

***SECOND STEP* AND SOCIAL/EMOTIONAL  
LEARNING AMONG AFRICAN AMERICAN AND  
LATINO CHILDREN**

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**Dale T. Richardson**

Elementary Education  
San Francisco State University

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## ABSTRACT

### ***SECOND STEP* AND SOCIAL/EMOTIONAL LEARNING AMONG AFRICAN AMERICAN AND LATINO CHILDREN**

Dale T. Richardson  
San Francisco State University  
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An urban elementary school has recently adopted the *Second Step* curriculum in order to promote the development of social knowledge and to reduce the development of social, emotional, and behavioral problems. The curriculum included three units: Empathy, Impulse Control and Anger Management. This study hypothesized that participation in *Second Step* would increase students' social/emotional competency (knowledge and behavior).

African American and Latino students make up 84% of the adjusted population. A stratified random sample was created to match the adjusted population in terms of ethnicity, gender, and grade level (n=27). A nonequivalent control group was taken from a matched elementary school. Teachers in the treatment school were divided into two groups. High Implementation Classrooms had finished all lessons in the Empathy unit and some of the Impulse Control lessons.

*Social skills knowledge:* Ability tests were administered to the sample before the curriculum was presented (pretest) and after the lessons were presented (posttest). Ability tests assessed identification of feelings, cues associated with different feelings, steps for solving problems, and techniques to control anger. Test results were compared to determine whether social skills knowledge increased, as measured in changes in means raw scores. Overall gains in social skill knowledge were very large as measured by effect size and consistent with results from formative studies. In particular, gains were noted in empathy due largely to increases in skills of interpreting emotion cues. These gains resulted across subgroups of age, gender, and race. Low Implementation Classrooms showed changes that were either comparable to or less than the control group. T-tests generally showed that results were not due to sampling error.

*Social skills behavior:* Report card ratings and comments were collected for the baseline year preceding implementation and for the intervention year. Low Implementation Teachers rated their children's behavior higher than the prior teacher. High Implementation teachers rated children about the same as the prior teacher. Written comments were analyzed using discourse analysis. Children in High Implementation Classrooms received improved comments in the treatment year compared with their prior year. Children in Low Implementation Classrooms received comments that were similar to those from their prior year.

General support was indicated for both a developmental model and an information processing model of social/emotional learning. Children from a community having high rates of poverty, crime, drug abuse, teen pregnancy, and high dropout rates, can benefit from *Second Step*. This study specifically showed that English Language Learners benefit from the curriculum, in both English and Spanish instructional classrooms, although Spanish instruction classrooms appeared to show a greater learning effect.

## **ACKNOWLEDGEMENTS**

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## ***Introduction***

Children are showing increasing social problems (compared to the 1970s) such as withdrawal, depression, anxiousness, attention and thinking problems, and delinquency and aggression (Goleman, 1995). Aggressive boys develop bullying problems and are rejected by peers and teachers; aggressive girls have increased rates of teen pregnancies (girls). Children who are extremely aggressive in early years (preschool - 9 years) are much more likely to develop delinquency problems, and about half of these aggressive children develop chronic violent offending have a history of early aggression (Dahlberg, 1998). Homicide is a leading cause of death for American youth, who are most often victimized by one of their peers (Kellermann, Fuqua-Whitley, Rivara, and Mercy, 1998).

The *Second Step* curriculum has a primary agenda of preventing violence by reducing development of social, emotional, and behavioral problems, and promoting the development of core competencies (Frey, Hirschstein, & Guzzo, 2000). In elementary classrooms, lessons are taught once or twice a week. The lesson sequence was designed to first build emotional skills (empathy) before using these core skills as applied to interpersonal problems (social problem-solving) and intrapersonal problems (anger management). The social skills presented in *Second Step* are fundamental learning and teaching tools that are useful across academic domains, learning situations, and social contexts (Piaget, 1932/1965; Erikson, 1963; Kohn, 1990; Salovey & Sluyter, 1997).

Can a program like *Second Step* teach urban elementary children the knowledge structures and skills to cope with the many obstacles facing them in their lives?

“Whitman” Elementary School (a pseudonym), where I teach, adopted *Second Step*

school-wide. The grant that provided partial funding called for program evaluation. The midyear results of this evaluation are the subject of this paper.

## ***Literature Review***

*Second Step* was evaluated in Seattle through formative studies and a program outcomes study. The formative studies showed that children who received *Second Step* achieved significant gains in social skills knowledge (Beland, 1988a; Beland 1988b; Beland, 1989; Moore & Beland, 1992). The program outcomes study was a large, randomized controlled study undertaken by the U.S. Centers for Disease Control (Grossman, Neckerman, Koepsell, Lui, Asher, Beland, Frey, & Rivara, 1997). The CDC study found that social skill knowledge gains translated into behavior changes. In relatively unsupervised situations, such as the cafeteria or playground, substantial decreases in verbal hostility and physical aggression, were observed, as well as modest behavior improvements even in more structured classroom settings.

Many emotional development milestones hinge upon the child's understanding of empathy (Saarni, 1999; Feshbach, 1982). Empathy has been defined as the affective response that stems from the apprehension or comprehension of another's emotional state or condition and is similar to what the other person is feeling or would be expected to feel (Eisenberg, 2000). One such response is sympathy (feelings of sorrow for another's emotional state or condition). Another response is personal distress (discomfort or anxiety experienced when exposed to another's emotional state or condition). Sympathetic individuals are well regulated, and help others in trouble, whereas people prone to personal distress are not so inclined (Eisenberg, Fabes & Lasoya, 1997). In the *Second Step* unit relating to *empathy*, students learn to identify their own and others'

feelings from how people look (face and body) and drawing on contextual clues.

Students learn to distinguish between intentional and unintentional acts, and learn how to take others' perspectives.

