

Healthy Play at Lincoln Elementary School:  
Three Year Research Project in Academic Years  
2002-2003, 2003-2004, 2004-2005

Charlie Steffens and Spencer Gorin

*Creative Spirit*

Reviewer: Larry Nicoll

*Lincoln Elementary School*

Reviewer: Amy Olson

*University of Arizona*

July 2006

Creative Spirit  
6062 E. Beverly  
Tucson, Arizona 85711  
Phone: 800-742-0708  
Charlie Steffens, Co-Founder  
Spencer Gorin, Co-Founder

Lincoln Elementary School  
216 W. Harris Street  
Eureka, California 95503  
Phone: 707-441-2446  
Fax: 707-445-2969  
Larry Nicoll, Pricipal

The Healthy Play (HP) curriculum is a character education, classroom management, violence prevention, and conflict resolution program that has impacted over 250,000 children, teachers, parents, and youth service professionals since 1992. HP has been primarily developed for use in the kindergarten through sixth grade classroom environment. Application of the curriculum is intended for both regular classes and for numerous special education class settings, including mainstreaming special needs students.

HP is an educational curriculum, which promotes students' abilities to gain empathy and compassion for others, practice nurturance, achieve feelings of success and well being, and to manage or prevent intimidating, aggressive, or violent behaviors. The curriculum is intended to be used by students, teachers, school counselors, principals, teaching assistants, and playground monitoring staff.

Central to the curriculum is the belief that play is the activity in which children practice the values that any character education program views necessary to develop. Play assists in the development of prosocial aptitudes while also giving students opportunities for intellectual and language development (Klugman, 1990). Issues of compassion, conflict resolution, diversity, fairness, honesty, and communication are all acted upon in play settings. HP provides practical opportunities to learn more effective social or behavioral management skills that students have not yet mastered. Once these behaviors are learned and practiced in play settings, it is easy using simple dynamics to transfer them throughout school and neighborhood community settings. As a daily curriculum, HP allows students to practice optimal healthy behaviors throughout the school day.

The educational focus of the HP game activities is based solely on the social interactions that the game experience provides. The positive play experience is an incredible motivator, and

the power of play as an effective medium for learning is irrefutable. Play contributes to social, cognitive, physical, and emotional learning by allowing children to test out their ideas of others and integrate these ideas into a joyful experience (Sponseller, 1974).

Game outcome and psychomotor skill development are inconsequential in assessing the value of HP as a character education and violence prevention model. It is the cooperative game model that allows for the development of prosocial skills. For example, research shows that the use of cooperative games can reduce racism (Rogers, 1981). Additionally, the playing of cooperative games has been linked to improved treatment of developmentally-delayed and socially-rejected peers (Acton & Zaratany, 1988; Pellegrini, 1988).

HP in the K-6 educational setting has been designed to be a simple and uncomplicated process for both the teachers and students who use it. It is based on the knowledge that:

1. Children like and want to play.
2. Play incorporates all eight of the multiple intelligence styles of learning (Gardner, 1983).
3. Play is the most natural form of learning.
4. When play is done correctly, it is a positive emotional experience for all the participants.
5. Of all the learning concepts involved in HP, the most important one is the emphasis placed on actually *practicing* social skills over and over.

#### History of Healthy Play Program Development

The original underlying therapeutic play concepts now used in HP were developed over a ten-year period in the in-patient psychiatric setting for children and adolescents with the severest of psychiatric illnesses. Under the direction of psychiatrists and psychologists, a milieu of specific, non-threatening experiences were developed. From these basic play experiences, children were able to better learn the skills of how to relate effectively with others (Schaefer &

O'Connor, 1983). Play became the tool, which did no harm.

All of the children's pathologies for which the nurses and associated therapeutic staff were equipped to deal with surfaced during "here and now" play experiences. The focus during play could center on simple things like talking out loud, demonstrating a kindness to another, making a decision, or just joining in. Sometimes it was as simple as having children move around vigorously to improve their attention span. This promoted receptiveness to viewing their life experiences positively. A willingness to receive feedback on how others perceived their actions was developed. Additionally, they were given repetitive opportunities to make positive changes. Within the field of play therapy, it is understood that play was not about exploring the depth of children's past pains caused by various abuses. It was not designed to resolve eating disorders, suicidal tendencies, or psychosis. However, it did allow children to practice how to do things better, over and over again.

Modern brain research adds to the play therapy literature by demonstrating the importance of physically active play. The accompanying increase in serotonin and endorphin levels following physically activity make people feel calmer and more content (McPhail, 2006). Higher blood oxygen levels make them more alert. Physical activity has been further linked with increases in epinephrine and norepinephrine, both related to improved memory functioning (Howard, 2006). Moreover, brain-based research supports that physical movement plays a vital role in the formation of neural circuitry to promote academic learning (Sprenger, 2005).

Based on the findings from play therapy and brain research, we solidified the HP philosophy and rules into the successful program that we now share with teachers and faculty for use in their schools. Essential is the understanding that the outcome of the game is inconsequential. The play activity is a tool. The methodology of utilizing play is about

processing aspects of the child's behavior during a game.

### The Healthy Play Program

The effective use of HP in the classroom must begin with the identification of the students' desired outcomes involving play at school. The teacher leads a simple exercise to create a visual poster of the children's values. It centers on answering, "Why do we play?" All grade levels give approximately the same responses. They play to make friends, get energy, take a break, go outside, exercise, win, get healthier, learn, and most importantly, have fun. Additionally, the teacher asks the students, "How do you want to feel when you play?" Students respond that they want to feel, "happy, good, nice, safe, and accepted." The typical poster usually has fifteen or more responses, but the critical answer for the teacher and students is that they play to have *fun*. Through this exercise, students become a part of the process of establishing their own criteria and values for play. The teacher may now hold students accountable to these expectations when they play. From this point forward, only students playing by their identified positive class values will be allowed to continue playing.

The second simple poster exercise led by the teacher is to answer the question, "What is the most important part of every game?" Typical class responses include the following: rules, fairness, listening, safety, teamwork, cooperation, winning, and sharing. In younger grades, no hitting, no fighting, no pushing, no tripping, etc. is often added. The teacher validates that these are great values. However, the teacher asserts that the most important part of every game at school is the *people*. Students learn that from this point forward the emotional and physical well being of the *people* is going to be the greatest concern in students' games.

In addition to the poster development, the teacher will explain the two essential HP rules. Rule #1 states, "If anyone is hurt, either physically or emotionally, the closest person must stop

playing and take care of that person.” This rule is taught through teacher discussion and by having students model what they might say or do if they see someone hurt. There are no exceptions in implementing this rule. Of great significance is that no blame is attached to whoever caused the problem. The focus of the HP learning opportunity is now centered on caring for the injured person rather than catching the culprit. However, in reality, this process most often catches the perpetrator. Of course, he/she was the closest when the injury occurred. It is not relevant whether the act was intentional or occurred because the child was simply out of control. It is now simply an issue of proximity and the closest person must stop and help. Additionally, even if a student trips and no one caused the injury, the closest person must stop and render immediate assistance. The HP emphasis is on the students, not the teacher, taking responsibility to *do* the caring. All students must commit by show of hands to following this rule if they wish to join any of the games at school.

The second HP rule involves disagreements or arguments during the game. Rule #2 states, “If two people have a disagreement, the two people involved need to leave the game until they come up with a peaceful solution.” In HP, we acknowledge that disagreements and arguments are normal human occurrences. What is essential for the students to learn is that there are right ways and wrong ways to settle these disputes. At school, students will practice how to do it the right way. The two students involved in the disagreement are no longer having fun. Therefore, they will have to leave the game until they come to a successful resolution. It is a logical consequence. The bottom line in HP is that no fighting or bad words are permitted.

Essential in rule two is for the teacher to calmly convey the understanding that students have a solvable problem and they are not in trouble. The HP curriculum has not established a myriad of protocols for the students and teacher to use in solving the disagreement. Instead,

removing the students from the center of attention allows them the chance to compose their feelings and thoughts.

Such playground disagreements are usually about, “whose turn it is, who was tagged, who is safe, or what the score is.” The de-emphasis on the role of the teacher is critical in these argument situations. In the vast majority of incidents, the teacher will *not* be involved in the students’ discussion of their problem. Even if the teacher knows whose turn it was, who was safe, or the exact score, the teacher will not intervene as the referee. These disagreement occurrences are viewed as student learning opportunities, which is the *true* educational objective of teachers playing games with their students. Disagreements offer a chance for the students to practice.

Upon resolving the disagreement, the students report their solution to the teacher. The teacher’s role is to validate them for achieving a successful solution. Students often receive praise for disagreeing the right way. Important during the argument process is the fact that the game was continued for all the other students. The fun continues for students not having problems. This creates an incentive for the people having the disagreement to effectively solve their problem.

The most effective facet of the use of the two HP rules is the logical consequences that occur for the students. The students who cause the most injuries or argue the most will be the recipients of more learning opportunities to practice correcting these problems. The two HP rules are meant as teacher guidelines in their usage. They are not written in stone. The HP curriculum promotes that teachers use their personal discretion. For example, the teacher might regularly join the student who is providing care and assist in nurturing in younger grades. If the injury is of a greater magnitude, the teacher will absolutely become involved. When a student

disagreement has a high potential to escalate into bad words or fighting, the teacher will immediately intervene to model proper steps to resolve the situation. However, the long-term goal is for students to act responsibly by themselves in these situations.

The last major concept in the HP curriculum is for the teacher to provide an opportunity for students to reflect upon their feelings and the behaviors of others during a game. Students are gathered to quietly share *only* positive compliments about their peers involved in the recent game. It is here that students give verbal affirmations to other students who did something positive. These comments are designed to support all the student values previously listed on the original two posters. HP does not endorse the use of giving stars, pencils, ribbons, bells, whistles, or any other tokens for doing something kind. These objects divert student attention away from the intrinsic reasons for why they are caring for people. Receiving verbal praise for caring, playing fair, arguing the right way, sharing, or tagging softly are the appropriate acknowledgements for doing things correctly.

The *fun* and *people* philosophical framework along with the two rules allow the teacher to quickly assess if their students are playing the right way. If all is well, the game continues. When a difficulty occurs, the teacher focuses on the learning opportunity that has presented itself by playing the game.

### Healthy Play in the School Setting

Regular daily implementation of the HP curriculum is essential to provide students with opportunities to learn optimal character education skills. HP can be part of a daily structured recess led by the teacher. It can be used in school settings where the elementary teacher is responsible for PE on a daily basis. Many teachers utilize the HP curriculum to give their students an energizing release break at various times throughout the day when the students'

attention span for class work has been exhausted. A key understanding is that play is no longer used as a reward for good behavior. Instead, play is part of the school curriculum to reinforce and teach good behavior.

Each activity the teacher chooses from the *Learning to Play, Playing to Learn* textbook (Steffens & Gorin, 1997) offers specific character skills that students can practice while playing games. Teachers can choose to select activities that focus on honesty, compassion, respect, responsibility, sharing, nurturing, fairness, or a number of other character values. Even though some of the HP activities highlight certain values, it does not mean other values are ignored during a game. HP provides opportunities for all positive behaviors, at all times.

HP, in the educational setting, goes beyond classroom lectures and slogans on the bulletin board. Visual and auditory cues provide some of the paths by which children learn, and they have been included them in the program. However, research shows that children retain new skills better when they are given opportunities to hear, see, say, and do them (Pica, 1997). Hence, it is the actual concrete, hands-on, life experiences that are the most critical learning factors for children ages 5-12.

