for standardized testing. With more emphasis on tests, schools required more time in the school day for test preparation. ‘Recess time was the first thing to go,’ [Doyle] says.” The “Nation at Risk” report, self-described as “A Report to the Nation and the Secretary of Education United States Department of Education by The National Commission on Excellence in Education” made recommendations that school districts use standardized testing to ensure that each child had met standards of education, and that time be used more efficiently for instruction. These recommendations stand out among others as possible triggers of questioning the validity, if not the elimination or reduction of recess in schools.

Pellegrini and Bjorklund (1996) point to Russell’s idea of the “cult of efficiency,” which “extols the values of work and devalues the role of leisure” as part of the reason why play is losing its place in schools. One of the clearest examples of

this view is the time-on-task literature in American education research. These studies emphasized that educational achievement was directly and positively related to the amount of time spent working on tasks. Calls for longer school days and school years and the elimination of recess periods are logical extension of this practice.

Eliminating recess makes sense with certain logic: if students learn during instructional time, then they will learn more with more instructional time. Within this frame of thought there is the idea that play is superfluous to learning and therefore has no place in schools.

There is, however, a significant body of literature that supports recess in schools. Recess, many of the articles say, is essential to the school day to help children pay attention, stay healthy, and develop properly.

A Matter of Attention

The National Association of Early Childhood Specialists in State Departments of Education (2002) published a position statement on Young Children and Recess that asserts “[The elimination of recess] has no serious research to back it up, and is actually counterproductive to increasing the academic achievements of students.” In fact, it claims, recess facilitates emotional, physical, cognitive, and social growth in children. To be sure, there is a far more substantial body of evidence that points to recess as beneficial, rather than detrimental, to the academic achievement of students. Cognitive benefits aside, there are numerous articles that point to the necessity of recess as a break in the day. Children have short attention spans and need breaks in order to perform at their optimal level.

The American Association for the Child's Right to Play (n.d.) gives several examples of times when adults take breaks to increase their productivity with the assumption that children need the same types of breaks. "Recess is not an alien word in our adult vocabulary, nor an abnormal response to physical and mental needs. For example . . . "Judges call a recess when courtroom participants become tired or unfocused. Congressional sessions recess for similar reasons. Labor unions mandate breaks to ensure safety. Breaks and lunch hours are corporate versions of recess. Fortune 500 and cutting edge businesses provide exercise rooms for employees."

Kaboom.org, a web site advocating for children to have recess, cites a study done by Olga Jarrett, a professor at Georgia State (2002). Jarrett's study found that fourth graders who didn't have recess were more listless and fidgety in class. In fact, she found that the amount of instructional time that was lost due to fidgeting was equal to the amount of time it would take to have recess. "It seems as if (the no-recess policy) is not really considering what is generally accepted as children's needs. That is that children do need to move around. It's like people at the water cooler during a coffee break. People just need some down time," Jarrett is quoted as saying. "If we told union workers that they had to go from 8 a.m. to 2:30 p.m. without a break, they'd go on strike." ("The Impact of Play on Classroom Productivity," n.d.)

Pellegrini and Bjorklund (1996) cite a study that found that children were "significantly more attentive after recess than before." They conclude that "...children's attention to school tasks wanes as they are expected to work for sustained periods. Recess seems to provide a break that maximizes subsequent attention to schoolwork." If the goal is for children to perform at their best, we need

to create the conditions for them to do so. Recess, according to the literature, gives children a chance to take a break from their work, and come back with a renewed ability to pay attention to the task at hand.

Recess and Development

One of the most vocal and prolific writers and researchers on the value of recess is Anthony Pellegrini. Pellegrini and Bjorklund (1996) examine play framed within two opposing perspectives. First, the perspective that recess is an “essentially nonproductive part of the school day” assumes that “more rigorous instruction during the early grades will result in enhanced cognition, both immediately and later in development.” This view is based on studies that showed that young children can be taught concepts and skills that are “usually spontaneously acquired by older children.” Within this perspective, immaturity is something to be overcome. A developmental perspective, however, sees immaturity as a way that children are “adapted to deal effectively with the cognitive demands they face in their daily lives at [certain] particular developmental periods... This position is consistent with the view that behaviors and cognitions within the early childhood period have value or function inherent to that period and should not be considered ‘imperfect’ variants of adult behavior.” Within this perspective, play is a way to optimize children’s learning, as their cognitive systems are suited to play in order to learn.

Play seems to be losing ground in what we perceive childhood needs to be, despite all accounts that play is a natural way for children to learn. In 2003, The

Association for Childhood Education International released the following statement

(Isenberg & Quisenberry, n.d., para. 23):

Play-based learning activities provide multiple ways for children to learn a variety of different skills and concepts. They allow children the opportunities to learn relevant skills and feel competent about their ability to learn. When children are concerned about their competence or adequacy, they cannot make sense of their learning because emotions drive attention, create meaning, and forge their own memory pathways (Goleman, 1995). Children are more likely to feel successful when they can experience active, meaningful learning; use complex, challenging, and varied materials; learn in a safe, nonthreatening environment; and receive accurate and timely feedback (Fromberg, 1998, 2002; Isenberg & Jalongo, 2000; Jensen, 1999).