Research into the reading of social cues from facial expression is perhaps a most striking example of how emotional skills can help children to respond empathetically. Ekman and Friesen (1975) developed a body of research that described how facial expressions relate to core emotions. For example, a "sad" face displays the corners of the mouth going down in a frown, the inner corners of the eyebrows may go up, and the eyes may look down and/or tear (Ekman, Friesen, & Ellsworth, 1972). Cross-cultural studies generally support the hypothesis that equivalent emotions in different cultures are characterized by similar appraisal patterns (Mesquita & Ellsworth, 2001).

The information-processing model of social competency proposed by Crick and Dodge (1994) indicated that when children experience an emotional event in their social world, they (1) encode cues that are both internal (feelings) and external (observed actions and expressions of others), (2) interpret these cues (causal and intent inferences), (3) clarify goals, (4) decide on a response, and (5) enact the behavior. Evidence supporting Dodge's model has been abundant, especially for the link between social information processing and behavior (Dodge, 1993, citing 26 studies). The first two steps in this model are integrated within the *Second Step* unit on empathy. The Impulse Control unit focuses on steps 3-5, which draw heavily on moral reasoning.

Kohlberg (1969) and Gilligan (1988) demonstrated how children's moral thinking develops along the value structures of justice and caring. According to Rogoff (1994), models that assume the existence or rightness of one value structure over another are

naively flawed, because development always occurs within and because of the cultural context. Cross-cultural studies illuminate variations of value structures and have begun extending the mainstream moral development map (Greenfield & Cocking, 1994). For example, although Kohlberg's stage 6 fits well with the Western value of individualism, in a culture such as Japan, the highest value is placed on maintaining harmonious relationships, which constitutes stage 4 thinking (Lebra, 1994; Burman, 1994).

Within the U.S., one important value structure has been referred to as an "oppositional frame of reference" (Ogbu, 1994, p. 377). This frame of reference is adopted by involuntary racial minorities who, according to Ogbu's theory, value *not being members* of the dominant culture. Ogbu includes African American and Latino children in this category. Do the information-processing and empathy models withstand cross-cultural analysis when analyzing the effect of social skills instruction with African-American and Latino children?

In an evaluation of the Resolving Conflict Creatively Program (RCCP), which is similar to *Second Step*, two main types of measurements were used to show program effects on African American and Latino children (Samples, 1997). Children were given hypotheticals and their answers were coded; and children were self-rated for conduct problems. Results implied two different developmental pathways that lead to aggression behavior for Latinos and African Americans.

Latino children are nearly as likely as African American children to have aggressive fantasies, and are more likely to think about using aggressive strategies (Samples, 1997). However, Latino normative beliefs are that violence is not actually acceptable and thus report fewer conduct problems as they get older. Meanwhile, their

hostile attribution biases are actually increasing during this period; this could explain why their overall anxiety level rises as they age. Thus they believe that violence is effective but they shouldn't use violence and thus are fearful in the face of conflict.

The mechanism preventing Latino children's use of violence wasn't described. Perhaps because they are not generating many nonviolent alternatives, they don't have experience in actually resolving the conflicts they face. As a result, hostile attribution bias continues to grow even faster for Latino youth than for African American youth. Incomplete knowledge structures among Latino children and youth may be particularly dangerous because an inflated sense of danger and a belief that there are few effective alternatives to violence, coupled with little actual experience using aggression, may create a potential for extreme and disproportionate violence.

African American children were shown to have more aggressive fantasies as they get older, very similarly to the Latino children (Samples, 1997). However, as they get older, African American children do not develop the sense that violence is not an acceptable way to solve problems. As a result they use more violence and report more conduct problems. When they are younger, African Americans are more likely to think of aggressive ways to solve problems, but as they get older, they generate fewer aggressive strategies. It almost seems that they have tried aggressive ways to solve problems and have come to realize that they don't work very well sometimes. Thus they try to generate additional ways to solve problems. This doesn't mean that they stop using aggressive solutions, and they continue to report more conduct problems than their Latino peers. Perhaps as a result of having another "effective" tool at their disposal, African American children are less anxious. Also perhaps because they have actually engaged in

more conflict resolution (albeit aggressively) than their Latino peers, African American children feel less anxious.

The present study attempts to also apply the information processing model to African American and Latino students. Evaluating the effect of the *Second Step* empathy unit will replicate the formative studies within a school having African American and Latino students. In the next section, population, data collection and study design are described.

## **Methods**

The present study used a nonequivalent control school design. The most important factor in selecting a control school was geographic proximity to Whitman, to equalize community risk factors. Children living in the Whitman community face many of the same substantial risks common to inner city communities, including drug and alcohol exposure, gang activity, criminal activity, teen pregnancy and poverty. These factors interfere with school performance which contributes to high rates of dropping out of school.

The second factor in selecting a control school was general school climate, as reflected in the school size, general academic level, school suspension rates, and percent of children who receive free lunches. The third factor was a similarity in terms of ethnic makeup and numbers of English Language Learners. Based on these factors, Hightower Elementary was selected as the control school. The match was excellent in all factors. It should be noted that the adjusted population of Whitman is about 25% smaller than the adjusted population of Hightower.

Whitman's population percentages were used to create stratification targets by grade level, gender, and ethnicity. Each classroom was initially represented with a randomly selected student, although rounding required the addition of two students to the original sample (n=36). Attrition included 9 students, most of whom moved away. Characteristics of Whitman's population and sample are described in Table 1. In Hightower (the control school), 14 of 38 teachers were selected randomly. Students were selected by teacher nomination and stratification target to create a sample with demographics similar to Hightower. A table showing the demographics by age, gender, and ethnicity, in the population and in the sample is included in Table 1.