HP utilizes the playground environment where the vast majority of students' daily problems actually occur. This is particularly the case when students are not provided with structured activities. For example, Hutchison and Bailey (1983) found that 212 aggressive incidents occurred on elementary playgrounds within a 20 minute period. White and Bailey (1990) estimated that approximately 700 aggressive acts per hour are committed on the playground. Walker, Colvin, and Ramsey (1995) determined that observations of children's behavior during recess are highly predictive of juvenile delinquency five years later. Moreover, research conducted in primary school demonstrates that the experience of recess games is

directly related to social competence and adjustment in the classroom. As Pellegrini, Kato, Blatchford, and Baines (2002) argue, recess is one of the few times during the day that children are given opportunities to interact directly with their peers, thus developing social skills. Hence, the playground provides a learning environment that cannot be ignored. The HP philosophy argues that the social interactions of play are where children accumulate the practical concrete experiences that will become the learning base for future abstract thinking and problem-solving skills.

Like any other subject taught in school, the eventual goal for character skills learned during play is to transfer them into the students' total life environment. The HP process is initiated through the use of daily play, but it is expected to carryover to encompass the entire school day. The HP rules are used by all school faculty members all day long. If students are pushing each other while in line, they need to use Rule #2. If a student from another class falls on the way to the bus, the nearest student must immediately use Rule #1. Squabbles in the cafeteria, hallways, library, computer lab, lunch recess, or during class are seen as opportunities for children to take responsibility and practice their character skills. As the students constantly see these guidelines being modeled by the teachers, they learn that they too are empowered to initiate the appropriate rules with their peers. Week by week and month by month the simple concrete focus on *doing* the correct social skills is transferred across all settings.

### Three-Year Research Study

It is with this essential understanding that we sought to finally view a total school using HP and see if character skills were being put into action by students. When HP is practiced, can we watch the playground and see students practice caring for an injured peer? Do teachers report students taking more responsibility in solving their problems? Do teachers see students

practicing higher levels of respect when they resolve their conflicts without bad words or fighting? Are there fewer minor and major acts of intimidation, aggression, and violence on campus? Does proof exist that the students are using healthy character skills because there are fewer children being sent to the principal? Can we see an improvement in the number of school suspensions? Positive results in these areas are measurements showing that students have internalized effective character education.

To answer these questions, three one-year research projects were initiated at Lincoln School in Eureka, California. The purpose was to test if utilizing Creative Spirit's Healthy Play program is an effective means to improve positive student character skills and reduce violence and aggression on campus. Lincoln Elementary School attempted to achieve the following:

- A. 50% reduction in the number of students receiving suspensions
- B. 50% reduction in the number of suspensions
- C. 50% reduction in the number of suspension days over the three year period.

The goal at Lincoln was to help children move beyond being able to say or recognize good behaviors on a written or oral test. The Five Year Goals 2000 Research Study for TUSD (Steffens & Gorin, 1999) on HP indicated success for students to moderately or greatly improve their social skills in:

- 1. Reducing aggression
- 2. Decreasing acting out
- 3. Increasing student social skills
- 4. Increasing nurturing
- 5. Increasing communication skills
- 6. Increasing peer mediation and conflict resolution abilities.

The emphasis at Lincoln School was placed on evaluating whether the students had learned new caring and problem solving skills on an interpersonal level sufficiently to avoid the major problems that are monitored by school suspensions. The suspension statistics reflect if students have internalized the HP curriculum and put their new positive behavioral changes into action.

The desire to improve the environment for students remains a high priority of the principal and the faculty at Lincoln School. They agreed as a whole faculty to implement the HP program as a mechanism to achieve a more positive school environment. They committed to regularly use the curriculum and guidelines on a daily basis, allowing their students opportunities for hands-on practice in developing the skills necessary to improve suspensions by 50% over three years.

## Method

### *Participating Schools*

Eureka, California is a small city of 27,000 people located on the Pacific Ocean about 200 miles north of San Francisco. There are several smaller cities and towns in the vicinity, but the area is mostly rural. The area is heavily forested, has mild temperate climate, and receives significant amounts of rain.

Eureka District elementary schools include: Birney, Grant, Jefferson, Lafayette, Lincoln, and Washington. In the past several years, the Eureka District elementary school staffs have been trained in a wide variety of violence prevention and character education program tools. All of the teachers, principals, and the school psychologists have used these various tools at differing levels of implementation.

Lincoln School was chosen to be the test site for the Healthy Play project. Although there is acknowledgement to the effectiveness of the character education program tools by the

Lincoln School faculty, the pattern of the suspension rates at Lincoln School had not improved. The selection of Lincoln School was made after meeting the principal, Larry Nicoll. Creative Spirit had done work at several schools in McKinleyville, Samoa, Blue Lake, and Trinidad, through which Nicoll had become aware of the Healthy Play character and violence prevention program.

Lincoln shares similar demographics with the other schools in the district. The student population is 46.5% White (not Hispanic), 16.5% American Indian, 15.4% Asian-American, 12.2% Hispanic/Latino, 6.3% African-American, 2.0% Pacific Islander, and 1.2% Filipino American. Overall, the district can be considered as serving a low socioeconomic population with the majority of students eligible for federal free and reduced lunch programs (91% Birney, 67% Grant, 94% Jefferson, 60% Lafayette, 89% Lincoln, and 36% Washington).

Essential in choosing this school was a commitment by the principal to have the entire faculty utilize the Healthy Play concepts on a daily basis for three years. Since no noticeable positive progress in the reduction of suspensions had occurred using previous programs, the focus of this research was to see if the initiation of the HP program could facilitate a decrease in the suspension rates. The only new character education and violence prevention program introduced at Lincoln School during the three-year project was HP.

For the purpose of this research project, it was decided to compare Lincoln to the population of elementary schools in the Eureka School District. The district has had and continues to experience a declining student enrollment. As the researchers postulated looking for a single comparable school it became clear this would be very difficult to achieve. At the beginning of the baseline data period, there were eight elementary schools. During the baseline period, Marshall School was closed by the district and students were relocated to different

schools. Additionally, it was known that Worthington (the only K-8 elementary school in the district) was also scheduled for closure in 2003-4 and thus would not be available for comparison. The closure of Worthington again caused the relocation of students to the different schools in the district. However, this did resolve the difficulty of comparing six K-5 elementary schools with one K-8 elementary school, and allowed for the same grade levels to be represented in the final schools. Thus, the control group for this research project consisted of Birney, Grant, Jefferson, Lafayette, and Washington elementary schools in the district.

### *Measures*

Selection of the suspension statistics for Lincoln and control group schools was determined because of its consistency of use among all the schools in the district. The district developed these standards in conjunction with the state of California's Education Code and all schools have had years of participation with this system. Conduct violations for which suspension may be assigned are outlined in the California Education Code, Section 48900-48927. Infractions include threat or use of violence or sexual assault, use or possession of a controlled substance or weapon, theft, and obscenity. Principals and school administration also may assign suspensions when the pupil has pervasively disrupted coursework or acted in ways to create a hostile educational environment (<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=48001-49000&file=48900-48927>). Based on findings from a previous study conducted in Tucson, Arizona, it was felt that suspensions were not an issue of wealth, race, religion, or any other demographic category, but simply a representation of a student's behavior (Steffens & Gorin, 1999). In the Goals 2000 Study, some of the 29 different schools evaluated were located in economically stressed areas while others were located in middle class or affluent parts of the city. Moreover, the schools serve a wide range of racial and ethnic

groups, and majority identity varied across the sample. Despite these differences, no observations were made that indicated the effectiveness of HP was related to diversity issues. One hypothesized reason for this is that the district maintains a uniform student code of conduct across schools. Eureka District also maintains a district-wide suspension policy. Hence, the same behavior would yield the same response, regardless of which school a student attended. This was viewed as a constant factor within the district.

Information on the number of suspension infractions is kept by the Eureka City School District and can be obtained by the principal or a school psychologist. For purposes of this study, we chose to average the previous three years from 1999-2002 to determine a baseline mean infraction per enrolled student for the district. This allowed for a comparison of the data with schools of different-sized populations.

### *Procedure*

In the first academic year (2002-2003), Lincoln Elementary School teachers, teaching assistants, and playground monitors received seven hours of in-service training of the HP curriculum by Creative Spirit. They were required to read the *Learning to Play, Playing to* curriculum textbook *Learn* (Steffens & Gorin, 1997) by September 30, 2003.

During the first day of school, all teachers completed the HP philosophy poster activity/discussion with their class on, “Why do we play?” and, “What is the most important part of every game?” during the first day of school. They also explained the two essential HP rules: Rule #1: The closest person to someone injured, either physically or emotionally, will stay with that person until they feel better and can return to the game. Rule #2: The students involved in a disagreement will leave the activity until they achieve a solution without bad words or physical fighting and the return to the game. All students were verbally taught to identify the two

philosophical components, fun and people, and two rules of HP by the end of the first week of school.

Over the course of the year, teachers led “compliment sessions” with their students in order to focus on positive character skills at least three times per week based on HP activities. All teachers also implemented the two philosophical criteria and two rules daily with their classes during recess or physical education periods. Additionally, the teacher and class utilized HP philosophical and rule components throughout the entire school day.

All teaching assistants and playground monitors were mentored by their supporting teacher, principal, or school counselor in use of the HP guidelines so they could implement these procedures during recess periods. The principal also actively participated in before-school, recess, and after-lunch periods of play at least three times per week to help mentor the HP guidelines.

The HP curriculum was discussed by teachers every month and they focused on both successes and problem areas during staff meetings. Quarterly student disciplinary reports from the Eureka School District were reviewed and shared with the teaching staff. An end of year summary was cooperatively prepared by Lincoln School and Creative Spirit staff evaluating the implementation of the methods at Lincoln School.

In the second academic years (2003-2004), the Lincoln Elementary School teachers, teaching assistants, and playground monitors received three hours of new in-service training on the HP curriculum by staff from Creative Spirit in 2003-2004. No additional training was provided by Creative Spirit in 2004-2005. However, new teachers were required to read the text *Learning to Play, Playing to Learn* curriculum textbook (Steffens & Gorin, 1997) and review the

lectures from the four HP training videos from both 2002-2003 and 2003-2004. New playground monitors were required to review the videos as well.

Throughout the second and third year, the staff continued to complete the poster discussion in their first class, teach their students the two essential HP rules, lead compliment sessions with their students, and implement the HP philosophy and rules on a daily basis. A review of recent successes and problems with HP implementation continued to be a part of monthly staff meetings, and the staff participated in the end of the year reviews of all goals and methods.

## Results

### *Assessments of Implementation*

School faculty records indicated that the entire Lincoln teaching and playground staff attended the HP training on 8/28/2002 and 8/25/2003. In addition, playground assistants from Americorps also attended that training. One teacher left the training after only one hour. She was later given individual instructions by the principal and her other teaching colleagues. The HP training instruction sessions were completed to the described standards.

The principal ensured that teachers had read the textbook by 9/30/2003 as discussed in faculty meetings. Teachers participated in 30 minutes of structured discussion of the entire *Learning to Play, Playing to Learn* (Steffens & Gorin, 1997) textbook. This was accomplished during part of the two-hour staff in-service time on Thursday afternoons. Discussions occurred during the first six weeks of the school year. Additionally, the teacher who missed the majority of the training was an active part of the book discussion. The principal reported that these discussion sessions promoted a greater understanding of the HP program and provided teachers with an opportunity to problem solve issues occurring in their classes. Hence, this objective was

fully accomplished to the standards of the research project.

In both 2003-2004 and 2004-2005, the principal validated that new faculty had stated they had completed the reading of the textbook. It is noted that the full faculty discussion during the first year promoted a greater comprehension of the use of HP than the solo reading experiences during 2003 and 2004.

The principal initiated an overview discussion of the HP process with the entire student body on the first day of school in each of the three years at the school morning meeting. Starting the second day of school in 2002, the principal led the entire student body in saying the HP concepts at the morning meeting. The chant was, "Why do we play?" The students responded, "To have fun!" "What is the most important part of every game?" The student response was, "People." "If someone is hurt do you run away or stay with them?" The students said, "Stay with them." "If you have a disagreement do you do it in the game or out of the game?" The students replied, "Out of the game." The principal stated that this was done daily for several weeks and then the chant was done on a weekly basis for the remainder of the school year. The verbal and auditory learning components of the research objectives of the HP program were successfully accomplished at the school. The principal was able to lead the chant on the first day of school in both years 2003 and 2004 as carryover had been achieved from the first year.