Even with all of the research that points to the benefits of play in education, play continues to be eliminated from curricula across the country. “In light of what might be perceived as our dubious hold on childhood and play in the current social and educational milieu, it is appropriate to revisit what researchers and theorists have formulated about the role of play and its connection to learning,” says Carole Janisch (2003, para. 1). Janisch set out to examine the role of play in children’s learning, specifically related to literacy. While her focus is solely on imaginative play, Janisch’s viewpoint on the importance of researching play is more than relevant. If play is threatened in the current educational trends, it is essential that we remind ourselves and others that play is an essential part of learning.

Childhood Obesity and Related Health Risks

Various studies claim that between five and 30% of children ages six to eleven are overweight or obese. Though the statistics vary on just how many children

in the United States are overweight or obese, the causes are generally agreed upon. There are many factors that contribute to childhood obesity and weight issues. Poor nutrition, sedentary lifestyles, family influence, and genetics are all cited as reasons that childhood obesity is on the rise. Many articles point to the loss of physical activity in schools as a contributing factor to the increasing numbers of overweight youth. The American Obesity Association fact sheet (2002) says, "Today's youth are considered the most inactive generation in history caused in part by reductions in school physical education programs and unavailable or unsafe community recreational facilities. In the U.S., only the state of Illinois requires daily physical education for students in grades K to 12. (para. 2)" Ross & Pate (1987), cited in an article on kidsource.com, claim that "only about one-third of elementary children have daily physical education, and fewer than one-fifth have extracurricular physical activity programs at their schools."

Both race and poverty seem to have an effect on obesity trends in children. According to the American Obesity Association (2002), 35.9 and 39.3 percent of Black (non-Hispanic) and Hispanic children (ages 6-11), respectively, are overweight, compared to 26.2 percent of white children and 20.6 percent of Asian American children. Healthinschools.org looked at statistics from the US Department of Health and Human Services and concluded that "adolescents from families below 130% of the federal poverty threshold are twice as likely to be overweight (16%) compared to those from families that are above 130% of the federal poverty level (8%)."

The health consequences of being overweight are numerous, especially for children, as they are still developing. Asthma, Type II diabetes mellitus,

hypertension, orthopedic complications, sleep apnea, increased risk of heart disease, and social and emotional stress are all possible effects of childhood obesity. If the poor and minority children are at a higher risk of childhood obesity, then they are at a higher risk of the complications that come with being obese. Lois Pearlman (n.d.) stated, “asthma is 26% more prevalent in minority children, who also experience more severe symptoms and are hospitalized for asthma more frequently than white children.” While there are other significant contributing factors to asthma such as air pollution and mice and rat infestations, obesity is a notable cause as well.

If childhood obesity is such a growing and severe public health issue, then it should be treated as such. It seems to me that encouraging activity during the school day is one of the most obvious places to start battling obesity. If children grow to see physical activity as part of the day’s schedule, fitness becomes less of a burden and more of part of a normal lifestyle. Dr. Irwin Redlener, president of The Children's Health Fund, and professor of pediatrics at Albert Einstein College of Medicine told insideschools.com (2003), "There is a significant benefit to taking every opportunity to be active rather than passive. In addition to the physical benefits, it sends a good message to students that physical activity is important." (para. 4)

Physical Education versus Recess

To fight obesity and provide breaks, one might say, physical education is a better idea because it is structured. In an online debate titled “Is Recess Obsolete?” (n.d.) Armelia Williams, a paraprofessional from St. Petersburg, Florida argued, “In phys ed [sic] classes, students have the chance to learn about all kinds of sports, plus

health, teamwork, and good sportsmanship. Those are far more constructive lessons than the ones they learn at recess.” But just what are those lessons that are learned at recess? And are they less valid than the lessons learned in P.E. classes?

“Compared to the rest of the school day, recess is a time when children have more freedom to choose what they want to do and with whom.” (Jarrett, 2002). The National Association for Sport and Physical Education wrote a position statement, cited by Jarrett, that recommends both physical education and recess, “with P.E. providing a ‘sequential instructional program’ related to physical activity performance and recess providing unstructured play time where children ‘have choices, develop rules for play... and practice the skills developed in physical education.’”

The power of children inventing and organizing their own games is highlighted in much of the literature. Jarrett presents many articles (Bishop & Curtis, 2001, Jarrett et al., 2001, Hartle et al., 1994) that argue that children use their recess times as they need to. While some children are inactive, children who tend to be inattentive in the classroom have higher activity levels than children who tend to be attentive. Jarrett (2002) cited a study by Kraft (1989) that found that more vigorous physical activity occurred during recess than physical education. According to Jarrett (2002), recess provides an “open setting,” one in which children can withdraw from games. In open settings, Jarrett argues, “children must learn to resolve conflicts to keep the game going, resulting in low levels of aggression on the playground.