In order to ascertain whether different levels of instruction (treatment) had any effect, Whitman classrooms were divided into two groups at the time of the posttest: High Implementation and Low Implementation. Characteristics of these two groups were similar to the main Resolving Conflict Creatively Program (RCCP) evaluation (Aber, Jones, Brown, Chaudry, & Samples, 1998), which found different effects based on the level of implementation. In the present study, High Implementation Classroom teachers had completed all lessons in the Empathy Unit by the time of the posttest (end of February). The Empathy Unit contained 7-14 lessons, depending upon the grade level. Most of the High Implementation Classrooms had already begun some of the lessons in the Impulse Control unit. Low Implementation Classrooms had all completed at least one lesson, but had not completed the Empathy Unit. Some Low Implementation Classrooms had completed over half the Empathy Unit lessons.

**Table 1. Comparison of intervention school and control school, populations and samples.**

	Total	Age (Grade)		Gender		Race		Implementation Level	
		K-2	3-5	Female	Male	African-American	Mexican	High	Low
Whitman (Intervention)	549	52%	48%	47%	53%	30%	70%	63%	37%
Whitman Sample	27	59%	41%	55%	44%	33%	66%	60%	40%
Hightower (Control)	780	50%	50%	49%	51%	41%	59%		
Hightower Sample	15	53%	47%	60%	40%	40%	60%		

Two main sources of data were collected for this study. Ability tests were taken to show how well students are learning the material presented in the curriculum. Report card data was collected to provide information about changes in global behavior reports.

Children in grades K-2 were given questions read by an interviewer in an instrument named the *Second Step Evaluation Interview*. The interview is accompanied by five photos. Questions assess students' abilities to identify feelings, the cues associated with different feelings, steps for solving interpersonal problems, and techniques to control anger. The *Student Social Skill and Knowledge Test* is a 12-item written instrument designed to assess students' skills in identifying feelings, feeling cues, and social skills related to problem solving and anger management.

Both tests were written by the curriculum authors and constitute theory-based evaluation (Valente & Dodge, 1997). Though not published, these tests are readily available from the Committee for Children. The instruments were translated into Spanish and administered in Spanish to children whose primary language was Spanish. The results of each K-2 interview was scored according to the instructions for scoring the evaluation interview, which indicates the points to be awarded for each type of response.

The interview and test relied on the use of hypothetical vignettes about which children were then questioned. Hypotheticals present children with stories or dilemmas and ask them to interpret intentions or generate evaluative solutions. This method was used extensively by Kohlberg (1969) and Gilligan (1982; 1988) in their studies of moral development. More recently, the information-processing model (Crick & Dodge, 1994) also used this method, as did Eisenberg (2000) and colleagues in their studies of prosocial behavior development. Another part of the interview/test showed pictures of children's faces with various emotional expressions. Children were asked to describe the emotion they saw, similar to research used in emotion appraisal (Ekman, Friesen, & Ellsworth, 1975).

Report card data was collected to show what teachers are telling parents about student social skills. The district report card included three items of relevance: "Self Control," "Interactions with Others," and "Conflict Resolution." Administrative delay precluded the use of control school report cards, so comparison was limited to High Implementation vs. Low Implementation Classrooms.

Ability tests and interviews yielded raw test scores. Pretest mean scores were compared with posttest scores, with sampling error determined using a paired t-test. This analysis was conducted for the impact on specific groups (ethnic, gender, age). Intervention school scores were compared with control school scores with sampling error determined using t-tests assuming unequal variance.

The report cards' behavior ratings yielded raw scores. This data was analyzed in a similar manner as the ability test data, although report card data for the control school was not available. Written comments from report cards provided a range of statements

from teachers as to how well children were functioning. These comments were grouped into conceptual categories and analyzed for patterns of discourse.

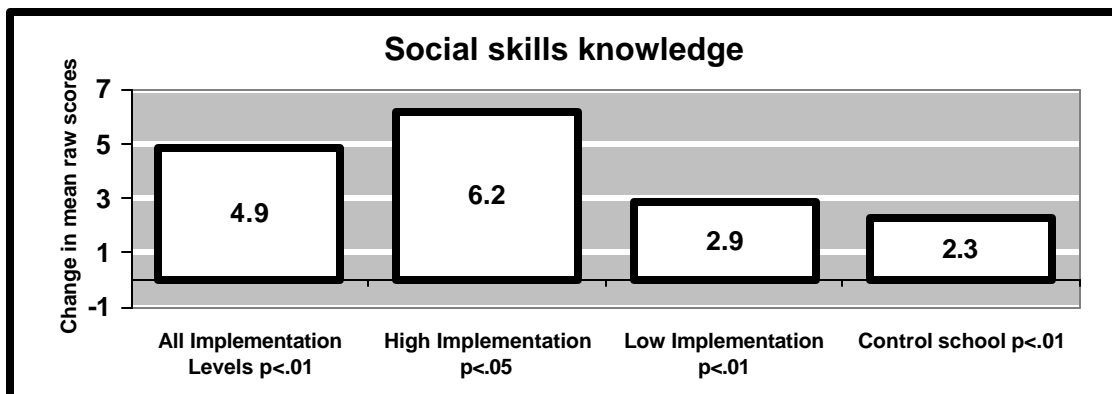
## **Results**

### **Changes in social skills knowledge**

The most basic question of this study was what changes in social knowledge and behavior occurred at the school participating in the curriculum and do they differ from the control school.

#### *Comparison of treatment, control, and by implementation level*

The results clearly indicate that Whitman, the intervention school, showed a significant increase in overall social skills knowledge (see Figure 1), with an average increase of 4.9 raw points. The scores of Hightower, the control school, increased by an average of 2.3 points. The average increase at Whitman is even greater when High Implementation Classrooms are compared with Low Implementation Classrooms.