Teacher-led HP poster and rules discussion in all 1<sup>st</sup> through 5<sup>th</sup> grade classes were held on the first day of school. The principal observed that every classroom had their posters on the wall on the first day of class in all three years. Exceptions were made for the kindergarten classes. These two teachers have a specific agenda for the first several weeks of school for the young children. It was not felt that the specific formal poster and rules discussions (a 25-minute process) were age appropriate for five-year olds at this time of the school year. The principal

coordinated with these teachers a modified curriculum, which would introduce the HP concepts at an age-appropriate rate. The basic philosophy and the two rules were introduced to the kindergarten classes. However, much more teacher modeling and interaction was considered appropriate for this specific age group. The principal acknowledged that kindergarten students did have a good understanding of the HP concepts by the end of the first quarter of the school year. The HP guidelines allow for such variations in the amount of “good discretion” that a teacher should use when implementing the HP curriculum. This is not only true for kindergarten students, but for all students in all grades. Because this objective was inappropriate for the kindergarten students it will be modified in future research projects.

Additionally, the librarian, new science teacher, and half-time resource teacher did not lead HP lectures. This is viewed as appropriate as they did not have a specific class of students. However, these teachers did use the HP guidelines when the students attended their classes. In summation, the objective of the visual learning through posters was not met as stated in the kindergarten, library, science, and resource classes, but the modifications were considered satisfactory. The goal was accomplished successfully in all other grades 1<sup>st</sup> through 5<sup>th</sup> at Lincoln school.

The principal or teachers verbally acknowledged that they had mentored playground monitors and heard them using the HP language. The principal reported having multiple five to ten minute meetings throughout the year to discuss HP concepts with the playground monitors. This was done throughout the full school year in 2002 and 2003. These discussions occurred only in September and October 2004 due to an emergency leave of absence.

The principal also participated almost daily in before-school and after-lunch recess periods where he was able to model how to effectively use the HP program with the monitors.

The principal mentioned that it was a high priority to instruct a new monitor who became employed during the school year so she was “Up to speed” on the HP process at Lincoln. The ongoing mentoring objective was successfully accomplished.

It has been the principal’s regular pattern for numerous years to be on the playground before school and during the lunch recess on almost all days that he was present at the school. At first, it was questioned if his presence on the playground would by itself cause a reduction in student acting out. However, since this had always been the way he monitored the school, it is not viewed as a confounding factor. The principal related that HP has given him numerous new options on how to help his students take responsibility for their actions. As the year progressed, students had fewer and fewer concerns that they sought his help in resolving. He related that being able to use the exact same language as the teachers used with students made recess periods a consistent part of the whole school day.

The principal vastly exceeded the three times per week objective for the research project in both 2002 and 2003. It was very unfortunate that the role of the principal in modeling and mentoring did not occur with the same consistency over the last 6 ½ months of 2004. Although the interim replacement principal was the kindergarten teacher at Lincoln for the previous two years and knew the HP program, as a first time administrative assignment, his presence may have had a different impact with all the students than the original principal.

In 2003-2004 a “Special Day” class was added to Lincoln. This class consisted of students with learning disabilities, emotional disturbance, and behavioral problems. The process was initiated with their teacher and students on their first day at school. During 2003, the principal recognized a temporary increase in playground conflicts until the students from the new “Special Day” class became more comfortable with the process.

After the first six weeks when the *Learning to Play, Playing to Learn* textbook (Steffens & Gorin, 1997) was discussed by the staff, there were no formal weekly meeting agenda records kept that specifically identify discussing the HP program on a monthly basis. The principal noted that although HP was not written down as a specific topic, the HP program was discussed several times each month. Sometimes a related issue would have a solution that HP could address. More often, it was teachers giving positive feedback or bringing up a problem which the whole faculty might discuss for a few or as many as thirty minutes.

The principal estimated that HP-related issues were discussed at various levels several times each month. One of these related issues was the monthly Eureka City School Suspension Report. Each month this report was discussed at the staff meetings and the relationship to the reduction of suspensions and the use of HP was always mentioned. By the second report, staff enthusiasm quickly grew as it was evident that the faculty was clearly making positive progress regarding the suspension issue at Lincoln School. The success of the HP program was specifically mentioned in the yearly *School Accountability Report Card* (2003-2004) which is given to parents, faculty and administrators in the district.

Staff meeting notes also indicated the discussion of HP issues each month in both 2002-2003 and 2003-2004. The discussion in teacher meetings from November 2004 to June 2005 is not known due to the change in principals at the school caused by the need for an emergency leave of absence. Teachers verbally acknowledged in monthly staff or grade level meetings that they had led three compliment sessions per week. They also gave oral and written comments about how HP has affected their classes. Teachers regularly shared at staff meetings their successful stories about the compliment sessions with their class. The principal heard many teachers acknowledge how the rule of “caring for someone who was injured” was making

positive changes in the students, and that students noticed these behaviors. The teachers also noted that students praised their peers for disagreeing the right way. Many of the teachers reported there was far less “tattle tale” incidents throughout the entire school day.

In addition to the numerous verbal discussions throughout the year, faculty members also submitted written comments on how they saw HP affect Lincoln School:

- “One of the values I want children to embrace is children nurturing other children. Rule #1 encourages care and nurturing.” (Barbara Madger)
- “I appreciate the positiveness of this program that promotes student self-esteem and responsibility. The most useful part of this program is unifying the school with a consistent way to promote a positive school atmosphere” (Sharon Aslanian).
- “I’ve seen students develop tools to use in conflict situations--(hand ball court) remove themselves and solve the problem quickly so they can return to play” (Mary Meyer).
- “As a monitor it is important to be consistent and allow the kids to straighten out as many conflicts as possible. I’ve tried to do these things whenever possible” (Jim Moore).
- “This program has truly helped the socialization of our students. Elements of consistency, fun, structure, and methods makes this program effective and easy to use” (Brad Albee).
- “We spent a great deal of time reading the book and discussing the positive aspects of HP. We were all impressed with the impact it made on both the classroom and playground” (Gerry Tollefson).

Daily use of the HP philosophy and rules by all teachers with all students was validated by both the principal and school psychologist. The principal further identified that the use of HP was “24/7” in its implementation at the school regardless of the subject being taught. HP was a curriculum requirement for daily physical education class and was noted in the teachers’ weekly class schedule. The use of specific HP activities as taught in the faculty training and listed in the *Learning to Play, Playing to Learn* textbook (Steffens & Gorin, 1997) were regularly used. It is important to note that it was the use of the philosophical guidelines that occurred daily. At some point, in many classes, the teacher was able to utilize other activities known by the children as part of the physical education curriculum. However, these activities were always played in a HP manner. This expanded usage is viewed as a very healthy transference of learned behaviors of the students to other activities.

The school psychologist additionally observed the regular use of this tool being used by the teachers. The psychologist acknowledged that it was the simplicity of the HP program that made it operational in every class, every day. HP concepts blended very well with other similar techniques teachers were already using on a regular basis, which only added to its enactment. HP often allowed the principal and teachers the opportunity to direct students to accomplish something positive and thus earn other forms of positive recognition that existed at the school.

The school psychologist noted that many violence prevention and character education programs have difficulty because they are hard to implement by the teacher on a consistent basis. She stated that the teachers’ success at Lincoln was due to the flexibility of HP. It could be part of physical education, recess, or as a break from the daily routine when the teacher felt the need to do that. This objective was successfully accomplished on a daily basis by the teachers in all three years. In written reports, she documented:

The HP program supported the educational goals for Lincoln School. Previous to this program being implemented we utilized another program. It was an 18 lesson, curriculum based training presented in the classroom. As with HP it is focused upon training children to understand and practice concepts of character education teaching necessary skills in empathy, active listening and conflict management. However, the time constraints upon psychologists, counselors and teachers and the demand of time within the classroom for academic instruction eliminated the program. HP allowed us to teach the same concepts within the entire school with all employees utilizing recess, minimal classroom time and with a unified language that all employees were comfortable with, and it worked. Students that I have counseled with over continual disagreements, serious social issues and general bullying would request to see me but by the time we scheduled a meeting, they had already 'solved' their problems utilizing the principals of HP by themselves. Many times my groups would only need a trigger word or sentence and they would then ask each other 'are we having fun', 'who isn't', 'why', and they would come up with a solution. As a Solution Focused Counselor/Psychologist I really appreciate the idea that the children must control themselves and must learn appropriate ways to do so. The consequences we control, instead of adding to the anger and sense of failure, encourage them to 'get back into the game or class activity' by their choice of behaviors. This program, by teaching children to solve their own peer behaviors, gave me much more time to work with the more serious emotional and environmental issues that were preventing children from fully participating in academics.

In summary, the faculty at Lincoln School successfully achieved all of the objectives for implementation of the HP research for all three years of the project. The teaching staff received the desired level of training, completed the textbook review, and discussed HP issues throughout the school year. The principal, school psychologist, and the teachers co-mentored themselves in the ongoing use of HP stressing both positive achievements and problem-solving issues as they occurred. They also supported HP use with the staff that monitored the playground. From the very first morning meeting of each school year, students actively began their participation in the use of HP. All faculty members assisted student practice of the philosophy and two rules on a daily basis. The students utilized the HP philosophy on a daily basis and practiced caring, honesty, fairness, respect, compassion, and solving disagreements. They regularly observed their peers duplicating the same character values. The students regularly gave and received praise for playing and acting in a healthy manner.

The analysis of the methods and objectives clearly indicates that the HP program met all the criteria for its implementation by the Lincoln School faculty. More importantly, the students actively practiced the concepts during recess, PE, and before school. It is therefore essential to assess if these skills learned by the students had a positive impact on the hypothesized goal of reducing the student count, number of suspensions, and the number of days of suspension.

#### *Reduction of Suspensions*

For the purpose of this research, the baseline data for Lincoln Elementary was the foundation from which we assessed percent decreases in suspension problems. The overall goal of the three-year project was to achieve a 50% reduction in the three suspension categories at Lincoln School. The goal for the first year research study in 2002-2003 was a 20% reduction. The goal for the second year, 2003-2004, was an additional 20% reduction in suspensions. The

goal for the third year, 2004-2005, was an additional 10% reduction in suspensions from the original baseline.

Table 1: Lincoln Elementary Baseline Data

Academic Year	Enrolled Students	Students Suspended	Number of Suspensions	Days of Suspension
1999-2000	296	27	58	98
2000-2001	283	35	63	97
2001-2002	260	35	76	117

Table 2: Lincoln Elementary Baseline Data per Enrolled Student

Measure	Mean	SD
Students Suspended	.117	.023
Number of Suspensions	.237	.050
Days of Suspension	.375	.066

The hypothesis states that the Lincoln Elementary School would achieve a 50% decrease in the total number of students receiving school suspensions by the third year 2004-2005 of this study as a direct result of the Healthy Play curriculum. A 20% decrease from 1999-2002 baseline average of .117 student suspensions would be achieved in 2002-2003 to .094 student suspensions. An additional 20% decrease would be achieved in 2003-2004 to .070 student suspensions. An additional 10% decrease would be achieved in 2004-2005 to the final goal of .059 student suspensions.

The hypothesis also states that Lincoln Elementary School would achieve a 50% decrease in the total number of suspensions by the third year 2004-2005 of this study as a direct result of the use of the Healthy Play curriculum. A 20% decrease from the 1999-2002 baseline average of .236 suspensions would be achieved in 2002-2003 to .190 suspensions. An additional 20% decrease would be achieved in 2003-2004 to .142 suspensions. An additional 10% decrease would be achieved in 2004-2005 down to the final goal of .119 suspensions.