Impact on Aggressive Behavior

What about the question of aggression? Surely, some might argue, unstructured time must lead to high levels of aggressive behavior. Recess, argues Williams (n.d.), can be a breeding ground for overly aggressive students who act out hostilities in some very hurtful ways. “I've seen bloody noses, loose teeth, black eyes, and worse--all because some students interpret "free play" as a time for "anything goes" behavior.” Sutton-Smith, as cited by Pellegrini (1989), argues that researchers have often treated rough play as a form of aggression, but children know the difference, and that rough play serves a purpose in children's development. In fact, rough play by boys was found to be “positively related to engagement in cooperative games-with-rules and popularity, not dominance.” (Pellegrini, 1989) While schools do have to be careful of students’ safety for liability purposes, dismissing recess as an outdated practice because of rough play is invalidated.

Many of the most vocal proponents of recess take extra care to distinguish recess from physical education. Recess, they argue, is a separate entity because of its “open” nature. Within that openness, children learn to make up, negotiate, and follow rules, mediate, and resolve conflicts. In a physical education class, much of that is done for them. In a sense, recess is a time to practice physical as well as social skills.

Implications for Education

Carol Chmelynski (1998) said, “We have no scientific data that says more instructional hours while simultaneously eliminating recess increases elementary children’s achievement.” As the elimination of recess plays out in schools across the country, we have yet to see the effects. I would argue that the body of literature cited here supports recess as an integral part of a child’s learning, health, and overall performance at school. The elimination of recess is an indicator of larger misunderstandings within our school system about how children learn and how, as educators, we can support and encourage their cognitive, physical, emotional, and social growth. As the recess issue is debated, I hope that larger ideas of education such as developmentally appropriate practice, and even how we view and treat childhood in general, will be brought under examination as well.

My Study

There are four types of data that I gathered for this study. The first was records of the types of talk that happened during our daily read-alouds. The second was the citywide ECLAS II assessments of children’s reading levels. The third was general notes on my students’ progress, both in play and in reading. All of my data were collected during two different time spans: October through December, which I will call “Period 1,” and January through April, which I’ll call “Period 2.” Finally, I collected assessment records that previous teachers had kept for my students.

Children's Talk During Read-Alouds

During the course of the year, I kept track of the types of talk that occurred during our read-aloud times; I used a coding system to record their speech based on the following seven categories:

- General comments (e.g., “I liked that part.”; “The pictures look scary.”)
- Text to self connections (e.g., “That reminds me of when my grandpa died.”; “I have a dog, too, and he likes to bark just like that one.”)
- Text to text connections,(e.g., “The illustrations in ‘The Hungry Little Caterpillar’ look like the ones in ‘Brown Bear, Brown Bear, What Do You See?’”; “He feels like Alexander when Alexander was having a no-good terrible very bad day.”)
- Text to world connections (e.g., “That’s like the story my mom read in the newspaper yesterday.”; “When people die, they put them in a casket, just like [a character in a book’s] grandpa.”)
- Unrelated comments (e.g., “My brother is three years old,” or “I’m having a party this weekend.” when the book has nothing to do with what the student has volunteered.
- Answering teacher-asked questions (e.g., “I think the little boy feels sad because he wants to be friends with the other students,” when the teacher asked “How do you think that little boy feels in this part of the story?”)

- Predictions (e.g., “I think that the girl is going to take off her hat and find a frog on her head,” or “I think that the mother bear is going to come home and get mad at Goldilocks.”)

I recorded and coded children’s talk as it occurred on a prepared recording sheet that was divided into boxes, one for each category of talk that I was keeping track of (see Appendix A). Each time a child made a comment in discussions that occurred during or after the daily read-aloud, I recorded her or his initials in the box that best described what she or he had said. If the talk had more than one component, I recorded each component separately.

As I recorded the categories of talk during the day’s literacy activity, I also noted the play opportunities made available that day as follows: 1) played outside; 2) played inside, or; 3) did not play. When I analyzed the data, I examined the percentages of each category of talk for each of these contexts. I also looked at the percentages of types of talk that occurred during Period 1 and Period 2.

ECLAS II Assessments

I used the students’ scores on the ECLAS II assessment to measure individual reading progress. ECLAS II is the city-wide reading assessment for grades K-3, and measures phonemic awareness, reading readiness, reading accuracy and comprehension, and oral communication skills. This test is administered bi-annually-- once at the beginning of the school year, and once at the end. In my classroom,

initial ECLAS II assessments were conducted between October 18 and November 2, 2003 and final assessments were conducted between May 2 and May 28, 2004.