**Figure 1. Changes in social skill knowledge at midyear.**

### *Comparison with formative studies*

The Committee for Children used similar instruments in their formative studies in Seattle public schools (Beland, 1988a; Beland 1988b; Beland, 1989; Moore & Beland, 1992). These studies did not provide a breakout for the three units (Empathy, Impulse Control, Anger Management). They reported an overall average change in score of 6.4 points (after the control group's change was subtracted). The overall midyear Whittier gains among High Implementation classrooms (after the control group's change was subtracted out) was 3.9 points (see Figure 2). By the midyear point, the Whitman students received less than half the curriculum's lessons and achieved slightly over 60% of the average gains of the students in the formative study, who had received all lessons. When compared with known treatment groups, Whitman students who received the lessons appear to be making substantial progress in gains in social skills knowledge.

### *Comparison of effect size*

Another common way to assess the magnitude of a difference between means of

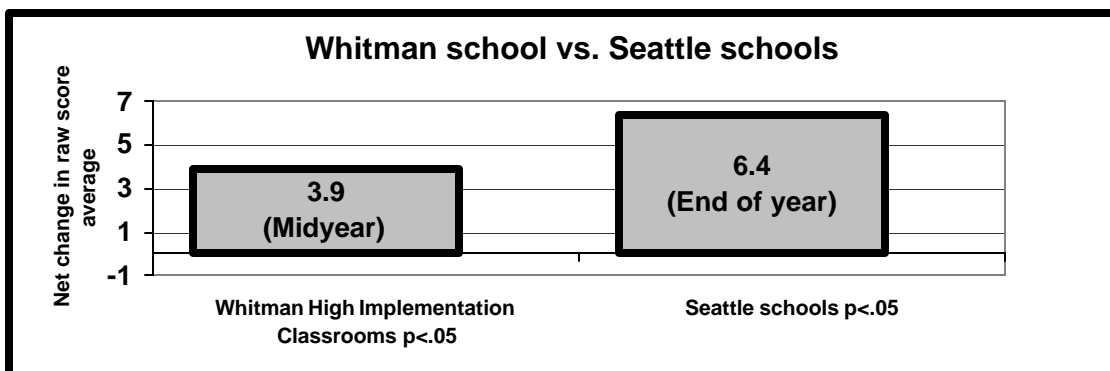


Figure 2. Changes found in this study compared with Seattle schools study (average change in raw scores with control group's average change subtracted out).

two groups is effect size, described as  $\Delta$ . A change of  $\Delta = .50$  (half a standard deviation of the control group's scores) or larger is considered an important finding (Frankel & Wallen, 2000). Among High Implementation Classrooms, effect size was very large;  $\Delta = 2.44$ . Stated another way, raw scores increased two and a half standard deviations over the control group.

### Effects on Empathy

The component of Empathy was considered the most reliable measurement at midyear because all High Implementation Classrooms had completed all lessons in this first unit. Results from the second and third units (Impulse Control and Anger Management) are not included in this report, and will be available in the year-end results. Low Implementation Classrooms varied in how many of the empathy lessons they presented (one or two to several), but none had completed the empathy lessons. Students in the control school received no empathy lessons. Factors making up Empathy included Emotion Identification, understanding Emotion Cues, Listening Skills, and other skills such as Showing Concern or making an I-Message.

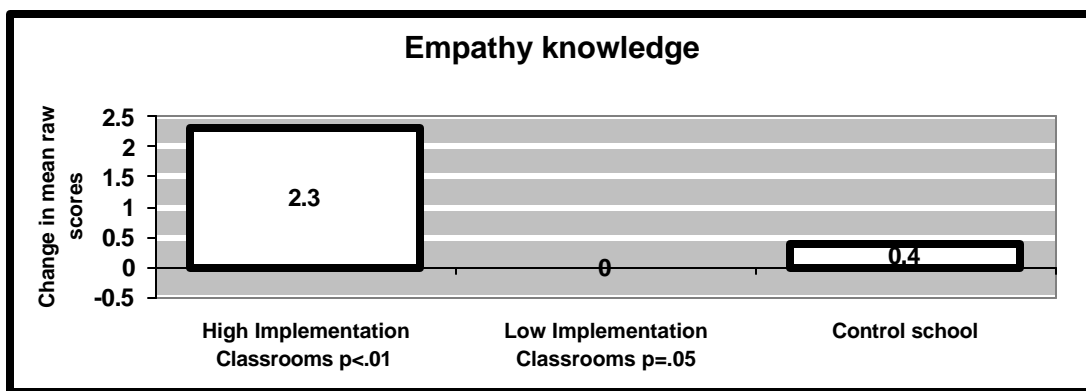


Figure 3. Changes in Empathy knowledge raw scores.

Differences in changes in Empathy were very substantial across the different groups. Whitman High Implementation Classrooms showed a large increase in Empathy compared with the control group and compared with the Whitman Low Implementation Classrooms. The effect size of  $\Delta = 1.27$  is considered a very large difference. The differences in the Empathy raw score changes are shown in Figure 3.

The factor making the largest contribution to the increases in Empathy was Emotion Cues. Whitman High Implementation Classrooms showed a moderate increase in Emotion Cues compared with the control group and compared with the Whitman Low Implementation Classrooms. The effect size of  $\Delta = .66$  is considered a sufficient difference to constitute an important finding. The differences in the raw score changes for Emotion Cues knowledge are shown in Figure 4.