Finally, the hypothesis states that Lincoln Elementary School would achieve a 50% decrease in the total number of days of suspension by the third year 2004-2005 of this study as a direct result of the use of the Healthy Play curriculum. A 20% decrease from 1999-2002 baseline average of .375 days of suspensions would be achieved in 2002-2003 to .300 days of suspension. An additional 20% decrease would be achieved in 2003-2004 to .225 days of suspension. An additional 10% would be achieved in 2004-2005 to the final goal of .188 days of suspension.

Chart 1: Hypothesized Reductions in Suspension Categories

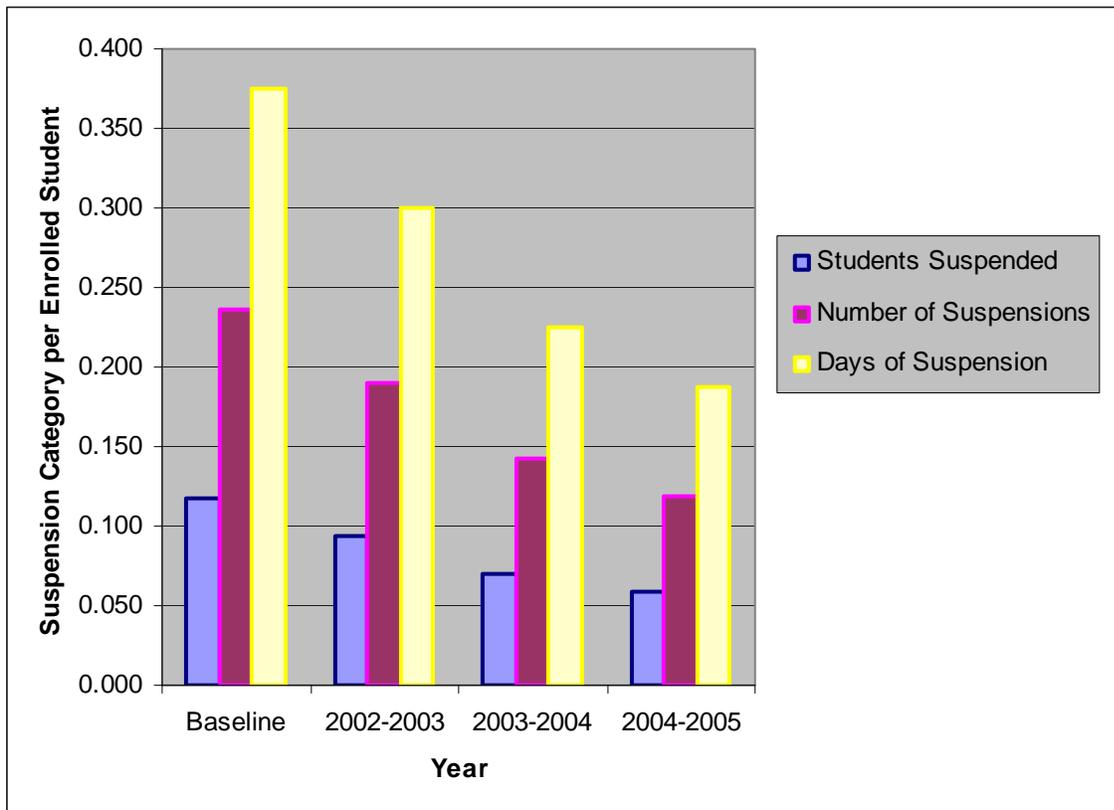


Table 3: Lincoln Elementary Test Period Data

Academic Year	Enrolled Students	Students Suspended	Number of Suspensions	Days of Suspension
2002-2003	228	10	16	24
2003-2004	254	12	21	26
2004-2005	225	10	25	47

Chart 2: Observed Reductions in Suspension Categories

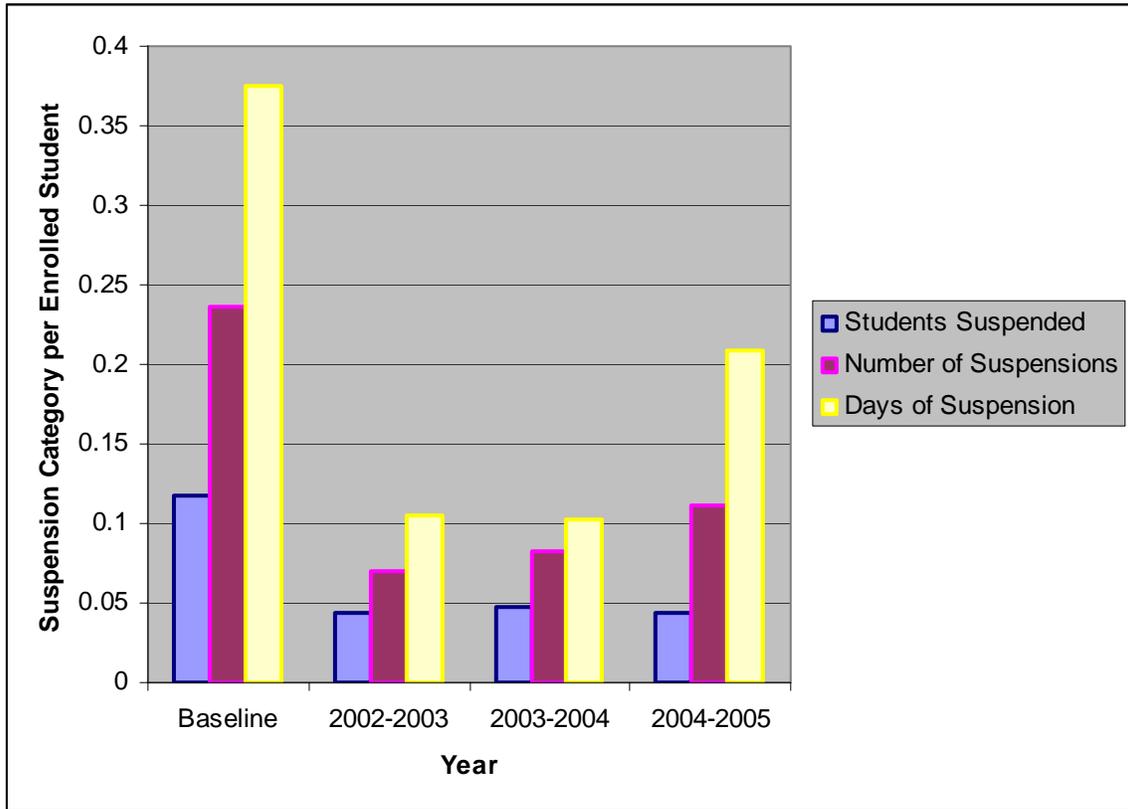


Table 4: Percent Reduction in Number of Students Suspended at Lincoln Elementary

Academic Year	Students Suspended	Hypothesis Goal	Percent Goal	Percentage Achieved
Baseline	.117			
2002-2003	.044	.094	20	62.4
2003-2004	.047	.070	40	62.4
2004-2005	.044	.059	50	62.4

Table 5: Percent Reduction in Number of Suspensions at Lincoln Elementary

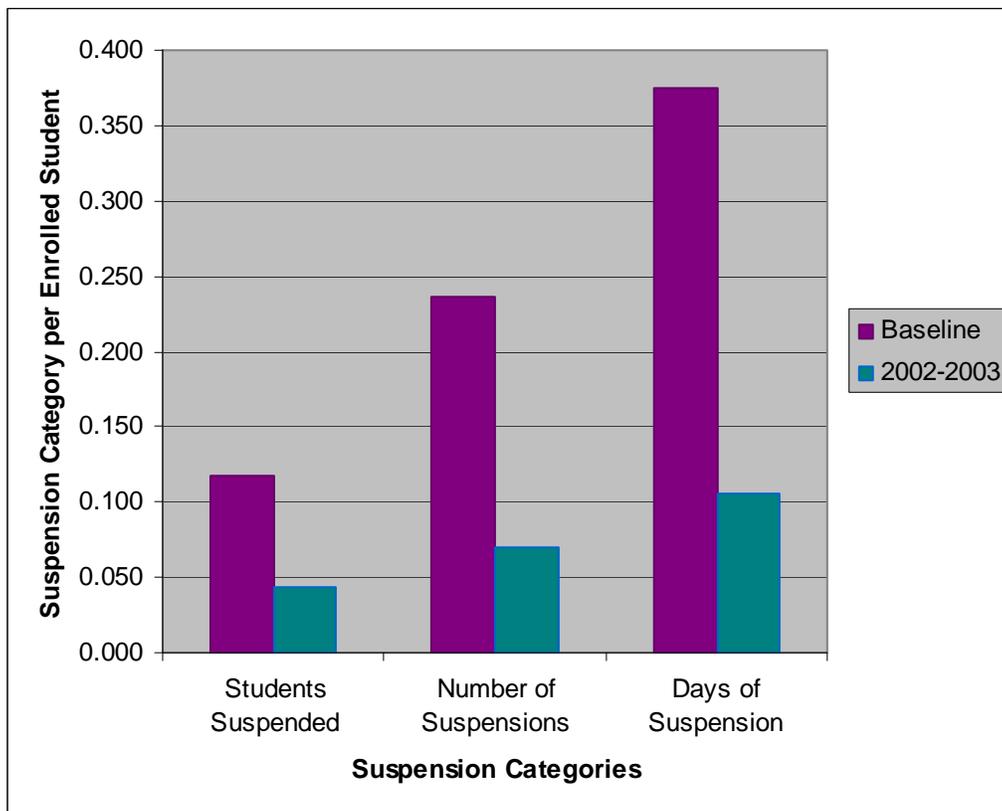
Academic Year	Students Suspended	Hypothesis Goal	Percent Goal	Percentage Achieved
Baseline	.236			
2002-2003	.070	.190	20	70.3
2003-2004	.083	.142	40	64.8
2004-2005	.111	.119	50	53.0

Table 6: Percent Reduction in Number of Days of Suspension at Lincoln Elementary

Academic Year	Students Suspended	Hypothesis Goal	Percent Goal	Percentage Achieved
Baseline	.375			
2002-2003	.105	.300	20	72.0
2003-2004	.102	.225	40	72.8
2004-2005	.209	.188	50	44.3

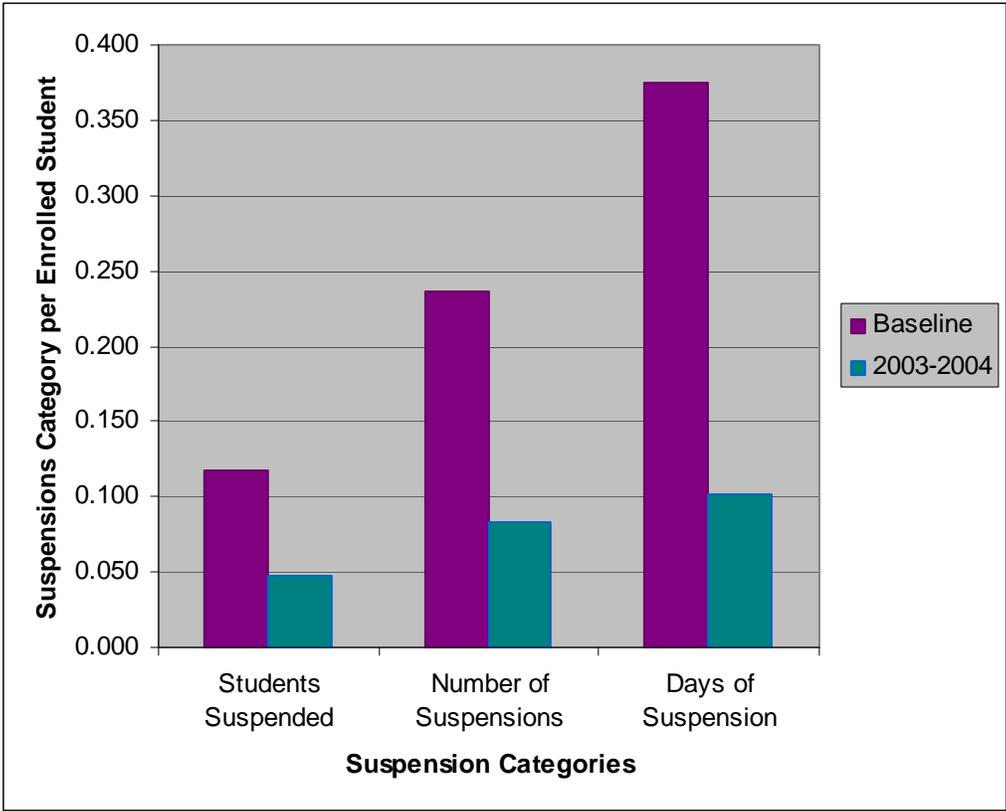
In 2002-2003 the Eureka School District Final Report showed that Lincoln School achieved a 62.4% reduction in the number of students suspended, a 70.3% reduction in the number of suspensions, and a 72.0% reduction in the number of days. The goals for 2002-2003 were all achieved. An important observation is that all three categories were impacted with almost equal significance thus indicating a systemic positive change at Lincoln School.