Anecdotal Notes on Children's Play and Reading

Initially, the study was designed to focus on the impact of the provision of time for recess on children's participation during literacy activities. However, as the year progressed, I started noticing the subtle (and obvious) changes that were happening in my students' play as well as in their actual reading abilities. Although it had not occurred to me to monitor these closely at the beginning of this study, I was so struck by their growth towards the end of data gathering and began to take brief and informal notes that provided some anecdotal documentation of their growth and learning during Period 2 that afforded me an informal comparative sense of change, based on my recollections, albeit unrecorded, of their play and reading during Period 1. Furthermore, I found that the anecdotal data provided rhyme and reason for much of the other data.

Previous Records

At the end of each school year, every teacher in the school fills out a small record card for each of his or her students. These cards are used to make decisions regarding class assignments for the coming year, and therefore include information on age, ECLAS scores, math scores, reading level, special services the student receives.

There is also a place for teachers to make comments. In addition, students are rated in academics and behavior on these cards; the ratings are excellent, good, fair, and unsatisfactory. This information was on file for 15 of the 24 students in my class and I decided to look at this information about how they had performed in previous years and the impressions they had made on their teachers in order to further understand their growth..

Predictions

Before starting my data collection, it was my prediction that there would be differences in the predominant categories of remarks made by students on days that we played compared to days that we did not play. I anticipated that the percentages of general and unrelated comments would be higher on days that we did not play than on days that we played. Because of the restless nature of my class, I thought that not having a chance to expend some extra energy would make my students less focused on discussions. I also thought that the percentage of general and unrelated comments would decrease over time with my students' increased exposure to play opportunities. While the general and unrelated comments represent lower-level thinking, connections, questions, and predictions signal a higher order of thought and communication. With more opportunities to play, I anticipated that my students would show higher-order thought and communication. I had also noticed that my class was significantly more focused on days that they had opportunities to play at

lunch, and anticipated that conversations would be longer on days that they had play opportunities.

Discoveries

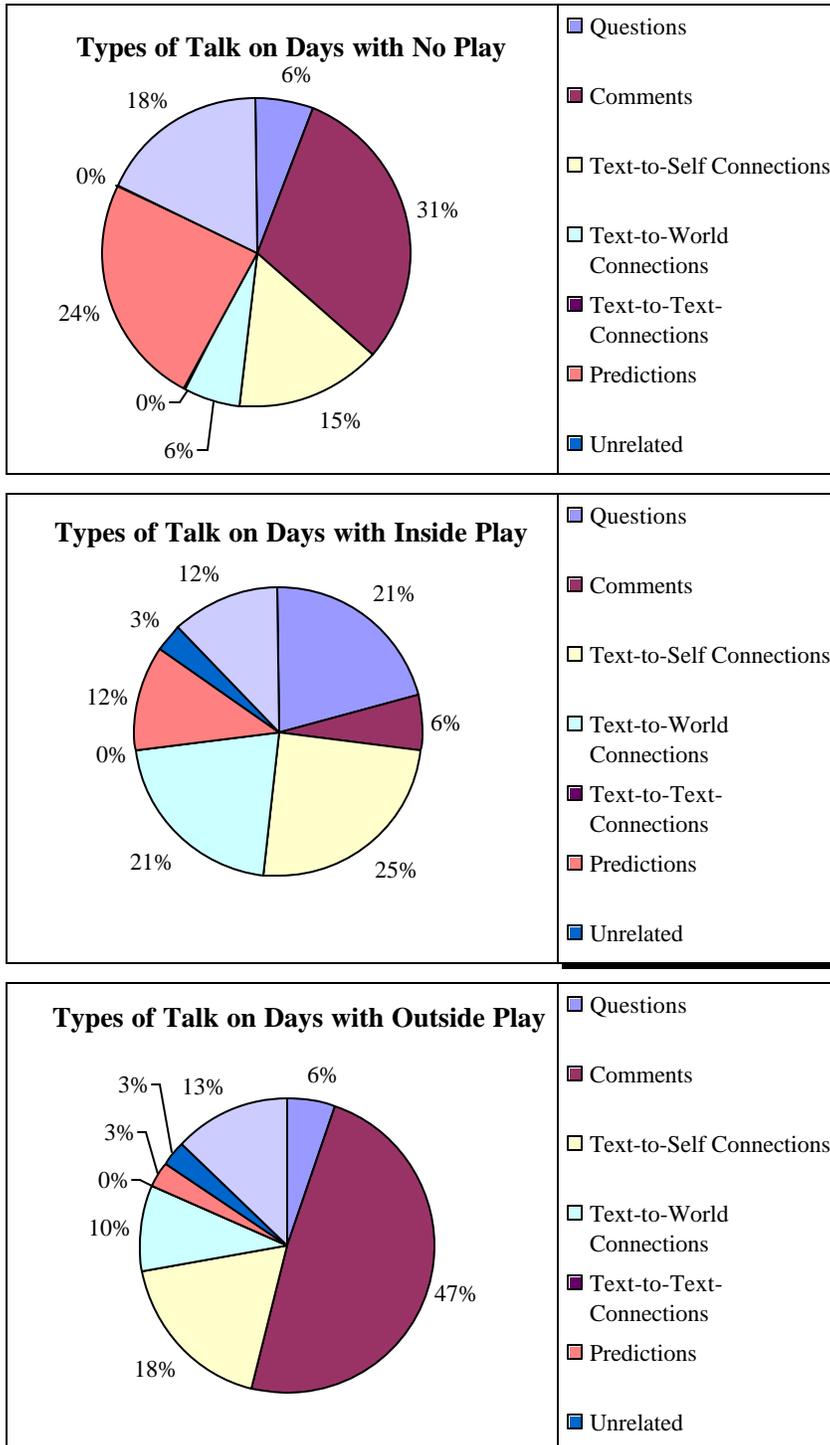
Not surprisingly, the opportunity to play had a dramatic impact on the average number of comments that were made during and after the read-alouds. When the presence or absence of play opportunities was not taken into account, there was little a small decrease in total comments in Period 2 when compared to Period 1 (an average of 13 and 12.16, respectively). However, when play context was taken into account, there were notably more comments recorded on the days when children played during Period 1 and Period 2.