### Comparison of changes for racial subgroups

An important consideration is whether the program was equally effective for African American students compared with Latino students (the two main ethnic groups at

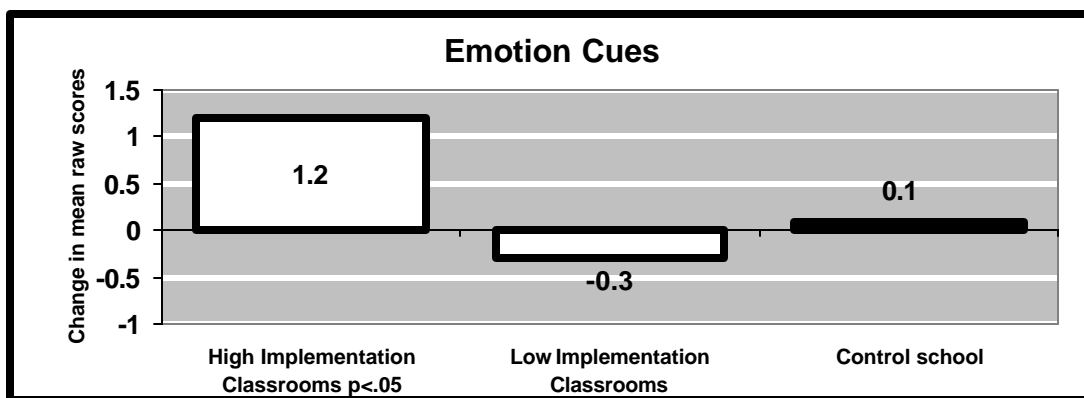


Figure 4. Changes in Emotion Cues raw scores.

both the intervention and control schools). Both subgroups made gains on the tests of social skills knowledge (see Figure 5). African American students showed a very large increase in Empathy knowledge when compared with the control group (ES  $\Delta = 1.98$ ). A similar increase was apparent when High Implementation Classrooms were compared with Low Implementation Classrooms.

Latino children showed a large increase in Empathy knowledge when compared with the control group (ES  $\Delta = .93, p < .05$ ), and showed a very large increase when compared with the Low Implementation Classrooms (ES  $\Delta = 1.61$ ). In summary, both African American and Latino students appeared to show gains in Empathy knowledge after receiving *Second Step*, with larger gains for African American students.

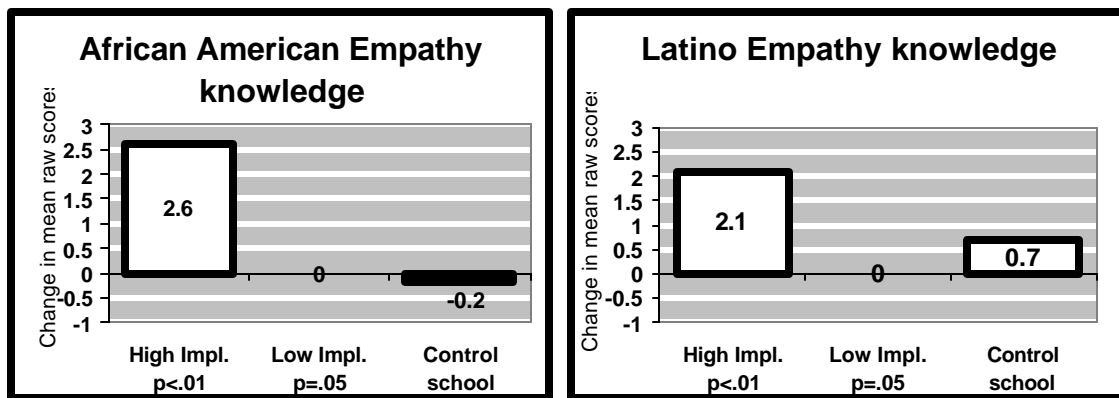


Figure 5. Differences by race in Empathy raw scores.

One question was whether there was a difference in scores between English Language Learners who received instruction in their primary language (Spanish) compared with those English Language Learners who were instructed in English. In classrooms where instruction was in Spanish, mean scores changes were about 20% higher on Empathy, and about 40% higher on Emotion Cues, than measured in English-instruction classrooms. However, the effect size calculation showed only  $\eta^2 = .20$

(Empathy) and  $r = .16$  (Emotion Cues), due to large variance, especially among the English scores. Very small sample sizes create the possibility that these results may be due to sampling error. Nevertheless, these results suggest that students who received *Second Step* instruction in their primary language (Spanish) showed greater increases in raw scores than those who received instruction in English.

## **Changes in behavior**

Two categories of data were used from the report cards. Report card *ratings* included three items relating to behavior: interactions with others, conflict resolution, and self-control. Report card *comments* that related to behavior were transcribed, translated if necessary, and coded as either positive or negative.

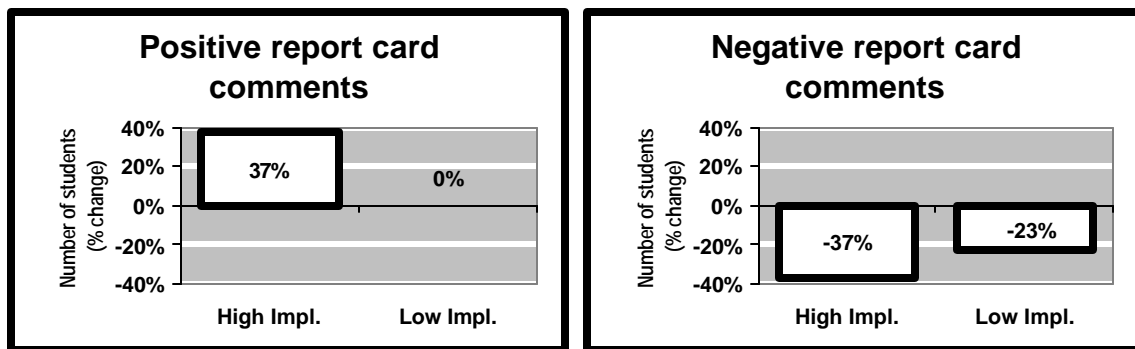
### *Changes in report card comments*

Qualitative analysis of report card *comments* showed that in High Implementation Classrooms, 37% more students received positive comments than in the same period during the prior year. In the same classrooms, 37% fewer students received negative comments during the intervention year. In Low Implementation Classrooms, the number of students who received positive comments was unchanged. The number of students who received negative comments declined by 22%. These changes are shown in Figure 6.