Chart 3: Reduction in Suspension Categories in 2002-2003



The goal for the second year was to reduce all suspension categories by 40% from the baseline average. In 2003-2004, the Eureka School District Final Report showed that Lincoln School maintained a 62.4% reduction in the number of students suspended, and achieved a 64.8% reduction in the number of suspensions, and a 72.8% reduction in the number of days. The goals for 2003-2004 were all achieved. Again one can see that a systemic response was achieved, although the percentage spread showed a greater variance than 2002-2003. The principal acknowledged that the addition of the “Special Day” students from the other schools had an impact most notably in the number of students suspended.

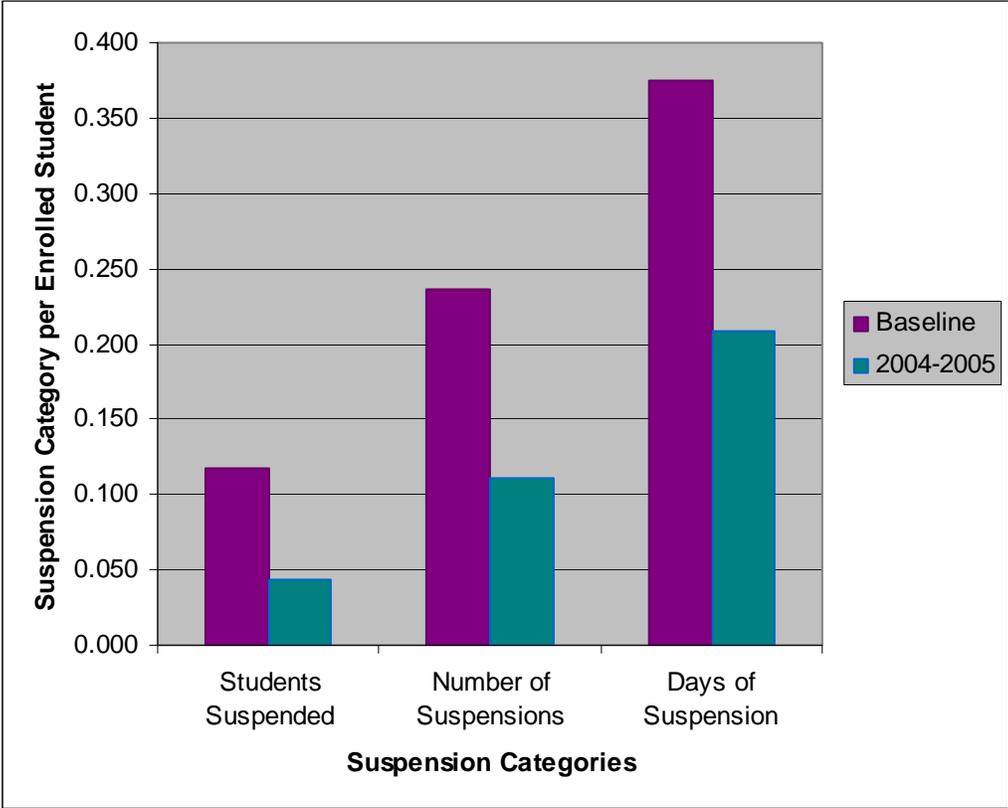
Chart 4: Reductions in Suspension Categories in 2003-2004



The goal for the third year was to reduce all suspension categories by 50% from the baseline average. In 2004-2005, the Eureka School District Final Report showed that Lincoln School maintained a 62.4% reduction in the number of students suspended, and achieved a

53.0% reduction in the number of suspensions, and a 44.3% reduction in the number of days. The goals for both the number of students suspended and the number of suspensions were achieved. The 44.3% improvement from the baseline average in the number of days of suspension did not achieve the desired 50% reduction. The most significant change in the suspension patterns for the 2004-2005 years was in the number of days of suspension. During 2002-2003 and 2003-2004, the rate was 72.0% reduction and 72.8% reduction, but the percent achieved was reduced in 2004-2005.

Chart 5: Reductions in Suspension Categories in 2004-2005



*Comparison with Control Schools*

Table 7: Baseline Enrollment Data

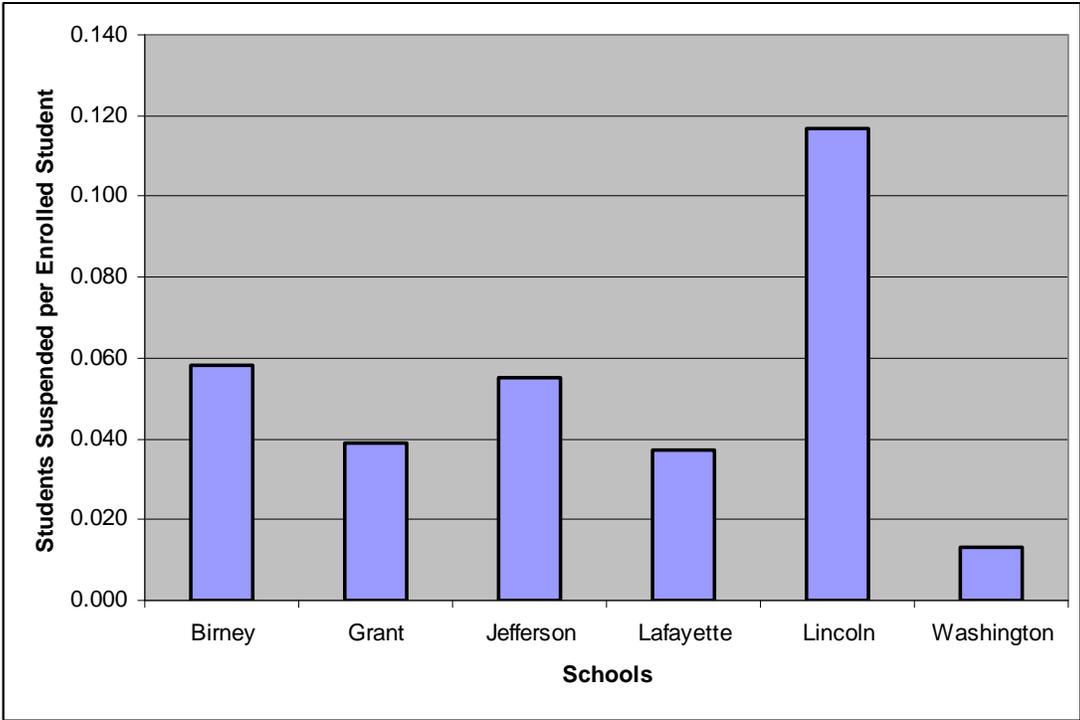
School	1990-2000	2000-2001	2001-2002
Birney	336	353	334
Grant	253	251	216

Jefferson	240	247	211
Lafayette	372	382	364
<b>Lincoln</b>	<b>296</b>	<b>283</b>	<b>260</b>
Washington	377	378	346

Table 8: Baseline Students Suspended per Enrolled Student Data

School	Raw Mean	Standard Score
Birney	.058	+0.14
Grant	.039	-0.40
Jefferson	.055	+0.05
Lafayette	.037	-0.46
<b>Lincoln</b>	<b>.117</b>	<b>+1.82</b>
Washington	.013	-1.14

Chart 6: Baseline Number of Students Suspended in District



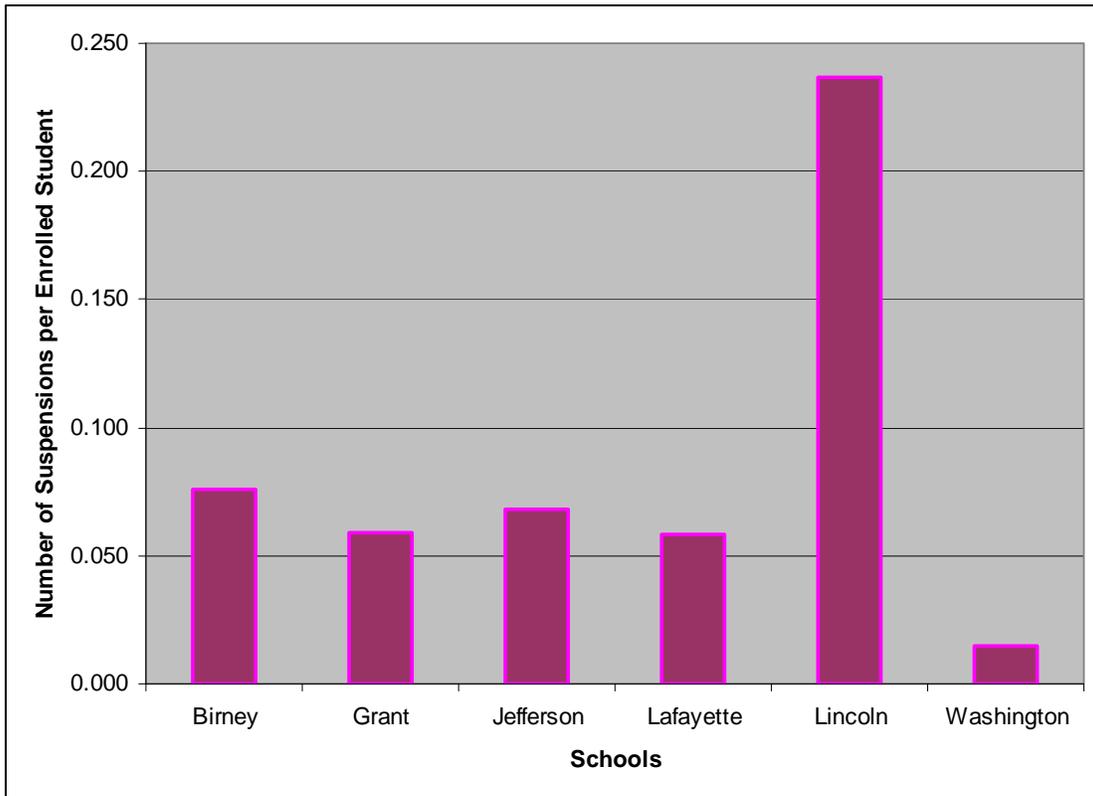
The district wide mean for number of students suspended per enrolled student during the baseline period was .053. A z-test confirms that the mean number of students suspended per enrolled student at Lincoln was significantly higher than the district mean ( $z = +3.04, p < .01$ ). In fact, the number of students suspended at Lincoln School was nearly two standard deviations

above the district mean. Relative to the other schools, Lincoln School demonstrated an unusually high rate of suspending students during the baseline. The only other school to exceed a distance of one standard deviation away from the mean was Washington, which demonstrated a number of students suspended per enrolled student well below the district average.