On days that the class had no opportunities to play, my students made an average of 8.25 total comments. On days that they played outside, they made an average of 14.2 total comments. On days that they played inside, an average of 16.5 comments were made.

I thought general and unrelated comments would be lower on days that my students had opportunities to play because the children would be more focused and attuned to the task of discussing the read-alouds. However, the number of general comments was 54.8% on days that we played outside, as opposed to 12.1% on days that we played inside and 29.6% of days that we did not play. The unrelated comments constituted 3.2%, 3%, and less than 1% respectively on days that we played outside, inside, and did not play. (See Figure 1) Thus, looking at the

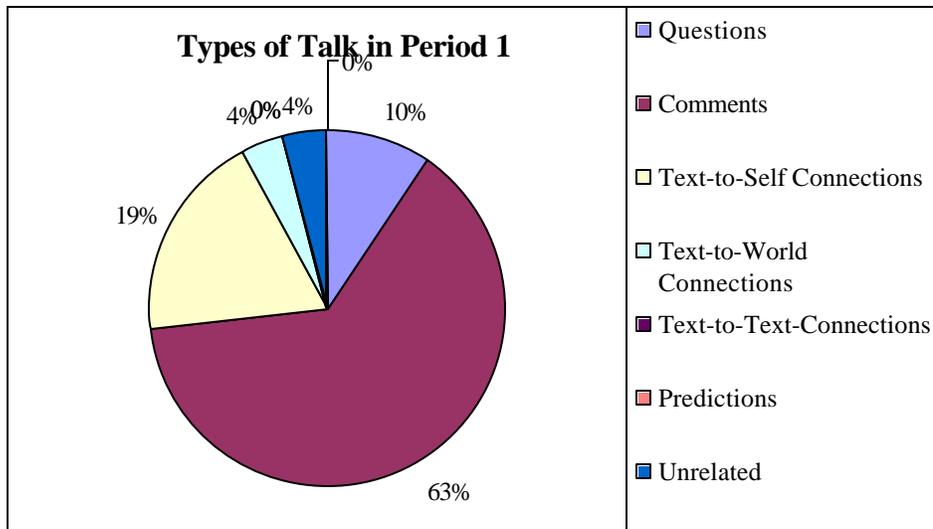
categories of talk in relation to play opportunities showed a varied picture, and did not seem to reduce the percentage of general and unrelated comments.

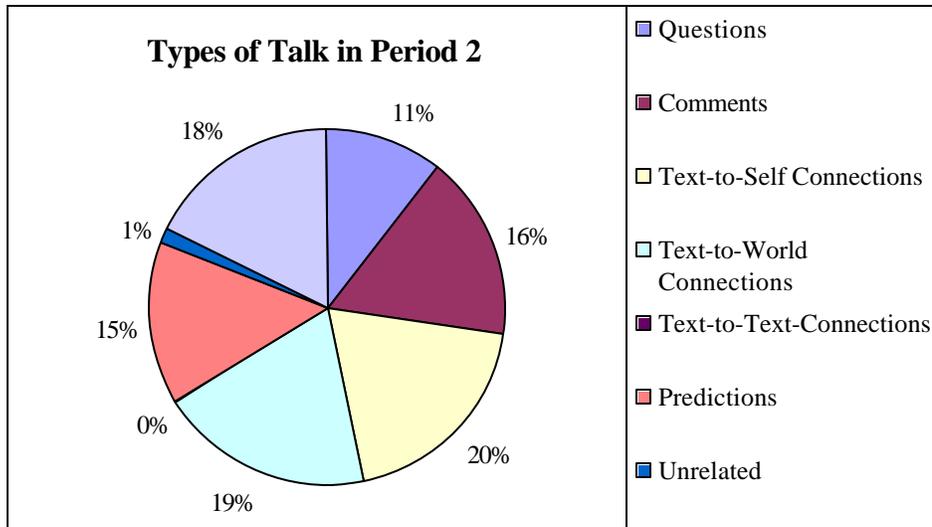
Figure 1: Graphs of Types of Talk on Days with Inside, Outside, and No Play Opportunities Broken Down by Comment Type