### *Changes in report card ratings*

Quantitative analysis of report card *ratings* showed different results. Changes in raw scores were obtained by subtracting the baseline period ranking from the intervention period ranking. Students in Low Implementation Classrooms showed an increase in

report card ratings compared with High Implementation Classrooms, which were essentially unchanged. In Low Implementation Classrooms, overall changes in report card ratings, as well as the individual items of self-control, conflict resolution, and interactions with others all showed effect size  $\Delta$ s of approximately 1.00 (and generally  $p.s < .05$ ).



**Figure 6. Report card comments by type of comment.**

Some limitations should be noted with respect to these results. Several report cards could not be located for the baseline year, so these students were dropped from this analysis, yielding a small sample that was not the randomly selected stratified sample used for other parts of the study. Moreover, report card data was not available at midyear from the control school, so it is not yet clear whether these differences would typically be seen within the elementary school setting. It is also unclear whether changes in ratings or comments correlate with actual behavior changes or rather may only reflect variations in teacher perceptions of student behavior. Nevertheless, the strong effect size and T-tests indicate that some relationship does exist. The implications of these findings will be discussed in the following section.

In summary, report card data indicate that in High Implementation Classrooms, more students received positive comments and fewer students received negative

comments, although ratings remained unchanged. In Low Implementation Classrooms, fewer students received negative comments but no additional students received positive comments. Report card ratings, however, increased across all factors.

## ***Discussion***

### **Main effects of *Second Step***

The main hypothesis of this study was that children who received *Second Step* would significantly increase their social competency. Social competency was defined as improvements in tests of social skill knowledge, similar to the curriculum's formative studies in Seattle schools (Beland, 1988a; Beland, 1988b; Beland, 1989; Moore & Beland, 1992). This study added the component of assessment of changes in corresponding behavior categories, as shown in report card ratings and written comments. Results of this study showed that students in the treatment school made substantial gains at midyear in social skills knowledge. The magnitude of the gains were consistent with the gains reported the formative studies in Seattle schools. This study validates the conclusion that *Second Step* was effective at imparting knowledge related to violence prevention, emotional identification, and specific social skills.

The present study showed mixed results for teachers' ratings of student behavior, which was consistent with the large CDC study (Grossman et al., 1997). The CDC study results showed no changes in behavior reported by teachers in treatment schools, but did find significant improvements in *observed* behavior. The present study did not use observations to measure behavior changes, but findings are consistent with the inference that social skills knowledge gains were of sufficient magnitude to result in similar

improvements in behavior as were found in the CDC study. Further study is needed to demonstrate whether this inference is correct.

### **Cross-cultural comparison of the effects of *Second Step***

This study filled an important gap by measuring *Second Step's* effect on Latino children. It should be noted that the formative studies included African American and Latino children in their sample but did not measure the curriculum's effect on these subgroups separately. Instead, these studies included in their attrition group "scores of zero on pre- and/or post-interviews in the cases of several ESL students" (Moore & Beland, 1992). The present study clearly showed that the Latino subgroup made substantial gains in Empathy knowledge.

African American students made even larger gains than Latino students. Part of the reason why Latino children did not make quite as large an improvement may be because many of the English Language Learners were in sheltered classrooms that presented *Second Step* lessons in English rather than in Spanish. (African American students received instruction in English.) Evidence suggests that Latino children made stronger gains when they received instruction in their primary language via the *Segundo Paso* materials.

Evidence from the tests support the Latino and African American developmental pathways described by Samples (1997). Latino children did not seem as able to list many different alternatives or outcomes as African American children. One reason for this may be a Latino cognitive style that values authority (Delgado-Gaitin, 1994) over hypothetical or metaphorical thinking (Heath, 1983). On the other hand, African American children generate more alternatives but these included violent alternatives. For example, one

African American student, after hearing a hypothetical about a child pushing her way in to play with others, listed many *more* outcomes, but these included, “someone could get hurt, they could start a fight, they can push her out the door, Jessie might tear stuff up, they might tear her stuff up.”

Both Latino and African American children’s thinking about aggression can be helped by differentiated instruction during *Second Step* lessons. When alternatives are brainstormed, this can help Latino children learn to generate more alternatives. When alternatives solutions are evaluated, including evaluation of aggressive solutions, this can help African American children learn to choose less aggressive alternatives.

### **Theoretical implications**

Saarni (1999) suggests that children construct a sense of self in the world based upon emotional competency as inferred from many social interactions. Thus accurately understanding and identifying emotions and emotion cues are critical to the development of the self. *Second Step* was shown to effectively increase children’s abilities to identify emotions. Children who are adept at identifying emotions in others are also adept at identifying their own emotions (Mayer, Caruso, & Salovey, 2000).

Knowledge structures that we rely upon to guide us through social transactions are developed in childhood based on experiences, interpretations, and skills (Dodge, 1993). Unless children can begin first thinking about a problem from another’s perspective, rather than immediately reacting, their development of social knowledge structures will be limited.

The problem-solving steps in Dodge's model correspond with the content of the *Second Step* unit on Impulse Control. This unit relies upon a child's empathy skills to inform and motivate conflict resolution through the problem-solving steps. Results of instruction on Impulse control will be reported after the year-end data is analyzed. Preliminary indications, based on classrooms that had begun instruction on this unit, were very promising.

### **Ratings and teacher perceptions**

One issue raised in prior studies of social/emotional development was why teachers (using rating scales) were unable to observe changes in children's behavior that were recorded by observers. In particular, this issue was raised by the CDC study of *Second Step*, where observers recorded improvements in behaviors but teachers did not notice these improvements (Grossman, et al., 1997). The present study also found this effect to a degree in that report card ratings for behavior did not increase for the High Implementation Classrooms. Given that Whitman students made social knowledge gains that were comparable to the gains of Seattle students, one may assume that had observers recorded behaviors at the school, there would have been an observable reduction in verbal and physical hostility and aggression and an increase in prosocial behavior. Paradoxically, the number of students receiving positive report card comments increased and negative report card comments decreased. How is this explained?

Whitman teachers are under enormous pressure to focus on academics, including II/USP sanctions that may be imposed if Whitman fails to meet academic targets. The following teacher comments from a survey are representative:

- I wish I found more time to prepare and teach this—I haven't been able to this year even though I fully support the program.
- [*Second Step*]'s interesting, but there are a lot of things that we have to teach.
- I hope it's giving kids tools to deal with conflicts. It's hard to find the time!

One teacher even wrote in frustration: "Not doing it. There's no time. 2 ½ hrs. Lang. Arts/Open Court Reading, 50 min. ELD, Math, Science, SS."

The Whittier teaching climate, common to many urban schools, may explain why only about half the report cards even received a single written comment dealing with behavior. Of the comments dealing with behavior, most were general comments about class participation or disruption. Only one comment out of 34 tied into the language or goals of the program (conflict resolution/anger management). During report card time, teachers were much more focused on Language Arts and Math than on Behavior.

Another explanation is the belief on the part of some teachers that the children in their class behave just fine, so they don't need the program; only children in the other classes need *Second Step*. One teacher stated, "It's not so important for my kids, who all are capable of empathy and don't generally fight each other. School wide it's a different story—I think it's very valuable." Teachers who have this attitude may well rate all of their students highly without specifically evaluating behaviors or components of behaviors.

The lack of social knowledge demonstrated by students suggests that they may not be as socially competent as their teachers judge. Scores on the tests indicate that children in Low Implementation Classrooms did not make gains in social skills knowledge during the same period as children in High Implementation Classrooms, and in some cases performed even worse than children from the control school.

One can look at report cards as a measure of teacher perceptions (rather than as an actual measure of behavior change). When looked at this way, the baseline report card tells how the prior teacher evaluated a particular student last year in terms of behaviors. Assuming the child's behavior is fairly constant, and assuming that the first teacher was accurate in evaluating the child's behavior, changes from this baseline by the subsequent teacher reflect a misperception of the child's behavior. Teachers in High Implementation Classrooms rated their students almost identically as the prior year teacher. However, teachers in the Low Implementation Classroom rated their students substantially higher than the prior teacher. Perhaps the teacher rated the students highly precisely because social skills such as those in *Second Step* were not taught during the period. Conversely, these teachers may simply be unaware of the social skills knowledge of their students and be exhibiting a "positive social skill rating bias."

A third explanation of this paradox may be that written comments may more accurately reflect behavior change than report card ratings that are checked off. Teachers who take the time to mention some attribute about behavior do so on only about half the report cards, so in all likelihood the comment is something that the teacher feels is important enough to justify the "extra" writing at report card time. Teachers in Low Implementation Classrooms wrote positive comments about only 33% of their students vs. 50% in High Implementation Classrooms. Low Implementation Classrooms showed negative comments about 33% of their students vs. 13% in High Implementation Classrooms.

Another reason suggested for teachers who fail to notice improvements in behavior was the low incidence of problems behavior in the baseline. In the CDC study,

the average student was observed in the classroom to be physically aggressive about once every 2.5 hours. After receiving *Second Step*, the rate was reduced by half to once every 3.75 hours. Many teachers might not notice that a student has gone an additional hour and a quarter without poking someone (if these behaviors are even observed by the teacher). In the CDC study, acts of verbal aggression in the classroom occurred once per hour before receiving *Second Step*, and about once every hour and twelve minutes after receiving *Second Step*. Teachers didn't notice this twelve minute difference, even though it translated into a 20% reduction overall.

For this reason, it is very important that schools (or districts) find means of conducting observational research that will provide their teachers with evidence that the curriculum is leading to improvements in observed behavior (as opposed to ratings of behavior). Teacher ratings simply do not seem to provide an accurate view of changes in student behaviors needed to create momentum for implementation. Without this evidence, the positive rating bias of some teachers may lead them to conclude that the curriculum is unnecessary.

## **Conclusion**

*Second Step* appears effective in teaching children to use empathy skills as a basis for nonviolent solutions to resolve school problems. Repeated use of this approach, as well as lesson content, appear to help children form new knowledge structures that have been demonstrated to help children avoid aggressive or withdrawal tendencies (Dodge, 1993).

Over time, Whitman students' vocabulary of emotion has been expanded and children have developed an ability to see patterns and scripts in social interactions.

Coupled with other skills such as effective listening and empathic communication, children can be much more effective in their relationships, further increasing their sense of self-efficacy. Because most children at the school will be learning the *Second Step* skills and steps, children feel comfortable getting involved in other's emotional experiences and can communicate emotion within relationships. Through these various processes and experiences, children at Whitman are developing their beliefs about what constitutes a desirable emotional balance and can seek to attain that.

For minority children, the challenge is learning effective social/emotional skills that will serve them in a variety of contexts without simply "acting white" (Delpit, 1995). *Second Step* addresses this problem by having *children* generate the specific steps needed to address particular kinds of social problems (such as seeing a friend cheat on a test), rather than delineating a one-size fits all solution to every type of problem. Schools have a responsibility to help children learn about emotions and social problem-solving strategies. "The political institutions of a society may channel individual moral reasoning by providing standards for the resolution of moral problems" (Rogoff, 1994, p. 44). Urban schools can support children as they resolve problems by using a social competency curriculum such as *Second Step* to allow children to construct appropriate social knowledge incorporating culturally responsive value structures.