Table 9: Baseline Number of Suspensions per Enrolled Student Data

School	Mean	Standard Score
Birney	.076	-0.12
Grant	.059	-0.34
Jefferson	.068	-0.23
Lafayette	.058	-0.36
<b>Lincoln</b>	<b>.237</b>	<b>+1.96</b>
Washington	.015	-0.91

Chart 7: Baseline Number of Suspensions in District

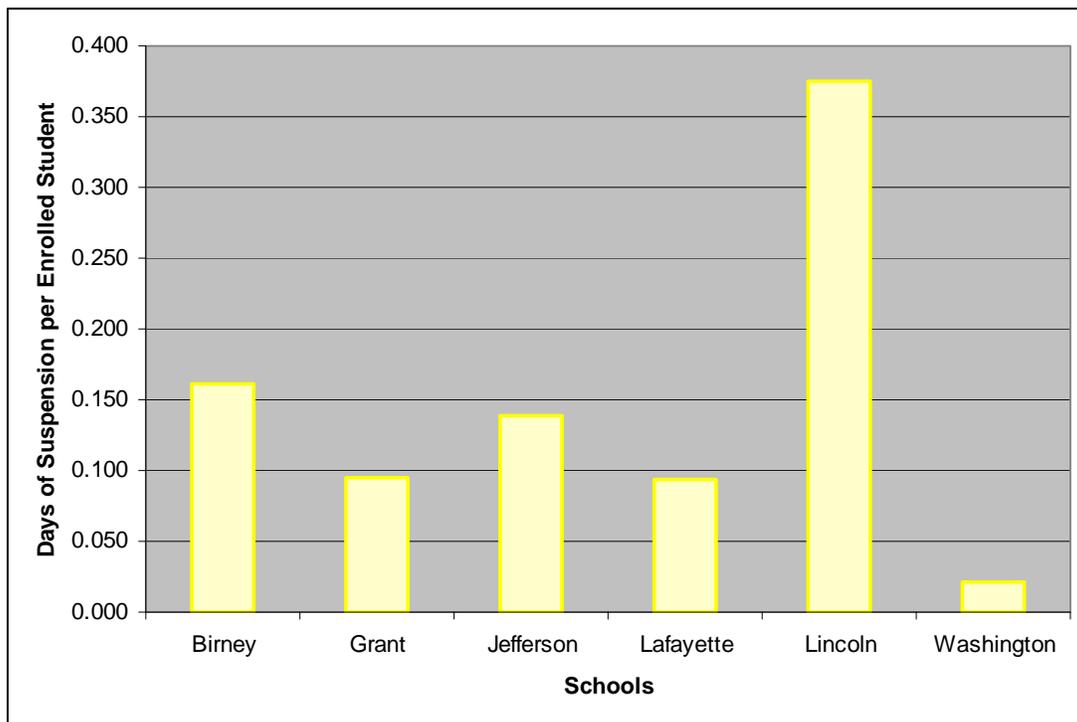


The district wide mean for number of suspensions per enrolled student during the baseline period was .086. In this category, the number of suspensions at Lincoln was again statistically different than the district mean ( $z = 3.43, p < .01$ ). Lincoln’s rate of suspensions fell nearly two standard deviations above the mean. Moreover, the other schools in the district all demonstrated suspension rates below the district mean. In fact, the inclusion of Lincoln raised the district mean by more than .03 suspensions per enrolled student.

Table 10: Baseline Number of Days of Suspension per Enrolled Student Data

School	Mean	Standard Score
Birney	.161	+0.11
Grant	.095	-0.43
Jefferson	.139	-0.07
Lafayette	.094	-0.44
<b>Lincoln</b>	<b>.375</b>	<b>+1.87</b>
Washington	.021	-1.04

Chart 8: Baseline Number of Days of Suspension in District



The district wide mean for number of days of suspension per enrolled student during the baseline period was .148. In this final category, the number of suspensions at Lincoln was again statistically higher than that of the district ( $z = 3.28, p < .01$ ). The number of days of missed school due to suspensions at Lincoln was nearly two standard deviations above the district mean. All other district schools fell within one standard deviation of the mean, except for Washington, which again demonstrated a baseline number of days of suspension approximately one standard deviation above the mean. From this it can be seen that Lincoln School demonstrated an unusually high rate of days of missed school due to suspension during the baseline.

Each of the five control group schools had established a specific pattern over the baseline years as represented by the suspension category per enrolled student. Although there were some year-to-year changes in different categories, when the averages were developed, a clear and consistent ranking could be seen. In every category Washington demonstrated the lowest rate, Lafayette was second, Grant was third, Jefferson was fourth, and Birney was fifth. When one looks at how Lincoln compared, it is consistently the highest in all three suspension categories. The baseline data also shows that the control schools have a range from .013 to .058 in the number of students suspended, from .015 to .076 in the number of suspensions, and from .021 to .161 in the number of days of suspensions. Lincoln exceeds the fifth rank school by more than double the number of incidents per enrolled student at .117 in number of students suspended, by more than triple the rate at .237 in number of suspensions, and again by more than double the rate at .375 in days.

Chart 19: Observed Suspension Categories in District 2002 -2003

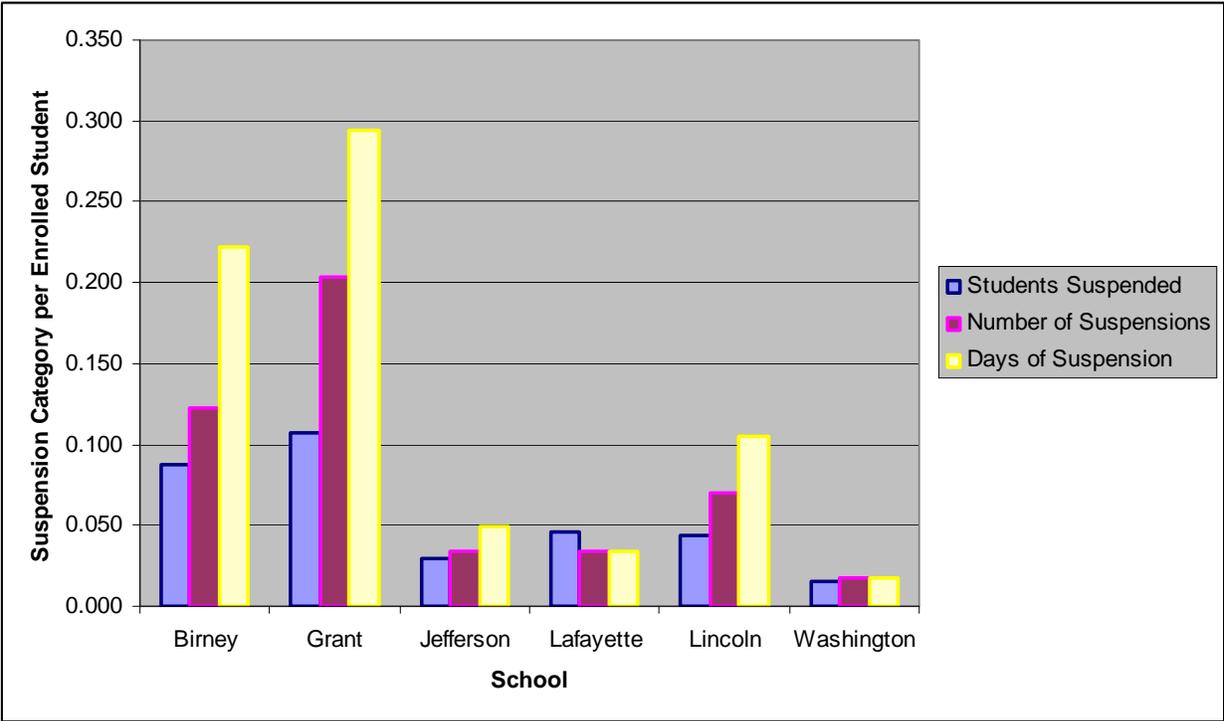


Table 11: Percent Change from Baseline in 2002-2003

School	Students Suspended	Number of Suspensions	Days of Suspensions
Birney	+50.0	+61.8	+37.9
Grant	+174.4	+244.1	+209.5
Jefferson	-47.3	-50.0	-64.7
Lafayette	+24.3	-41.4	-63.8
<b>Lincoln</b>	<b>-62.4</b>	<b>-70.5</b>	<b>-72.0</b>
Washington	+15.4	+13.3	-19.0

Two schools, Birney and Grant, demonstrated increases in all suspension categories in the first year of the HP project at Lincoln. Only Jefferson and Lincoln were able to reduce the incidence of all three suspension categories, and Lincoln outperformed Jefferson by an average of 14.3% improvement in the three categories.

Chart 10: Observed Suspension Categories in District 2003-2004

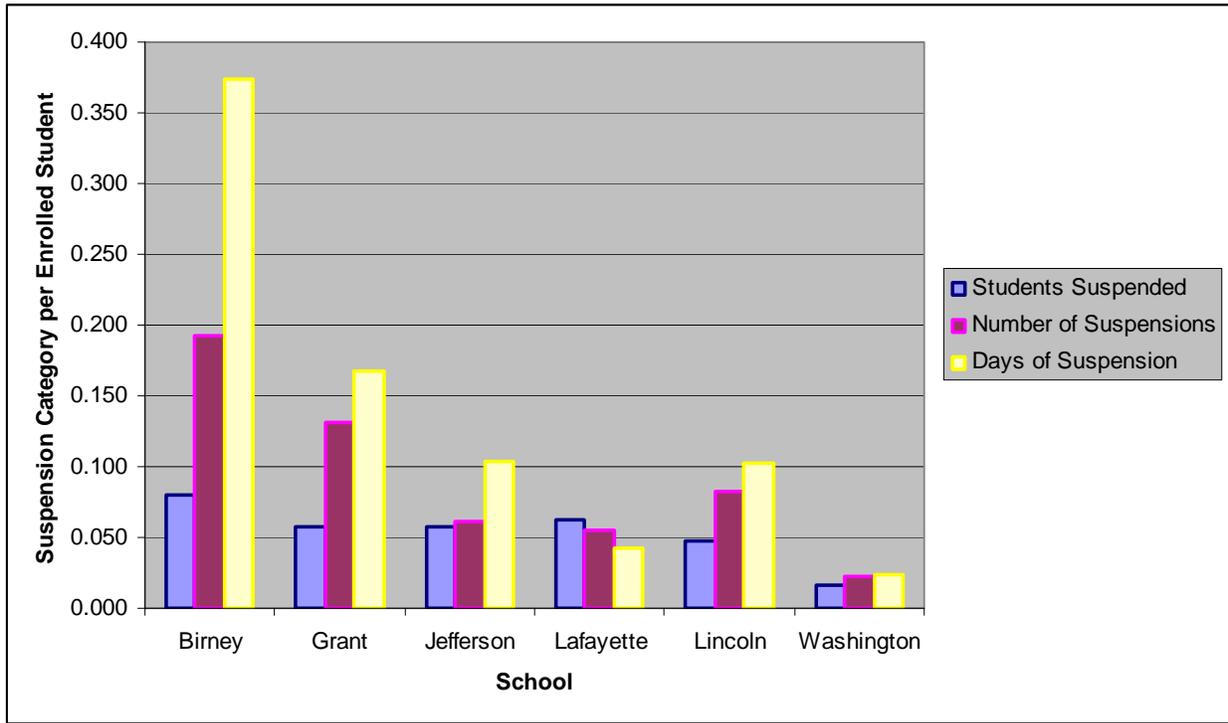


Table 12: Percent Change from Baseline in 2003-2004

School	Students Suspended	Number of Suspensions	Days of Suspensions
Birney	+37.9	+152.6	+132.2
Grant	+46.2	+122.0	+76.8
Jefferson	+3.6	-10.3	-25.2
Lafayette	+70.3	-5.2	-55.3
<b>Lincoln</b>	<b>-59.8</b>	<b>-65.0</b>	<b>-72.8</b>
Washington	+23.1	+206.7	+52.4

In the second year of the project, Lincoln was the only Eureka District school to demonstrate decreases in all three suspension categories. In fact, three of the five remaining schools showed increases from baseline in all three categories.

Chart 11: Number of Days of Suspension in District 2004-2005

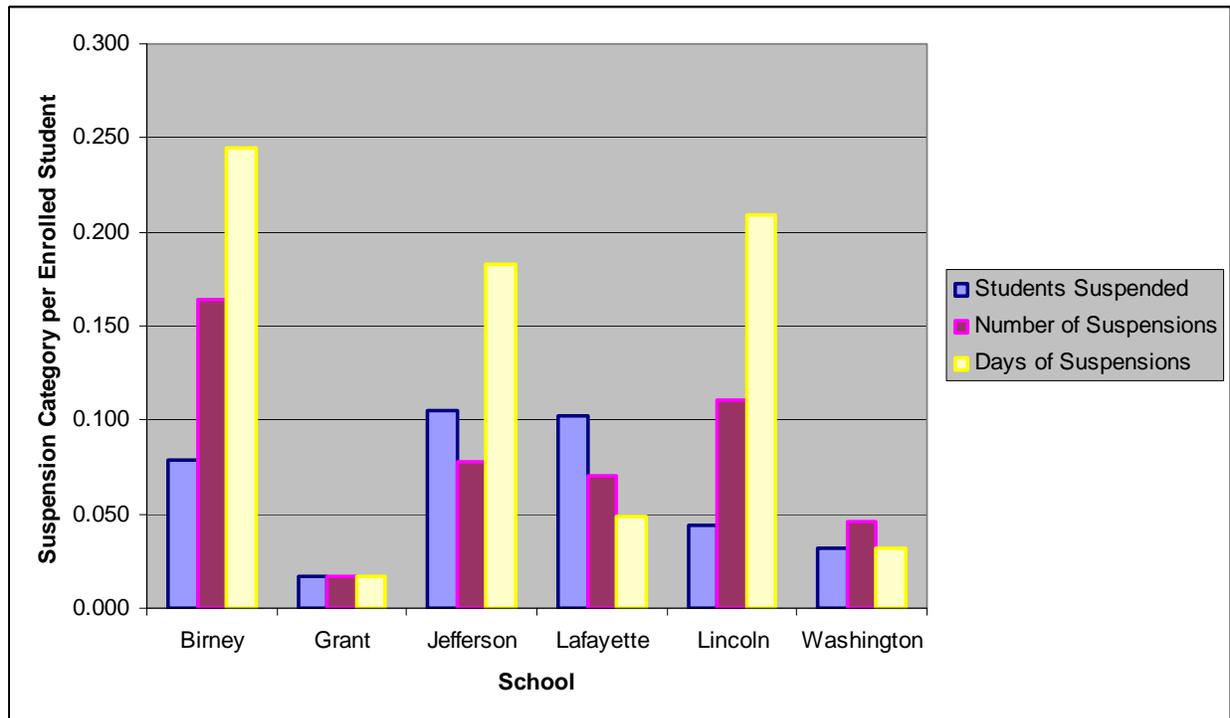


Table 13: Percent Changes from Baseline in 2004-2005

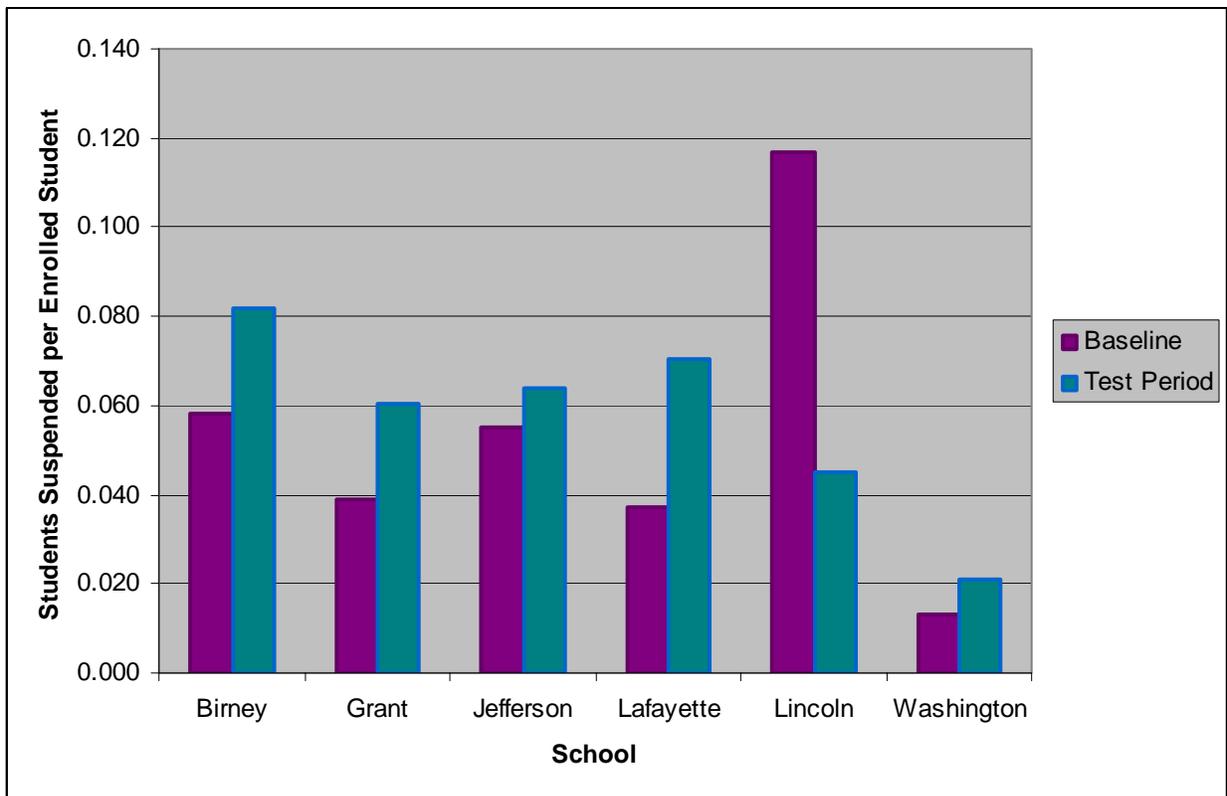
School	Students Suspended	Number of Suspensions	Days of Suspensions
Birney	+36.2	+115.8	+179.5
Grant	-56.4	-71.2	-82.1
Jefferson	+90.9	+14.7	+31.7
Lafayette	+175.7	+20.7	-47.9
<b>Lincoln</b>	<b>-62.4</b>	<b>-53.2</b>	<b>-44.3</b>
Washington	+146.2	+206.7	+52.4

In the final year of the project, Lincoln was again one of only two schools to reduce the incidence of suspensions in all three categories. While Grant appeared to outperform Lincoln in terms of percent suspension decrease in the third year, they were not able to demonstrate a similar pattern in the preceding two years. Moreover, Lincoln was the only school to show systematic positive changes during the test period.

Table 14: Mean Suspension Categories per Enrolled Student in Test Period

School	Students Suspended	Standard Score	Number of Suspensions	Standard Score	Days of Suspensions	Standard Score
Birney	.082	+1.17	.160	+1.57	.280	+1.66
Grant	.060	+0.14	.117	+0.68	.160	+0.37
Jefferson	.064	+0.33	.058	-0.54	.112	-0.15
Lafayette	.070	+0.61	.053	-0.64	.042	-0.91
<b>Lincoln</b>	<b>.045</b>	<b>-0.56</b>	<b>.088</b>	<b>+0.08</b>	<b>.139</b>	<b>+0.14</b>
Washington	.021	-1.68	.028	-1.16	.024	-1.11

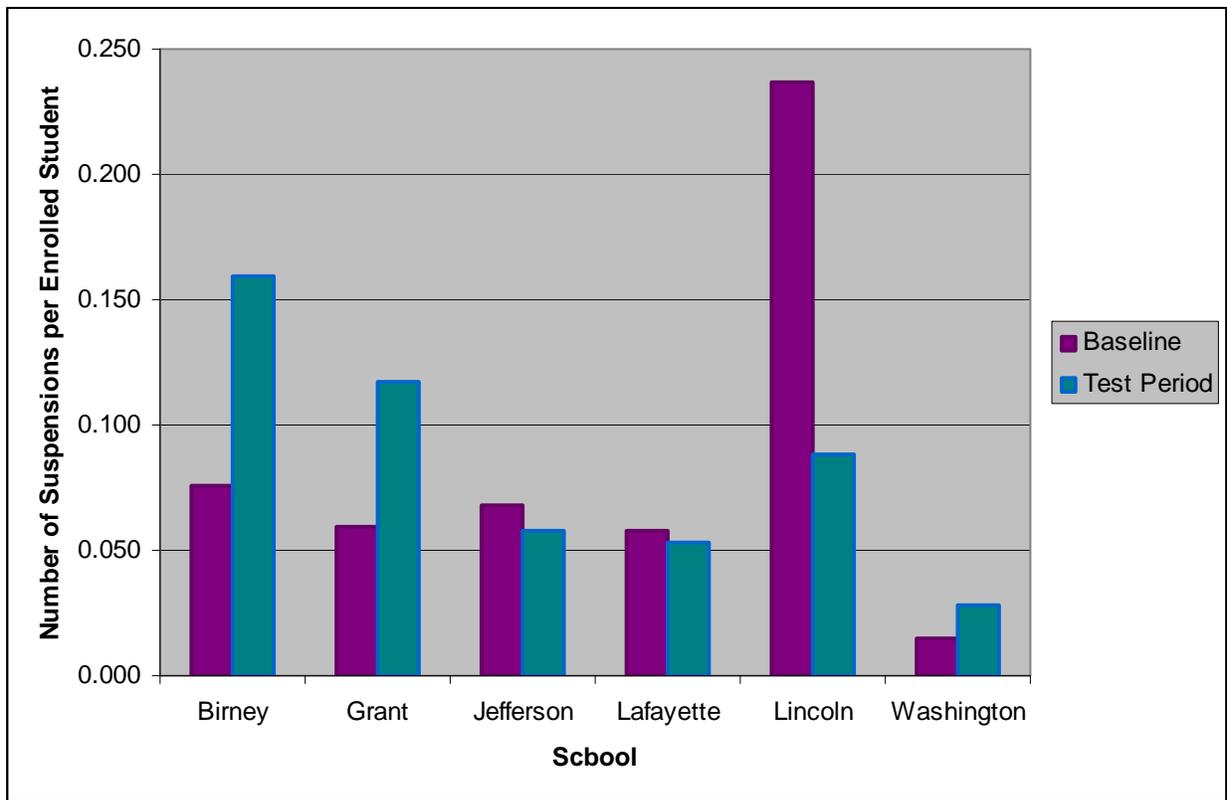
Chart 12: Comparison of Mean Number of Students Suspended in Baseline and Test Period



When the average of the baseline years is compared to the average of the test period years, the substantial reduction in number of students suspended per enrolled student at Lincoln becomes even more evident. The average number of students suspended per enrolled student in the district was .057 in the three year test period. During the baseline, the number of students suspended at Lincoln was nearly two standard deviations above the mean. Following the

intervention, the number of students suspended per enrolled student at Lincoln no longer significantly differed from the district average ( $z = -0.68, p < .01$ ). Hence, the Lincoln rate of suspension was in line with district norms during the years in which HP was practiced. In fact, during the test period, Lincoln was able to demonstrate a reduction to more than half a standard deviation below the mean. In fact, Lincoln and Washington were the only schools to perform below the mean on this measure.

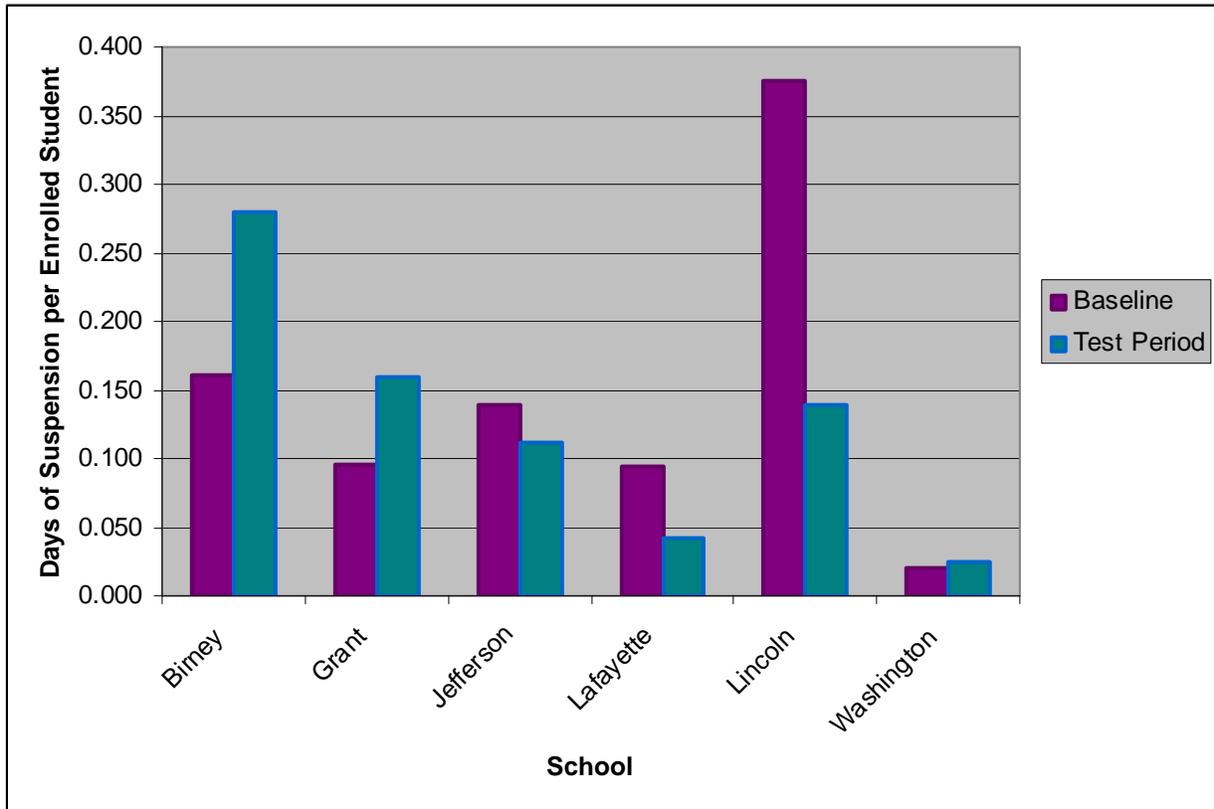
Chart 14: Comparison of Mean Number of Suspensions in Baseline and Test Period



Lincoln also demonstrated improvements in the mean number of suspensions per enrolled student given from the baseline to the test period. The district mean for this measure during the test period was .084. Again, the number of suspensions at Lincoln no longer statistically differed from the mean number of suspensions of the Eureka School District ( $z = +0.12, p < .01$ ). Rather

than maintaining position at nearly two standard deviations above the mean, the Lincoln suspension rate nearly matches that of the district mean (.084) during the test period.

Chart 15: Comparison of Mean Number of Suspensions in Baseline and Test Period



The district mean for the days of suspension measure during the test period was .126. On this measure, Lincoln dropped nearly 1 ¾ standard deviations from the baseline in comparison to the other schools. Again on this measure, Lincoln was able to demonstrate an average days of suspension that did not differ significantly from the district mean ( $z = +0.20, p < .01$ ) during the three-year test period.

Table 15: Percent Change in Suspension Categories per Enrolled Student Baseline to Test Period

School	Students Suspended	Number of Suspensions	Days of Suspensions
Birney	+41.4	+110.1	+74.1
Grant	+54.7	+98.3	+68.1

Jefferson	+15.8	-14.7	-19.4
Lafayette	+90.1	-15.2	-55.7
<b>Lincoln</b>	<b>-61.5</b>	<b>-62.9</b>	<b>-63.0</b>
Washington	+61.5	+88.9	+15.9

Over the test period, three of the five control group schools (Birney, Grant, and Washington) had increases in all three suspension categories. No control group schools showed improvement in all three categories. The only control group schools to show improvement in two suspension categories were Jefferson and Lafayette. However, neither of these schools showed the dramatic improvements that Lincoln School was able to demonstrate in all three suspension categories. The control schools were subject to the same variables that the test subject school experienced. Each received relocated students, each had changes in faculty, and several (Birney, Grant, and Lafayette) had principal changes either during the baseline period or the test period. No unique variables except for participation in the Healthy Play program are known to have affected individual schools. Thus, it is likely that such variables did not positively or negatively affect the overall outcomes as can be seen from the baseline period to the completion of the three year test period.

### Discussion

In this research study we have postulated that the implementation of the HP character education and violence prevention program would reduce suspension rates in all three categories by 20% in 2002-2003, by an addition 20% in 2003-2004 and by a final 10% in 2004-2005 at Lincoln School. HP was the only new prevention curriculum variable introduced at Lincoln School during this time period. All of the methods for implementing HP at Lincoln School were successfully accomplished by the principal, psychologist, teaching faculty, and playground monitors. Through play, the students were given daily hands-on experiences to practice utilizing the philosophy and two rules of this curriculum. It is believed that this daily hands-on

application of the HP curriculum provided sufficient opportunity for the students to internalize the methods being taught. The positive reflection of the mastery of these character education and violence prevention skills was seen in the reduction the student count, number of suspensions, and the number of days of suspension at Lincoln School.

The test year data clearly indicates that Lincoln exceeded the anticipated 20% suspension reduction in all three categories in 2002-2003. The school again exceeded the 40% accumulated suspension reduction in all three categories in 2003-2004. Lincoln also exceeded the 50% reduction in both the number of students and the number of suspensions in 2004-2005 and demonstrated a 44% reduction in the number of days of school missed due to suspensions from the baseline period.

Lincoln achieved a three year average decrease of approximately two standard deviations in all categories when compared to other schools in the district. These findings place Lincoln in line or above expectations for the district's suspension rate. Moreover, z-tests show that while Lincoln's suspension rates in all three categories were significantly higher than those of the district before intervention, they did not differ significantly from district norms while HP was being practiced. In addition, Lincoln was the only school to demonstrate an average improvement in suspension rates of more than 60%. It is therefore concluded that the daily use of the HP curriculum by the students and faculty is the factor responsible for making the successful positive changes at Lincoln School.

A possible confounding variable in this research was the abrupt need for the principal, Larry Nicoll, to take an emergency leave of absence from November 2004 through June of 2005. The change in principals did not reach the Creative Spirit staff until April 2005 and no attempts were made to enlist the interim principal in the guidelines of the research project. It was

postulated to the principal that it was “His presence and skills that really made the difference at Lincoln. It was his consistency and determination which made the difference.” Mr. Nicoll responded “I’m the same person that was here before we started the project. Healthy Play was the tool I needed to make these changes happen with the students.”

The impact of the first-time interim principal on the implementation of the suspension criteria is unknown. It is speculated that the trust and bonding relationships between the original principal and the students were different from the interim principal. This factor could have affected the frequency of suspensions reported in the third year of the research. Most notably, one can see that the number of suspensions did not change much (10, 12, 10), yet the number of days of suspension (24, 26, 47) was almost double from the previous years. However, the researchers believe that the faculty’s and the students’ two previous years of experience with the program were able to somewhat compensate for the fact that the original principal was not at the school from November 2004 through June 2005.

Schools are constantly looking for curriculum which will improve academic results on their states standardized tests. That was not an expectation we were looking for as an objective of this research project. However, it should be noted what occurred at Lincoln School during the time that this curriculum was being used. California uses an Academic Performance Index (API) as the primary school accountability measure (California Department of Education, 2006). In 2001-2002, the last year of the baseline period, Lincoln had achieved a score of 641 on the California Academic Performance Index. At the conclusion of this research project Lincoln reported in 2004-2005 that it had now achieved an API total of 761, a score that approaches the statewide goal of 800. The three year gain of 120 points on the California API is very substantial. Although the research design does not allow for speculations of any specific

academic gains by using Healthy Play, we can conversely state that the daily curriculum time that it took to implement this program did not have a negative effect on student achievement.

We can only speculate that the increase in school safety, daily physical activity, improved social skills, and time saved by students and faculty in not having to deal with problematic situations contributed to a healthier learning environment.

## References

- Acton, H. M. & Zarbatany, L. (1988). Interaction and performance within cooperative groups: Effects on nonhandicapped students' attitudes toward their mildly mentally retarded peers. *American Journal on Mental Retardation*, 93, 16-23.
- California Department of Education. (2006). Academic Performance Index (API). Retrieved June 26, 2006 from <http://www.cde.ca.gov/ta/ac/ap/>
- California Codes. (2006). Education Code, Section 48900-48927. (2006). Retrieved July 14, 2006 from <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=48001-49000&file=48900-48927>
- Gardner, H. (1983). *Frames of mind: the theory of multiple intelligences*. New York: Basic Books.
- Howard, P. J. (2006). *The owner's manual for the brain: Everyday applications of mind-brain research*. Austin, TX: Bard Press.
- Klugman, E. (1990). *Children's play and learning*. New York: Teachers College Press.
- Lincoln Elementary. (2003-2004). *School Accountability Report Card*. Retrieved July 14, 2006 from <http://www.cnusd.k12.ca.us/lincoln-es/reportcard.html>
- McPhail, J. D. (2006). The therapeutic benefits of physical activity. *American Medical Athletic Association Journal*, 19(1), 9-10.
- Pellegrini, A. D. (1988). Elementary-school children's rough-and-tumble play and social competence. *Developmental Psychology*, 24, 802-806.

- Pellegrini, A.; Kato, K.; Blatchford, P.; & Baines, E. (2002). A short-term longitudinal study of children's playground games across the first year of school: Implications for social competence and adjustment to school. *American Educational Research Journal* 39(4), 991-1015.
- Pica, R. (1997). Beyond physical development: Why young children need to move. *Young Children*, 52(6), 4-11.
- Rogers, M. (1981). Cooperative games as an intervention to promote cross-racial acceptance. *American Educational Research Journal*, 18, 513-516.
- Schaefer, C. E. & O'Connor, K. J. (Eds.). (1983). *Handbook of play therapy*. New York: John Wiley and Sons.
- Sponseller, D. (1974). *Play as a learning medium*. Washington, D.C.: National Association of the Education of Young Children.
- Sprenger, M. (2005). Inside Amy's brain. *Educational Leadership*, 62(7), 28-32.
- Steffens, C. & Gorin, S. (1997). Learning to play, playing to learn: Games and activities to teach sharing, caring, and compromise. Lowell House: McGraw Hill.
- Steffens, C. & Gorin, S. (1999). Creative Spirit's Healthy Play is a Solution: Goals 2000 evaluation research study for Tucson Unified School District. Available from TUSD district offices.
- Walker, H. M.; Colvin, G.; & Ramsey, E. (1995). *Anti-social behavior in schools: Strategies and best practices*. Pacific Grove, CA: Brooks/Cole.
- White, A. G. & Bailey, J. S. (1990). Reducing disruptive behaviors of elementary special education students with sit and watch. *Journal of Applied Behavior Analysis*, 23, 353-360.