However, there were differences in children’s talk over time. The distribution of the comments that the children made changed dramatically from Period 1 to Period 2. During Period 1, 63.5% of the comments during the read-alouds were general comments. During Period 2, that percentage was 16.4. Furthermore, during Period 1, general comments constituted a clear majority of the talk. In Period 2, no category constituted a clear majority; rather, the types of comments were spread relatively evenly across the other categories that represented more focused book talk than general comments. (See Figure 2)

Figure 2: Graphs of Types of Talk During Period 1 and Period 2 Broken Down by Comment Type





I decided to look at the students’ performance in the ECLAS II, taking into account the different factors that have traditionally been predictors of academic success. By taking into account factors such as being held over or having been identified as having “behavior problems,” I thought I might see trends in which groups of my students were showing academic growth.

To more fully understand the growth of my class, I decided to look at my students’ actual gains over the course of the school year vis-à-vis their anticipated gains. I devised a way to determine expected gains by looking at their records from the previous year and their initial ECLAS II scores at the beginning of their year in my class. On the record cards from the previous year, teachers had rated my students in academics and behavior. Of the fifteen who had record cards, five received a “fair” rating and ten received an “unsatisfactory” rating in academics, and three students received a “good” rating, while five received “fair” and seven received “unsatisfactory” in behavior ratings (Table I).

Table I: Students' Previous Ratings
Total N = 15

	Excellent	Good	Fair	Unsatisfactory
Behavior	0	3	5	7
Academics	0	0	5	10

Only one of the 24 students in my class was reading at grade level at the beginning of the year according to initial ECLAS II scores. By the end of the year, six were reading at or above grade level. Of those who were not reading at grade level, three had nonetheless progressed two levels (the equivalent of one year). Looking at the numbers this way, only nine of my students had made significant academic progress during the year. However, it appeared that the students who would not be expected to make great progress because of a number of factors (such as previous school records, learning disabilities, and family crisis) were actually the ones who made the most relative progress.

I categorized my students into one of three groups: 1) students expected to make great gains; 2) students expected to make some gains, and; 3) students expected to make no gains. I assigned my students to one of these categories by giving one point for being held over, one point for reading more than one level (half a year) behind grade level, one point for having an individualized education plan (I.E.P.) that identifies a learning disability, and one point for having been identified as having behavioral issues by a previous teacher (or if no record exists, by my co-teacher and me), and one point for having an unstable home environment. The highest possible number of points was five. Those students who had four or five points were assigned to the third group (expected to make no gains); those with two or three points were assigned to the medium group (expected to make some gains); those with zero or one

point were assigned to the high group (expected to make great gains). I only did this for the 19 students who were in my class for the entire year and who were assessed both at the beginning and the end of the school year. (For example, I had two students who, because of excessive absences due to family crises, were not assessed at the end of the year). (See Table II)

Table II: Distribution of expected achievements

Total N = 19

Expected Gains	Number of Students
Students expected to make great gains	5
Students expected to make some gains	10
Students expected to make no gains	4

Of the four students who were expected to make little or no progress during the year because of the many factors that could impede their learning, three progressed one to two levels in the Period 2 ECLAS test. Of the ten students who were expected to make some progress, four progressed over two levels (over one year), five progressed one to two levels, and one made no progress. Of the five students who were expected to make great progress over the course of the year, two progressed over two levels, and three progressed one to two levels. (See Table III)

Table III: A Comparison of Students' Actual versus Anticipated Achievement (Total N=19)

Anticipated Gains	Actual Achievement		
	Significant Gains (More than 1 year)	Expected Gains (1-2 ECLAS II levels)	No Gains
Students expected to make great gains	2	3	0
Students expected to make some gains	4	5	1
Students expected to make no gains	0	3	1

Just as their growth in reading took time, so did my students' growth in regard to play. Partially to avoid a management disaster and partially because I was hesitant

to let my class run wild at the beginning of the year when we played outside, I took a teacher-directed approach when they played. I led organized games like tag, relay races, and Duck, Duck, Goose. Then in February, I decided to let my class play on their own. Recess became just that: time to play by themselves and organize their own games. I participated in some of their games to model sportsmanship and to show that physical activity is important to me. At the beginning of the year, I could expect to have more than a few minutes of chaos and tantrums at the beginning of every recess period, as my students figured out what they were going to play, with whom they were going to play, and how they were going to negotiate terms of play. By April, my students pretty much ran their own recess time. They negotiated sharing of materials, ground rules of behavior (ask to play instead of forcing your way into a game), and social relationships. At the beginning of the year, I remember feeling like I had to cajole my students into playing and running around. At the end of the year when I asked my students what they hoped for in second grade, most of them replied, “recess.” (See Appendix B)