## REFERENCES

- Aber, J. L., Jones, S. M., Brown, J. L., Chaudry, N., & Samples, F. (1998). Resolving conflict creatively: Evaluating the developmental effects of a school-based violence prevention program in neighborhood and classroom context. *Development and psychopathology, 10*, 187-213.
- Beland, K. (1988a). Second Step, preschool-kindergarten: Summary report. Seattle, WA: Committee for Children.
- Beland, K. (1988b). Second Step, grades 1-3: Summary report. Seattle, WA: Committee for Children.
- Beland, K. (1989). Second Step, grades 4-5: Summary report. Seattle, WA: Committee for Children.
- Burman, E. (1994). *Deconstructing developmental psychology*. New York: Routledge.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological bulletin, 115*, 47-101.
- Dahlberg, L. L. (1998). Youth violence in the United States: Major trends, risk factors, and prevention approaches. *American journal of preventive medicine, 14*, 259-272.
- Delgado-Gaitan, C. (1994). Socializing young children in Mexican-American families: An intergenerational perspective. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 55-88). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York: Free Press.
- Dodge, K. A. (1993). Social-cognitive mechanisms in the development of conduct disorder and depression. *Annual review of psychology, 44*, 559-584.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual review of psychology, 51*, 665-697.

- Eisenberg, N., Fabes, R. A., & Losoya (1997). Emotional responding: Regulation, social correlates, and socialization. In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence* (pp. 129-163). New York: Basic Books.
- Ekman, P., & Friesen, W. (1975). *Unmasking the face*. Palo Alto, CA: Consulting Psychologist Press, Inc.
- Ekman, P., Friesen, W., & Ellsworth, P. (1972). *Emotion in the human face, guidelines for research and an integration of findings*. New York, Pergamon Press.
- Erikson, E. (1963). *Childhood and society* (2nd ed.). New York: Norton.
- Feshbach, N. D. (1982). Empathy training and the regulation of aggression. *Academic psychology bulletin*, 4, 399-413.
- Frankel, J. R. & Wallen, N. E. (2000). *How to design & evaluate research in education* (4<sup>th</sup> Ed.). New York: McGraw-Hill.
- Frey, K. S., Hirschstein, M. K., & Guzzo, B. A. (2000). *Second Step: Preventing aggression by promoting social competence*. *Journal of emotional and behavioral disorders*, 8(2), 102-112.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Gilligan, C. (1988). Remapping the moral domain: New images of self in relationship. In C. Gilligan, J. V. Ward, J. M. Taylor & B. Bardige, *Mapping the moral domain*, (pp. 3-19). Cambridge, MA: Harvard University Press.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam.
- Greenfield, P. M., & Cocking, R. R. (Eds.) (1994). *Cross-cultural roots of minority child development*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Grossman, D.C., Neckerman, H.J., Koepsell, T.D., Liu, P-Y, Asher, K.N., Beland, K, Frey, K, & Rivara, F.P. (1997). Effectiveness of a violence prevention curriculum among children in elementary school: A randomized controlled trial. *Journal of the American Medical Association*, 277(20), 1605-1611.
- Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. New York: Cambridge University Press.
- Kellermann, A. L., Fuqua-Witley, D. S., Rivara, F. P., & Mercy, J. (1998). Preventing youth violence: What works? *Annual review of public health*, 19, 271-292.

- Kohlberg, L. (1969). Stages and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research*, 347-480. Chicago: Rand McNally.
- Kohn, A. (1990). *The brighter side of human nature: Altruism and empathy in everyday life*. New York: Basic Books.
- Lebra, T. S. (1994). Mother and child in Japanese socialization: A Japan-U.S. comparison. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 259-274). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2000). Selecting a measure of emotional intelligence. In R. Bar-On & J. D. A. Parker, (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp. 320-342 ). San Francisco: Jossey-Bass.
- Meisels, S. J., Atkins-Burnett, S., & Nicholson, J., (1996). *Assessment of social competence, adaptive behaviors, and approaches to learning with young children*. (National Center for Education Statistics, Working Paper Series, No. 96-18.) Washington, DC: Office of Education Research and Improvement, US Department of Education. (ERIC Document Reproduction Service No. ED 416 036.)
- Mesquita, B. & Ellsworth, P. C. (2001). The role of culture in appraisal. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, & research* (pp. 233-248). New York: Oxford University Press.
- Moore, B., & Beland, K. (1992). Evaluation of Second Step, preschool-kindergarten: A violence-prevention curriculum kit. Seattle, WA: Committee for Children.
- Ogbu, J. U. (1994). From cultural differences to differences in cultural frame of reference. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 365-390). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Piaget, J. (1965). *The moral judgment of the child* (M. Gabain, trans.). New York: Free Press (Originally published, 1932.)
- Rogoff, B. (1994). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.
- Saarni, C. (1999). *The development of emotional competence*. New York: Guilford.

- Salovey, P. & Sluyter, D. J. (Eds.) (1997). *Emotional development and emotional intelligence: Educational implications*. New York: Basic Books.
- Samples, F. (1997). Cognitions, behaviors, and psychological symptomatology: Relationships and pathways among African American and Latino children *Journal of negro education*, 66(2), 172- 188.
- Valente, E., & Dodge, K. A. (1997). Evaluation of prevention programs for children. In R. P. Weissberg (Ed.), *Establishing preventive services: Healthy children 2010. Issues in children's and families' lives, Vol. 9*, (pp. 183-218.) Bethesda, MD: National Institute of Mental Health, Department of Health & Human Services. (ERIC Document Reproduction Service No. ED 415 964.)