A good example of how my class grew on the playground as well as in the classroom is a group of girls who liked to jump rope during recess. Of the seven who jumped rope during the majority of the time we spent outside playing, four demonstrated rhyme recognition but not rhyme generation at the beginning of the year. By the end of the year, all seven had mastered rhyme recognition and six had mastered rhyme generation. Granted, we can attribute some of this growth to the fact that, during class time, the students received instruction regarding, and practice with, rhyming words. What must also be taken into account is the fact that while jumping

rope, many of these girls would sing songs and chant rhymes as they jumped. One of their favorites was a chant that I taught one of my girls, who then taught it to the other jump-ropers:

Bubble gum, bubble gum,

in a dish, how many pieces do you wish?

One, two, three, etc. (The jumper then goes on to count until he or she stops jumping.)

At first, their jumping and chanting or singing showed no rhythmic coordination whatsoever. However, by the end of the year, they were jumping and chanting in rhythm. They had also learned numerous chants, songs, and rhymes.

Discussion

This study focused on three aspects of my students' school day: play, discussion, and reading. There was no mechanism to take into account such factors as parental involvement or direct instruction. Thus because of the nature of this study, it is not possible to draw definitive conclusions about the positive effect that time outside had on my students' growth in literacy. However, the data certainly suggests that giving my students the time to play outside has increased their readiness and ability to learn to read.

Duration of Conversation

Sustaining conversation is one of the most basic prerequisites for talking about literature. Conversation is a necessary condition for taking in others' ideas, especially when the class is pre-literate and cannot share their ideas in writing. On the days that my children had no play opportunity, they made an average of 7.1 fewer comments than on days that they had opportunities to play. This piece of data supports the work of Pellegrini and Davis (1993) that concluded that recess maximizes children's attention spans because it provides them with needed breaks. The data suggests that providing my students with recess increased their "productivity" during conversations about literature. Their ability to pay attention and remain focused was noticeably higher on days when they did have some opportunity to play.

Before discussing the types of talk that happen in classrooms, we also need to examine how much talk happens in academic settings and some reasons for those numbers. If students are unwilling or unable to discuss literature at length, achieving significant growth in their conversations will be nearly impossible.

Conversational Changes

As already mentioned, during Period 1, a clear majority of the comments my students made about our read aloud, 63.5%, were general comments. During Period 2, 16.4% of their comments were general comments, and the rest of the comments

were spread relatively equally among the categories representing more focused book talk: questions; text-to-self; text-to-world; text-to-text connections; predictions; and unrelated comments. (See Figure 2)

General and unrelated comments can be considered to represent lower-order thought (or language), as little or no processing in the mind is needed in order to generate these thoughts. General comments represent knowledge and comprehension from Bloom's taxonomy of the cognitive domain. Predictions, connections, and questions, however, require students to apply, analyze, synthesize, and evaluate aspects of literature such as plot, character, setting, and motivation of the authors and illustrators.

Growth in Unexpected Places

Examining individual students' level of achievement helped to flesh out some of the changes that occurred in my classroom. It could be argued that students in the lowest group would not be expected to progress at all, because they have three or more factors that might predict failure in school. The medium group would be expected to make mostly the expected gains, and the highest group would be expected to excel and make great gains. Yet, this is not exactly the case. What actually happened was that many of the students in the two groups who might have been expected to make only modest gains or no gains at all actually achieved gains to an unexpected level. This suggests that the students who had previously had some trouble at school, or who might not have been as successful as their peers in the classroom were, for the most part, experiencing success and growth in the classroom

at a rate that was equal to, if not greater than, their peers. Where could the change have come from?

Children have the desire to be successful. However, when we give them tasks that are similarly academic in nature throughout the day, there is not much chance for different students to excel in other realms, such as physical activity or social relationships. What ends up happening is a certain group of students enjoy success while another does not. Integrating recess into my classroom provided an environment in which different students could showcase their skills and talents. Nomar², who is a struggling reader, is a phenomenal basketball player. Pedro, who made almost no progress in reading this year (he is in the process of being evaluated for services), grew into a sensitive, skilled, respected conflict mediator. Recess gave my students who struggled in the classroom a part of the day where they could be the stars.

Though I cannot draw definitive conclusions that attribute my students' growth to the fact that they had recess, the data suggests that having opportunities to play certainly increased their academic achievement. Play is indisputably a part of every child, yet is not honored, even offered, to so many children in the public school systems. During so many professional development opportunities, we talk about curricula for the whole child, instructional strategies for the whole child, and classroom management systems that honor the whole child. When we leave play out of our school day, we are ignoring a huge part of every child.

When a recess playtime was introduced into my classroom culture, the children who weren't responding to reading lessons alone had another avenue through

² All students' names have been changed.

which they could experiment with literacy and language. Thus what they might not have learned in a structured lesson, they might have learned on the playground.

It seems that recess, apart from being fun, gives students the time and space to practice what they are learning in the classroom, and to make their own sense of it. Above all, recess gives children a chance to be successful at something other than academics. In the case of the girls who learned rhymes as they were jumping rope, the learning that needed to happen took place in a fun, non-threatening environment where the students felt successful.

Implications for Research and Policy

Next steps for further research regarding the value of play time fall into three categories: studies that examine the impact of recess in socio-economically disadvantaged communities; studies that explore connections between the provision of recess and test scores, and; studies that examine the impact of the provision of recess on the achievement on underperforming students.

In socio-economically disadvantaged communities, recess may be even more important than in wealthier communities. At my school, which is situated in a low socio-economic community, children rarely have a chance to play outside for a wide variety of reasons. In such communities where children are given little time to play outdoors in mixed age groups, providing them with opportunities to play at school acknowledges the fact that providing a quality education goes far beyond instruction. The statistics regarding overweight children in poor communities are staggering.

Allowing a block of time for physical activity in the communities that are most heavily afflicted by childhood obesity is an obvious solution to the growing problem.

Because recess is such a contested topic in education policy, it seems that a wider study needs to be done to determine whether recess can have a place within schools that are facing ever-growing pressure to perform. If educational policy continues to generate mandates for high-stakes testing, then we should determine the effects of recess on test scores. I have a hunch that a school that provides recess periods and encourages and fosters play might score higher.

My students who were underperforming at the beginning of the school year seemed to reap the most dramatic benefits from having recess. I would guess that a larger study across a community would show similar results.

This year, New York City implemented a city-wide curriculum with mandated amounts of time for different activities, but this study actually points to what teachers have known all along: educators should have the autonomy to introduce elements they feel are lacking into their classrooms. Doing this assumes the professional integrity of teachers. While guidelines should be provided for what should be taught, mandates regarding the actual scheduling of activities (when to teach reading, how long, the elimination of play time) might inadvertently make instruction less effective, rather than more, as teachers are expected to continue a lesson even if the children aren't "feeling it." In order to assure the effectiveness of encouraging teachers to create a schedule that works for them, some opportunity to collaborate with other teachers to discuss what is working and what isn't.

If teachers are going to take their students to recess, obviously, they should receive some basic training to prepare them for the inevitable scrapes and bruises that happen on the playground, as well as training on how to explain these injuries to concerned families and if need be, to justify including recess in the day.

Conclusion

Research points to the fact that children, like adults, need to take breaks in their work in order to be productive. Furthermore, many psychologists and educators argue that play is necessary for development. In a school situated in a neighborhood where children may not get much time to play outdoors, and in a classroom with a proportionately high number of students with learning and behavioral issues, recess seemed like a reasonable idea.

Having a chance to play outside had positive effects on my students' growth. On days that my class had an opportunity to play, their conversations were sustained for longer periods of time. Furthermore, the discussions among my students shifted over the year from a preponderance of comments that represented lower-level thought to comments that represented higher-order thinking. Students who, because of various predictors, wouldn't have been expected to make academic gains performed at higher than expected levels. Recess was another avenue through which my students could be and feel successful.

In a perfect world, students in low-income neighborhoods would have the same if not more opportunities to have recess than their high-income counterparts. However, schools in these communities are often under the greatest pressure to

improve scores on standardized tests (using the same amount of resources and facing much greater challenges than their counterparts in high income areas). Using valuable instructional time to allow students to have recess is a great risk for a school. Based on the drastic change in my classroom that I attribute to allowing (and teaching) my students to play independently outside, I would suspect that schools with recess would have comparable, if not higher test scores than schools without.

If play is essential to children's growth, schools should be obligated to provide time for children to play. Especially in neighborhoods where opportunities to play are limited, schools in those neighborhoods should compensate by making play a priority in the day. There are no empirical studies that show that recess is not beneficial to students' learning. Recess provides a much-needed break from the pressures of the classroom, as well as a different forum through which children can feel successful. As art, music, dance, drama, physical education, and recess are cut from daily schedules, fewer and fewer children have times in their day when they can experience success, albeit non-academic, at school. Reinstating recess into every child's day would be a step away from superficial education, and a step towards realizing that we are not only teaching children to read and write, but we are teaching them to be well-rounded human beings.

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Date:

Play Opportunity:

Read Aloud Title:

Questions	Comments
Text-to-Self	Text-to-Text
Text-to-World	Unrelated
Answer to Question	Prediction

Notes: