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The Impact of Second Step Implementation on Students’ Social-Emotional Skills in an Elementary School Setting

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In fulfillment of final requirements for the MAED degree

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Abstract

A positive classroom and a positive school environment are needed to best support students, especially those students with major behavioral concerns. The implementation of the Second Step curriculum is one way to support positive student behavior. This study examined the impact of Second Step implementation methods on students’ emotion management skills. Peer-to-peer, small-group teacher intervention, and whole-group implementation groups in kindergarten and fifth-grade classrooms were studied. Data collection methods included observational checklists, a district created formative assessment, and pre- and post-tests created by the Second Step curriculum. The data collected indicated that many students had an accurate understanding of social-emotional learning skills, but they did not implement emotion-management skills consistently. However, students participating in peer-to-peer emotion management teaching were more self-aware and applied emotion management skills more frequently when compared to students receiving small-group and whole-group instruction. Based on these results, peer-to-peer instruction methods are recommended to strengthen Second Step emotion management skill instruction and student self-awareness.

Keywords: emotion management, Second Step, self-awareness, self-regulation, social-emotional learning
A significant number of students are entering elementary classrooms with a lack of support and skills needed to regulate their behaviors and emotions appropriately. This absence of social and emotional skills can cause problematic classroom disruption and undesired behavioral outcomes in other classmates. These behaviors take time away from learning due to the increased teacher attention needed to combat the deficit behaviors. Because of this, student behavior is a prime factor in supporting or hindering student academic growth and achievement (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). In addition to the negative impact on learning, deregulated behavior and emotions set a precedence for the duplication of these behaviors among students’ peers.

Therefore, a positive classroom environment is needed to combat the deficit of social and emotional abilities. One way of accomplishing this is through the use of the Second Step curriculum. Second Step is a Social-Emotional Learning (SEL) program that aims to develop appropriate social-emotional skills, such as empathy, emotion management, and problem-solving, which are necessary for students to be successful in their everyday lives (Frey, Hirschstein, & Guzzo, 2000; Neace & Munoz, 2012).

Much is known about the impact of Second Step implementation. However, current research has not yet focused on specific effective implementation strategies affecting student emotion management skills in elementary settings. Implementation strategies and student demographic profiles are varied in research related to the Second Step curriculum. Studies conducted on this curriculum do not accurately show qualitative social-emotional learning strategies.

This study addresses the unknown effects of peer-to-peer and small-group teacher intervention upon the effectiveness of Second Step programming and implementation of student
emotional management skills. Kindergarten and fifth-grade students’ emotion management and regulation skills were studied to determine the effectiveness of multiple Second Step implementation strategies in an elementary setting. While providing Second Step curriculum instruction, we aimed to focus on a unit that teaches emotion management skills, self-regulation, and peer conflict by answering this question: How do specific Second Step implementation strategies (whole-group instruction, peer-to-peer instruction, and small group teacher intervention) affect the emotion management skills of kindergarten and fifth-grade students?

**Theoretical Framework**

Social Learning Theory suggests that personality is formed by a person’s natural environment and those around them (McCloud, 2016). The theory was built around the idea that relational behavior is a driving force in an individual’s goal attainment (Mearns, 2009). Social Learning Theory also suggests an individual’s self-efficacy is what drives his/her personal goals and behavior, and the way individuals feel about themselves directly correlates to self-regulation and feelings of behavior self-control (Bandura, 2008). Bandura (2008) theorized cognitive perceptions, including self-efficacy, directly influence one’s behavior. Therefore, Social Learning Theory suggests social influences in a person’s life are critical factors in the development and growth of personality, self-efficacy, and behavior.

Students in classrooms are influenced not only by their teachers, but by the behavior of their peers. Bandura (2015) found individual agency increases when peers model activities and are observed doing similar tasks. When studying social learning and cognition, Rosenthal & Zimmerman (1978), found that one’s behavior and actions are influenced more heavily by peer to peer modeling as opposed to external incentives over time. Therefore, this action research study explored the impact of peer-to-peer teaching and small-group teacher interventions in
developing and modeling functional and positive emotional management and self-regulation strategies.

Overall, Social Learning Theory served as the basis for our research methodology. Additionally, effective Second Step teaching informed our teaching practices throughout our research. A review of the literature provided a comprehensive look at the impact of the Second Step curriculum on student emotion management and self-regulation.

Review of Literature

Social and emotional learning programs strive to foster a school-wide environment that supports children’s problem-solving capabilities and positive social behaviors. The Collaborative for Academic, Social, and Emotional Learning, also known as CASEL, (2018) defined Social-Emotional Learning (SEL) as:

“...the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.”

Second Step is an SEL program that aims to develop appropriate social-emotional skills necessary for students to be successful in their everyday lives (i.e., empathy, emotion management, and problem-solving.) (Frey et al., 2000; Neace & Munoz, 2012).

Too many students are entering schools with a lack of support and skills needed to regulate their behaviors and emotions appropriately. This gap can cause severe classroom disruption and undesired behavioral outcomes in other classmates. Therefore, a positive classroom environment is needed to combat this deficit of social and emotional abilities. A positive environment is sufficient when a strong SEL program is in place (Bierman et al., 2008;
Frey et al., 2000). According to Larsen & Samdal (2008), implementing valuable skills to prevent behavior problems in children requires support from administration, teachers, and the students themselves. The research indicates a strong SEL program is needed to develop valuable prosocial student behavior skills in students regardless of their backgrounds, abilities, or beliefs.

**Implementation Strategies**

**Teacher implementation.** Frey et al. (2000) found that teachers who offered students many opportunities for peer discussions and role-playing, and who gave students the freedom to solve real problems in the classroom setting, tended to have the most rewarding results when implementing SEL programs. *Second Step* teacher manuals and training provide several key strategies for successful implementation of this program (Sullivan, Sutherland, Farrell, & Taylor, 2015). Providing structure for open communication among teachers and supporting a positive attitude about the *Second Step* program helps to ensure successful implementation overall (Larsen & Samdal, 2008). Researchers also agree that, during implementation, group discussions play a central role. Students should be encouraged to talk about feelings and discuss the potential consequences of each real-life lesson presented.

*Second Step* lessons are typically taught twice a week by trained classroom teachers and counselors. Elementary-level lessons are structured using visual cards which illustrate children in various social-emotional situations. Teachers read the lesson story aloud, show the visual photo card, and offer whole-group discussions. Frey et al. suggests the use of visual cards provides teachers with a lesson outline and common vocabulary while including objectives and fundamental concepts. These researchers also state the most popular feature in the early childhood and kindergarten *Second Step* curricula are stuffed puppets used to teach impulse control skills and self-regulation (2000). After the discussions, students are asked to reflect upon
their learning. Durlak, Domitrovich, Weissberg, and Gullotta, (2015) found students who were self-reflective thinkers were more likely to show greater social-emotional intelligence and regulation.

Additionally, whole-group discussions guide students to relate these real-life situations to their own experiences (Frey et al., 2000). When teachers model self-talk and self-regulation strategies during whole class time, students have a better understanding of how peer interactions and appropriate Second Step skill implementation should work (Larsen & Samdal, 2008). Furthermore, teachers should partner with parents to reinforce social-emotional skills taught in school for students to use at home. This home to school partnership has been proven to enhance the long-term retention of students’ SEL (Cefai & Cavioni, 2013).

**School-wide benefits.** Second Step developers note that their programs have been implemented in 25,000 schools reaching 9 million children in the United States and other countries (Sullivan et al., 2015). Elias et al. (1997), indicate the implementation of behavior strategies, skills, and proactive prevention tools requires an ongoing, school-wide, commitment. By demonstrating support of the program and holding staff accountable, administrators play a crucial role in ensuring long-term commitment school-wide implementation (Elias et al., 1997). Low, Cook, Smolkowski, and Buntain-Ricklefs (2015), suggested that Second Step increased empathy and peer issues in schools with additional optimistic, confident, and encouraging successful school structures and environments. Second Step benefits students regardless of school atmosphere and environment. Therefore, critical social-emotional skills are even more significant when the setting, climate, and supports are proactive and positive.

However, some gaps in research have been found related to Second Step implementation. Though many schools implement behavior prevention programs like Second Step, few studies
have evaluated these programs’ impact on students with disabilities (Sullivan et al., 2015). Additionally, it is unlikely that Second Step alone is adequate to address the challenging cognitive and social-emotional struggles that some students with behavioral concerns have. In such cases, there is evidence that these students would benefit from more intensive programs than the Second Step program (Cook, Burns, Browning-Wright, & Gresham, 2010).

Demographics

Age and Gender. Researchers agree that behavior problems displayed in kindergarten and first grade are related to poor school achievement in later grades; poor achievement that links to delinquency in teenage years (Neace & Munoz, 2012). The Second Step program works for students of many ages. In their study, Upshur, Heyman, and Wenz-Gross (2017) found that, when implementing the Second Step program, younger students made more gains in their social-emotional skills by the end of the year than peers in upper elementary grade-levels.

Social-emotional skills taught in the Second Step program seem to equally benefit girls and boys. (Upshur et al., 2017; Bierman et al., 2008; Denham et al., 2012; Montroy et al., 2016). Furthermore, due to varying gender roles and role models for boys and girls, anticipated behavior and the outcome of the social skills taught by Second Step may be different for each gender (Neace, & Munoz, 2012). One study completed on both males and females found that boys in one intervention group had more significant improvements in self-management and decreases aggression and social problems than boys in the control group (Raimundo, Marques-Pinto, & Lima, 2013). There were no differences in either group for girls.

Socioeconomic and ethnicity. Risk factors (e.g., poverty) in early childhood may prevent behavioral regulation skills from developing. Social-emotional learning is a
developmental challenge for many youth, especially those who come from culturally and socioeconomically diverse communities and homes where emotion management is nonexistent (Silk et al., 2007). However, studies show Second Step can benefit these at-risk students (Upshur et al., 2017).

Although socioeconomic status can play a large role in academic achievement, results of a study by Raimundo et al. (2013), suggested that gender, not socioeconomic status, appeared to be an indicator of how much a child would benefit from certain SEL programs. Another study that examined the ethnicity of students participating in the Second Step program explained that Hispanic children seemed to have fewer gains in emotion management and self-regulatory skills over the school year than Caucasian students (Upshur et al., 2017).

**Behavior plans.** Second Step is also beneficial for students in general education classrooms who suffer from behavioral issues. In one study, Second Step was helpful in reducing some, but not all, of the problem behaviors for youth with behavior management issues. Research suggests that students who do not see improvement may need additional instruction and practice in specific areas and a program with a more rigorous, multi-tiered approach (Sullivan et al., 2015). Additionally, students who are most receptive to Second Step are students who struggle to use positive social-emotional and behavioral skills consistently. Children who started with a higher number of challenging behaviors or skill deficiencies showed the most considerable improvements, which drove the program effects (Low et al., 2015).

However, other studies have found Second Step may not be overly helpful for all students who receive additional support from a behavior plan. Low et al., (2015) found there were no changes observed in students who displayed disruptive behavior after the implementation of Second Step. It was difficult to determine the amount of growth made in students who showed
severe disruptive behavior due to the amount of time they were in and out of the classroom. However, the baseline moderation with observed disruptive behavior was slightly significant.

**Classroom Implications**

**Student self-monitoring and social competence.** Nugent (2013) defines self-monitoring as “a personality trait for the ability to change behavior in response to different situations” (p. 1). Social competence is the ability to appropriately and effectively initiate and maintain relationships and address social situations (Nugent, 2013). Researchers agree that Second Step implementation in a general education elementary setting increases both student self-monitoring and social competence (Cooke et al., 2007; Low et al., 2015). This shift allows for caring and concern for others, self-awareness, and responsible decision making to determine behavior (Durlak et al., 2011). According to Cooke et al. (2007), “Students showed significant improvements in positive approach/coping, caring/cooperative behavior, suppression of aggression, and consideration of others” (p.102). This finding is based upon consistent Second Step implementation with students younger than fifth-grade. In these studies, students took baseline scores to indicate their proficiency in self-monitoring and social competence. Low et al. (2015) found that students with lower social competence and self-monitoring baseline scores achieved higher results in observational and post-tests compared to those with higher baseline scores. The students who did not have low baseline scores did not exhibit apparent self-monitoring and social competency improvement. Additionally, Cooke et al., (2007) noted the number of office referrals for students who exhibited low self-monitoring/control did not show a decrease in referrals when follow-up data was collected.

**Aggression.** Results of aggressive behavior are often studied when implementing Second Step. The literature agrees students are more aware of how to handle their aggression when
taught explicit Second Step lessons (Edwards, Hunt, Meyers, Grogg, & Jarrett, 2005; Frey et al., 2005). Edwards et al. (2005), found 60% of students apply these skills during and after program implementation. Additionally, Frey et al. (2005) note students who receive Second Step programming portrayed less aggressive behaviors than students in control groups who were not involved in Second Step programming.

Students in lower elementary grades show the most improvement related to aggressive behavior with the Second Step curriculum. Studies of second and third graders found the most significant decrease in physically aggressive contact and outcomes within a school context (Frey, Hirschstein, & Guzzo, 2000). Similarly, Cooke et al. (2007) suggests Second Step is more effective with students younger than sixth-grade.

An area of discord in the literature regarding the prevalence of aggression among students in the Second Step program exists, however. While the research shows students are more aware of ways to recognize and monitor aggressive behavior, Botzer (2002) found an SEL curriculum did not decrease the prevalence of violent actions in school. Instead, their research noted a triumvirate of components including early intervention, school-wide implementation, and individual interventions was most effective. This finding suggests an SEL curriculum like Second Step is more effective with students’ exhibiting general, age-specific student behavior concerns opposed to the prevalence of above average extreme behavior.

**Academic outcomes.** The literature does not offer conclusive evidence that students’ scores improve when taught an SEL curriculum like Second Step. Durlak et al. (2011) found academic performance increased with SEL program implementation. Students in this study experienced an average of an 11 percentile point increase on their overall academic scores.
(Durlak et al., 2011). It is important to note that an academic content area (i.e., reading, math, science, or social studies) was not specified in this particular study.

On the other hand, Cook et al. (2018) found students did not score better on measures of reading fluency and math computation compared to students in classrooms that did not teach Second Step. In support of this finding, Durlak et al. (2011) found student academic performance only increased when teachers conducted the Second Step lessons. Given the literature findings, further research is needed to support or discredit student academic gains during implementation of an SEL curriculum.

Discussion of the Literature

Limitations in the research are apparent as social-emotional learning outcomes using the Second Step program have produced varying results. This may, in part, be due to the fact there is not a universal measuring tool for social-emotional behavior. Little research has been conducted related to children with disabilities and how these students’ behaviors impact classroom environments. Research was ambiguous as to how, specifically, Second Step worked and which demographics benefited most from the program’s implementation.

Offering opportunities for students to solve real-life problems in the classroom through classroom discussions have had the most promising results when implementing SEL curricula. Students learn fundamental concepts related to SEL when trained teachers focus on the lessons and ensure open communication within the classroom. Teaching Second Step lessons twice a week allows students to learn impulse control and self-regulation skills which help promote positive and encouraging classroom management skills (Cooke et al., 2007; Low et al., 2015). School-wide implementation of Second Step shows greater results when an ongoing commitment
is made to its continued implementation, staff are held accountable, and program supports are positive and proactive.

Based on the diverse samples in various studies (including cultural, socioeconomic and age diversity), it is conceivable that Second Step leads to academic improvements for some students, while others see very little growth. Second Step and other SEL programs may be more beneficial for early elementary students with average to above average social-emotional skills. Students who have low academic skills or who are from low-income areas may benefit emotionally from SEL programming, but these students may still need extra supports that aim to remediate educational deficits to show growth in academic achievement (Cook, 2018). The outcomes from Second Step implementation greatly depends on the social-emotional competencies of the individual child, not the demographics of the student.

Overall, students are more aware of aggression management strategies when teachers implement Second Step programming in the classroom. However, no study found conclusive results indicating the program decreased the prevalence of consistent violent behaviors. Some literature suggests Second Step does indeed increase students’ academic performance. Other studies show it has no profound academic effect when compared to control groups. “Too many children start off their school careers without the necessary social-emotional skills to be optimally engaged in the classroom, which can dampen the cumulative profit from their learning experiences.” (Low et al., 2015). This study will attempt to fill the gap in the literature by examining both qualitative and quantitative data demonstrating the effectiveness of Second Step implementation strategies on students’ emotion management skills.

**Methodology**
This action research study spanned six weeks, beginning in October and extending through December. During this time, the Second Step K-5 curriculum’s emotion management unit was implemented in the kindergarten and fifth grade classrooms included in the study. The Second Step curriculum was a district-provided resource that all K-5 teachers were required to implement during their daily routines and procedures. Lessons were taught at least once a week to meet the curricular scope and sequence, as well as to satisfy the district’s time frame requirements. During Second Step implementation, whole-group teaching, peer teaching, and small-group implementation were studied. Although all Second Step lessons were incorporated into daily routines and schedules, parents were given a passive consent form before research was conducted allowing parents to opt their child out of the study if necessary. The consent form (Appendix A) informed parents about the purpose of the study, gave a summary of the research, and explained interventions or regular classroom lessons that would be used and/or taught throughout the six-week time frame. Equal numbers of male and female student participants were selected in both kindergarten and fifth-grade classrooms.

Participants

The study’s 27 participants were kindergarten and fifth-grade students. Within this group of students, nine male and nine female students represented kindergarten. These students ranged in age from five to six years old. The fifth-grade students in this study were between 10 and 11 years of age, with five of the students being male and four being female. The research took place in an urban elementary school in the Midwestern United States. The classrooms had limited ethnic diversity, but significant socioeconomic variance among students. Twenty-four of the student participants were Caucasian, while two students were Native American and one student identified as being Indian. Two student participants, one from each grade-level, were on
individual classroom behavior plans to meet their behavioral needs, and both of these students received additional supports within the school.

Procedure

During the study, students were placed into three groups in each of the three classrooms. Students were grouped with the sole purpose of balancing genders throughout the groups. Each classroom was represented by nine students. In each group of nine students, three students were a part of a peer-taught group and three received small-group teacher intervention, both strategies were in addition to whole-group instruction taught by the classroom teacher. The remaining group of three students received only whole-group Second Step instruction in their own classroom.

Students in the teacher-led intervention small-group received direct instruction every two weeks throughout the study, for a total of three sessions per group. Each session lasted five to ten minutes. During these sessions, teachers presented students with a behavior scenario depicting a need for an emotion management skill taught previously during a whole-group Second Step lesson. Each student in the teacher-led group wrote down or acted out how to respond. After this, students and teachers reflected on the effectiveness of each scenario response through a group discussion.

In the peer-led groups, three of the nine fifth-grade students taught three separate lessons to six kindergarten students. These students were sporadically placed into the peer-led group with only the intention of balancing the amount of males versus females. The six kindergarten students consisted of the two peer-led groups from both kindergarten classes represented in the study. Every two weeks (for a total of three times), the peer-to-peer group met. Within the group, three fifth-grade students created and co-taught lessons on recognizing and handling anxiety,
frustration, and peer conflict. Each lesson consisted of a brief mini-lesson, scenario role-playing by the fifth graders and kindergartners, and a final reflection discussion to solidify skill knowledge. Teachers videoed the lessons to observe and analyze student participation, social and emotional knowledge demonstration, and the lesson’s effectiveness.

The students receiving only regular classroom, whole-group *Second Step* instruction were provided instruction as part of two kindergarten classrooms ranging from nineteen to twenty students and a fifth-grade classroom of twenty-five students. *Second Step* lessons from the *Emotion Management* unit were fifteen to thirty-five minutes long, and one lesson was taught to students each week. The kindergarten teacher taught students using emotion regulation songs, puppets, scenario modeling, and role-playing. The fifth-grade teacher used an Activboard displaying *Second Step* songs, video scenarios, and partner skill practice activities. In both grade-levels, a short student reflection discussion was held to demonstrate lesson objectives and learning.

**Data Collection**

The use of both quantitative and qualitative data tools was required to identify and observe student self-regulation, self-monitoring, and the overall impact of *Second Step* implementation on students’ social-emotional skills. Students completed pre- and post-tests at the beginning and end of the curriculum implementation (Appendix B). The pre-test was the same as the post-test allowing comparison to determine growth in students’ SEL skill competency over the course of the study. The pre- and post-tests were conducted in an interview format using an interview template included visuals for students to refer to when asked knowledge-based questions related to social and emotional behavior. Males and females received similar interview questions with different visuals of student behavior situations tailored to their gender. Teachers wrote down
student interview answers both before teaching the Second Step emotion management and after. Comparison of student answers and emotion management vocabulary determined the effectiveness of implementation practices on students’ emotion management knowledge.

Student participants were given a district created assessment in the middle of the Second Step emotion management unit in November (Appendix C). This assessment was different for both kindergarten and fifth-grade, and it helped researchers determine whether students understood the emotion management skills taught in the Second Step unit. All assessments highlighted students’ capability of controlling strong feelings, identifying how strong feelings affect their body, and effective problem-solving steps.

The kindergarten assessment included three sections. In the first section, students were asked to identify parts of the body that can indicate anger. The second section asked students to identify three steps for calming down strong feelings. The third section displayed a picture of a young female demonstrating an angry face and angry body language and students explained how they knew the female looked angry by describing the clues they saw in the picture. The fifth-grade assessment included three scenarios of various students experiencing different emotions or problems. After reading each story prompt, students were asked to list three specific Second Step strategies that could be used by students in the scenarios to calm down and also the four specific steps that could be used to solve the specific problems.

The K-5 Second Step Lesson Observation Form was used to document the fidelity of the teachers’ implementation of the curriculum (Appendix D). An instructional coach filled out the observation form once while observing each teacher implement the Second Step emotion management unit during week three of the study. The observation form highlighted ten lesson strategies. It utilized a 3-level Likert Scale (“clearly evident or observed,” “partially evident or
observed,” and “not evident or observed”) to measure various observable behaviors within each strategy. At the end of the form, there was an area for the observer to highlight the teacher’s strengths, as well as an area for suggestions for improvement. The form highlighted strengths and weaknesses in the whole-group teaching of the emotion management unit, and it allowed the teachers to reflect on how Second Step lessons were presented to the students. Feedback from the observation form was used to improve teaching of the Second Step program in an effort to provide students the most useful skills to cope with their social-emotional needs appropriately.

The Observable Behavior Tally Form measured the frequency in which students did or did not use calm down strategies taught in Second Step when frustrated, feeling anxious, or involved in peer conflict situations (Appendix E). Dates and locations of observed behaviors and strategies were documented to deepen understanding of student participants’ emotion management skills. This form and the data it provided helped measure whether students were using Second Step skills in everyday school activities.

**Analysis of Data**

Data from pre- and post-tests, the district formative assessment, and the observational emotion management tally sheets were analyzed. The pre- and post-test were created by the Second Step program and obtained from the online educator resources. The pre- and post-test interviews were approximately 15-20 minutes long. Teachers documented the students’ interview answers and scored each interview according to the Second Step assessment protocol. Each question was worth up to two points, with one extra credit point possible if students named more than one appropriate SEL skill approach. The pre- and post-test scores were compared by looking at basic social-emotional knowledge scores and extra credit points earned for each
student. Implementation group scores were compared to identify which group demonstrated the most SEL knowledge growth from pre- to post-test.

The formative assessments created by the school district used visuals presenting real-life scenarios in which students were to identify the emotion the student in the visual was showing and state calm down strategies to counteract the emotion shown in the visual. The data collected was scored based on the percent of calm down strategies identified correctly out of the total number of correct answers. Data from this assessment determined which group (peer-to-peer, teacher intervention, or whole-group only) could correctly identify specific emotion management strategies taught in the emotion management unit of the Second Step curriculum.

Lastly, teachers observed students throughout their daily routines during the six-week research window to determine if students used social-emotional skills when they were frustrated, feeling anxious, or experiencing peer conflict in the classroom. Tallies were made on the observation sheet when each student in the study either exhibited or did not exhibit calm down strategies taught during implementation of the Second Step emotion management unit. If students experienced a situation in which emotion management strategies were needed and the student did not use calm down strategies, the situation was documented on the observation form. Observation results were compared by looking at each implementation group and grade-level.

Findings

Basic SEL Skills Per Implementation Method

The first research question this study addressed dealt with identifying what prior knowledge of SEL skills students had before implementation of the Second Step emotion management unit. The post-test determined growth of students’ SEL knowledge after teaching the unit. Students in both kindergarten and fifth-grade scored 75% or higher on the basic SEL
skills pre-test interviews (Figures 1, 2, & 3). These scores indicate students exhibited high levels of SEL knowledge and demonstrated they understood accurate use of SEL skills and calm down strategies prior to implementation of the Second Step curriculum. Comparisons between the pre- and post-test indicate a marginal increase in knowledge after the emotion management unit was taught. In the area of extra credit points, more SEL strategies were identified by the students in the post-test than on the pre-test. As shown in Figures 1 and 2, all kindergarten students in the peer-to-peer groups improved in identifying SEL strategies as identified by their increase in extra credit points from pre- to post-test. In Figure 3, fifth-grade peer-to-peer student scores showed no decrease in extra credit points with 66% of the group showing growth. Sixty-six percent of kindergarten students in the teacher intervention group showed growth in classes one and two. All fifth-grade students showed growth in the teacher intervention group. Fifty percent of kindergarten students and all fifth-grade students participating in whole-group instruction group showed growth in extra credit points. Fifth-grade students’ post-test results show that whole-group implementation had the highest increase of scores. The data did not indicate any significant growth in extra credit points between students in the teacher intervention and students only receiving whole-group instruction.
Figure 1. Kindergarten class 1 pre- and post- SEL test scores based on peer-to-peer, teacher intervention, and whole-group implementation using the Second Step curriculum focusing on the emotion management unit.
Knowledge of Emotion Management Skills in an Elementary Classroom Per Implementation Method

The second research question in this study examined whether peer-to-peer and teacher intervention groups impacted students’ learning of specific emotion management skills. Kindergarten teachers interviewed their students individually, whereas the fifth-grade students read the assessments on their own. Analysis of the data indicated students in the peer-to-peer implementation groups in both kindergarten and fifth grade yielded higher percentages of emotion management knowledge when compared to students in the teacher intervention and whole-group only groups (Figures 4, 5, & 6). Sixty-six percent of kindergarten students in the peer to peer group obtained a perfect score on the district formative assessment (Figures 4 & 5).
Additionally, as shown in Figure 6, all students in fifth-grade peer-to-peer group scored 100% on the district formative assessment. Thirty-three percent of kindergarten students and all of the fifth-grade students scored 100% on the district formative assessment. Lastly, 33% of kindergarten students and 66% of fifth-grade students scored 100% as shown in Figures 4, 5, and 6. The data varies in consistency as to whether the teacher intervention or whole-group only grouping is a more effective implementation strategy than the other. Therefore, no conclusive results indicate whether teacher intervention or whole-group is more effective in teaching student emotion management skills.

Figure 4. Kindergarten class 1 district formative emotion management interview assessment. This graph exhibits student emotion management calm down skill knowledge.
Figure 5. Kindergarten class 2 district formative emotion management interview assessment. This graph exhibits student emotion management calm down skill knowledge.

Figure 6. Grade 5 district formative emotion management interview assessment. This graph exhibits student emotion management calm down skill knowledge.

Application of Emotion Management Skills Per Implementation Method
The third research question this study related to whether students implemented the skills and strategies they learned throughout the emotional management unit of the Second Step program. Tally totals from kindergarten classes one and two were combined to show a total of all kindergarten student participants (Figure 7). Kindergarten data show students who received whole-group instruction only used the emotion management strategies most often when they felt frustrated (Figure 7). Tally totals of students in the teacher intervention group were high in the “Did Not Use” category for frustration. This may have resulted from the fact that one student in this group received additional supports for behavior. The peer-to-peer group used their skills most often, and they used their skills more than any other group confronted with peer conflict (Figure 7). Students in the teacher intervention group exhibited their skills most often when feeling frustrated. All implementation groups showed they were able to utilize the emotion management strategies to some extent when faced with frustration, anxiety and peer conflict.
Figure 7. This figure shows kindergarten students from classes 1 and 2 that were observed implementing Second Step calm down strategies. The data collected demonstrated when students were observed using and not using appropriate SEL skills throughout the six-week time frame.

Fifth grade emotion management observation data showed similar results (Figure 8). Students in the teacher intervention group practiced their calm down strategies most often when feeling anxious. However, students in this group never used calm down strategies in peer conflict situations. Students in the peer-to-peer group were observed equally using and not using Second Step emotion management strategies when feeling frustrated (Figure 8). Overall, the data varies in emotion management skill consistency among both kindergarten and fifth-grade students in all three study groups.

![Emotion Management Student Tally](image)

Figure 8. This figure shows fifth-grade students that were observed implementing Second Step calm down strategies. The data collected demonstrated when students were observed using and not using appropriate SEL skills throughout the six-week time frame.
Conclusions

There are gaps in research related to the effectiveness of specific Second Step implementation strategies on the curriculum’s learning objectives. Therefore, the primary purpose of this action research project was to study the impact of implementing Second Step emotion management unit instruction on students’ SEL skills, focusing on the influence of peer-to-peer teaching, small-group teacher intervention, and whole-group implementation. The data for this research was collected during implementation of a Second Step unit that taught emotion management skills, self-regulation, and peer conflict to answer the question: How do specific Second Step implementation strategies (whole-group instruction, peer-to-peer instruction, and small group teacher intervention) affect the emotion management skills of kindergarten and fifth-grade students? The goal was to show that students in kindergarten and fifth-grade are aware of SEL skills and use them in positive ways in a school setting. It was hypothesized that when skills from the Second Step emotion management unit were taught, students would: self-regulate, identify peer conflict, anxiety and frustration; and use strategies to positively handle feelings and emotions in everyday school situations. Based on the findings of this study, the following conclusions were drawn:

- Younger students increased emotion management knowledge and SEL skill demonstration when taught by older peers. Peer-to-peer Second Step teaching for kindergarten students yielded higher levels of learning when compared to either teaching students through whole-group lessons or individual teacher intervention.
SECOND STEP IMPLEMENTATION

- Fifth-grade students who taught Second Step lessons to kindergarten students demonstrated higher emotional management knowledge scores than their peers.

- Findings revealed a gap between social-emotional knowledge and use of that knowledge/skills learned. Student participants were able to discuss correct emotion management skills while being interviewed by their teacher, but had more difficult time displaying the calm down strategies when classroom conflict arose.

- There was no impact in the overall scores of students who received small-group instruction with their teacher compared with students who received only whole-group instruction.

Many areas for change and improvement within the implementation and execution of the Second Step curriculum were found. A positive impact of peer interaction with students in either different classrooms or different grade-levels is apparent. This indicates that more peer-to-peer interactions are called for when Second Step units are implemented. The Second Step curriculum targets kindergarten through fifth-grade students and each year builds upon content learned the previous year. Therefore, students from all grade-levels use the same vocabulary and learn and practice the same social-emotional skills. In this study, kindergarten and fifth-grade students had impactful conversations about real school conflicts situations and how to handle them appropriately based on what they are learning through Second Step lessons. Kindergarten students emulated fifth graders and were more receptive to the lessons taught by the older students. Collaborating with colleagues to create peer-to-peer teaching opportunities would be an effective way to promote positive social-emotional skills school wide.
Additional reteaching of small-group or whole-group mini-lessons was another way to support implementation of the Second Step curriculum. Giving students who needed further practice of the skills supplementary instruction and support allowed students to strengthen skills they needed during conflict or times when they had “strong feelings”. Whole-group and small-group instruction were effective ways to teach Second Step emotion management skills despite students applying the skills less often than students receiving peer-to-peer teaching. Students who received whole-group and small-group instruction exhibited high SEL knowledge scores. The difference between whole-group and small-group versus peer-to-peer teaching was in students’ application of the skills, not in their SEL knowledge.

These Second Step implementation strategies were shown to have a positive impact on students’ learning. Not only were students’ SEL skills strengthened, but their relationships with classmates, school peers, and teachers were reinforced as well. Their understanding and use of SEL was fortified by skills they will carry and use for the rest of their lives.

**Action Plan**

Recommendations from this study support further understanding of effective Second Step implementation strategies. It would be beneficial for researchers to examine the ways gender plays into effective implementation methods, such as whether males and females benefit equally from peer-to-peer SEL teaching and learning. Similarly, it would be interesting to consider whether single-gender or mixed-gender groupings in peer-to-peer teaching positively or negatively support student learning.

Secondly, future research could focus on longitudinal observation of students’ emotion management application. This study was six weeks in length and focused on only one Second Step curriculum unit, therefore it did not study the long-term impact of peer-to-peer SEL
teaching practices. Longitudinal studies might better determine whether peer-to-peer teaching is an effective teaching and learning strategy for all Second Step units, not just the emotion management learning unit. Observing student behavior over a greater period of time would create a more accurate understanding of the whole child and their SEL skill application. Overall, extending the time from six weeks to a year-long study, as well as considering the impact of gender in results would expand educators’ understanding of Second Step implementation and its impact on students’ social-emotional skills.

In summation, further research is necessary to determine the benefits of peer-to-peer and whole-group teaching and implementation using the Second Step curriculum in a classroom setting. However, when focusing on the Second Step emotion management unit, peer-to-peer teaching proved to be a highly effective and beneficial way for students to not only identify their feelings, but manage their emotions positively and productively. It is concluded that further research on Second Step implementation strategies is needed to better understand best practices for implementing the Second Step curriculum in schools and districts with students from varying backgrounds and different levels of academic achievement. Overall, this study shows strong gains in students’ self-awareness of SEL skills and self-regulation as the result of Second Step implementation. Peer-to-peer instruction for both kindergarten and fifth-grade students is impactful when learning and using SEL skills in a school environment. With the skills provided by the Second Step curriculum, educators offer students meaningful learning which extends far beyond the classroom setting to prepare them for a successful future.
References


https://psychologydictionary.org/self-monitoring/


https://books.google.com/books?id=GEe0BQAAQBAJ&printsec=frontcover&source=gs_s_ge_summary_r&cad=0#v=onepage&q&f=false


Appendix A
“Consent Form”

Second Step Implementation in the Elementary Classroom
Parental Permission Form

August 20th, 2018

Dear Parents,

In addition to being your child’s [_____] teacher, I am a St. Catherine University student pursuing a Masters of Education. As a capstone to my program, I need to complete an Action Research project. I am going to be studying the impact of Second Step (our district’s social and emotional curriculum) on students’ emotion management skills.

In the coming weeks, I will be teaching Second Step units on skills for learning, empathy, emotion management, and problem solving as a regular part of our daily classroom schedule. All students will participate as members of the class. In order to understand the outcomes, I plan to analyze the data obtained from the results of the emotion management unit, feelings, managing frustration and anxiety, and calming down strategies to determine if students are understanding and utilizing the skills in an effective way. All strategies implemented and assessments given are part of normal educational practice.

The purpose of this letter is to notify you of this research and to allow you the opportunity to exclude your child’s data and results from my study.

If you decide you want your child’s data to be in my study, you don’t need to do anything at this point.

If you decide you DO NOT want your child’s data included in my study, please note that on this form below and return it by Friday, August 31st. Note that your child will still participate in the daily Second Step lessons, but his/her data will not be included in my analysis.

In order to help you make an informed decision, please note the following:

- I am working with a faculty member at St. Kate’s and a project coach to complete this particular project.
- This study and the data collected will be used to improve your child’s educational experience and performance in the classroom.
- I will be writing about the results that I get from this research. However, none of the writing that I do will include the name of this school, the names of any students, or any references that would make it possible to identify outcomes connected to a particular student. Other people will not know if your child is in my study.
- The final report of my study will be electronically available online at the St. Catherine University library. The goal of sharing my research study is to help other teachers who are also trying to improve their teaching.
- There is no penalty for not having your child’s data involved in the study, I will simply delete his or her responses from my data set. Your decision of whether or not to allow use your child’s data will have no impact on your relationship with the school or any of the teachers involved in the research.

If you have any questions, please feel free to contact me, [_____], [______]. You may ask questions now, or if you have any questions later, you can ask me, or my project coach, [_____], who will be happy to answer them. If you have questions or concerns regarding the study, and would like to talk to someone other than the researcher(s), you may also contact Dr. John Schmitt, Chair of the St. Catherine University Institutional Review Board, at (651) 690-7739.

You may keep a copy of this form for your records.

__________________________ 8/21/18
Date

OPT OUT: Parents, in order to exclude your child’s data from the study, please sign and return by Friday, August 31st.
I do NOT want my child’s data to be included in this study.

__________________________  ______________
Signature of Parent                  Date
Appendix B
“Pre and Post Test”

Second Step Knowledge Assessment Interviews

Overview and Contents

In this kit, you will find everything you need for carrying out the Second Step Knowledge Assessment Interviews with young children. The 15-20 minute interviews are designed to be given as pre- and posttests to demonstrate knowledge gains in Second Step skills and concepts. The materials included herein were developed to assist you in administering, scoring, and understanding the results of the Second Step Interviews.

This kit contains the following materials:
- Guide to Using the Second Step Interviews
- Printing masters of the Interviews—Boys’ and Girls’ forms
- Photographs used in the Interviews

Please call the Committee for Children Client Support Services department at 800-634-4449, ext. 200 if you have any questions after reading this packet.
Guide to Using the Second Step Interviews

Description and purpose: The Second Step Knowledge Assessment Interview evaluates the social-emotional knowledge and skill of young children. Designed for students who are not yet proficient in reading, this assessment measure uses an interview format rather than a paper-and-pencil one. The interviews are conducted individually with students and use black-and-white pictures to depict social situations and assess social-emotional knowledge and skill. The story-and-question format is similar to the one used in the Second Step lessons.

Evaluation research has been done using the interview with preschool and kindergarten students (see below for more detail). However, to our knowledge, no research is available yet on its use with first- and second-grade students. As with younger children, first- and second-grade students vary widely in their reading ability, posing significant challenges to assessment. Therefore, this interview may be one option for schools interested in evaluating social-emotional knowledge and skill of first- and second-grade students. Please be aware that due to the lack of research, it is unknown how effective the interview is for those grade levels.

Interview content: The Second Step program teaches children core social and emotional skills. Each question in the interview is designed to measure key concepts and skills, as outlined below:

- Ability to identify emotions (sadness, anger, happiness, surprise; Items 1, 8, 14, 16, 18).
- Use of physical and situational cues and perspective taking to identify emotions (Items 2, 9, 15, 17, 19).
- Ability to brainstorm alternative solutions to a problem (Items 3, 10).
- Ability to formulate a prosocial solution for joining a group (Items 4, 6) or gain access to something that isn't yours (Item 12).
- Ability to predict consequences of a solution (Items 5, 11).
- Ability to use an alternative prosocial solution when one solution isn't working (Items 7, 13).
- Knowledge of anger-management techniques (Item 20).

Background research: The interview measure has been used to demonstrate children's knowledge gains in two evaluations of the Second Step program. The first was a pilot study conducted by the curriculum developers within six schools in the Seattle metropolitan area (Moore & Beland, 1992). Preschool and kindergarten students who received the program (n = 85) were compared with a group of students who did not receive it (n = 38), using the interview to measure social-emotional knowledge and skills. Second Step students indicated significant growth from pre- to posttest, while students who did not receive the program made little gain.

In an independent program evaluation, McMahon and her colleagues assessed the growth of 109 preschool and kindergarten students attending a Chicago elementary school (McMahon, Washburn, Felix, Yakin, & Childrey, 2000). Student change was evaluated using the Second Step interview and
Guide to Using the Interviews

behavioral measures (that is, observations and teacher ratings). After receiving the program, students showed increased social-emotional knowledge and skill in the interview. Students also demonstrated a reduction in observed problem behaviors (but no change on teachers' ratings) following Second Step lessons.

Please note that we do not have norms or psychometric information (that is, research about the tool's characteristics) for this tool. However, as mentioned above, evaluations of the Second Step program—with and without comparison groups—have shown change before and after the program with this measure. Additionally, the measure typically is appropriate for most grant applications and other evaluations educators are asked to carry out.

Using the interview as an outcome measure: The interview can be helpful in assessing the effects of the Second Step program for non- or beginning readers. However, for a comprehensive outcome evaluation, additional measures should be included. Multiple outcome measures will provide more information about program effects and aid interpretation of the evaluation results.

We also recommend a strong evaluation design (for example, pre-/post-assessment and multiple participating schools) and procedures to support high-quality program implementation. A well-planned strategy will be essential to optimizing your outcome evaluation. Please refer to "Conducting an Outcome Evaluation for Second Step: A Violence Prevention Program" on our Web site (www.cfcchildren.org) for further details. Consultation with someone experienced in program evaluation may be vital as well.

Instructions for use
1. Initial planning.
To use the Second Step Knowledge Assessment Interview as a pretest, administer it a few days before you teach the first lesson of Second Step*: A Violence Prevention Curriculum. Then administer the interview again as a posttest after all the lessons are taught. In order to assess students' knowledge gains, the same group of students must be interviewed at each time point.

Given the time-intensive nature of the Second Step interviews, selecting a subsample of students to interview is a frequent evaluation strategy. Two methods can be used for sampling or choosing students in the subgroup:

- **Random sampling all students.** If you are interested in how the program works with the general student population, sampling must be done randomly. That is, the students interviewed should not be "hand-picked" but selected at random. Random sampling will yield a group that is representative of all the students within the grade levels of interest.

- **Random sampling a smaller subset of students.** If you are interested in how the program works with a particular group of students, a random sample should be drawn from that subset of students. For example, schools are often interested in how effective the Second Step program is for less-skilled or at-risk students. In that case, the students with weaker social-emotional skills could be identified. In turn, a subsample could be selected randomly from the subset of less-skilled students.
A related consideration when planning the evaluation is the number of students to include. The number of students will likely affect the results, particularly for small sample sizes. The greater the number of students evaluated, the more reliable the results. In general, a minimum of 30–50 students is needed to achieve results that are reliable and able to be analyzed.

Careful planning will allow the most efficient use of the tool. The following is an estimate of the time involved at each step, once the student sample is selected:

<table>
<thead>
<tr>
<th>Time Planner (per classroom)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation time</td>
<td>30–45 minutes (or more, depending on the number of students being evaluated)</td>
</tr>
<tr>
<td>Administration (per interview)</td>
<td>15–20 minutes</td>
</tr>
<tr>
<td>Scoring (per interview)</td>
<td>3–5 minutes</td>
</tr>
<tr>
<td>Data analysis/interpretation</td>
<td>30 minutes</td>
</tr>
</tbody>
</table>

2. Preparing for the interviews.
   - **Timing.** Plan for about 15–20 minutes per student to administer the interview.
   - **Conditions.** Interviews should be conducted under similar conditions each time the students are interviewed. “Standardized” assessments are important for evaluating student growth (that is, change) accurately from pre- to posttest. For example, it is ideal for the same interviewer to conduct the interview with a given student at pre- and posttest.
   - **Forms.** Prepare copies of the interviews, noting that there are “girl” and “boy” versions to match the gender of students being interviewed.
   - **Identification codes.** If large numbers of classes at the same grade level are using the assessments and/or if scoring or data entry is conducted by someone other than the classroom teacher, identification (ID) codes should be used instead of student names on the interviews. ID codes protect student confidentiality and help ensure standardization of scoring. Special attention should be made to make sure the exact numbers are assigned to the same student for both the pretest and posttest.
   - **Photographs.** Ensure you have all seven photographs used in the interview. “Boy” and “girl” versions are included for the first two photos; the last three photos are used for both boys and girls. (The rationale for “boy” and “girl” versions is to minimize gender bias—that is, reduce the chance that children’s responses are due to how they perceive the opposite sex.) We do not recommend photocopying the photographs because the quality of copied photographs is typically poor. If you need additional copies of the photographs, please call our Client Support Services at 800-634-4449, ext. 200.
   - **Interview content.** Read over the interviews and instructions. You may want to practice the script out loud so you are comfortable reading it. It is important for the interviewer to use the script as written to assess students’ Second Step knowledge and skill accurately. The use of identical scripts across interviews and students is another critical aspect of standardizing the assessments.
3. Conducting the interviews.
   • **Present the photographs.** Place the photos one at a time on a table or desk with the
     student sitting opposite you. Use a clipboard and keep it at a slant so the student cannot
     see the recording form.
   • **Be consistent.** Your actions and voice tone should be the same for every student you
     interview. Be warm to the students, but do not praise ("good"), smile, nod, or offer other
     indications that their response was correct.
   • **Avoid correcting students.** Because the interview is an assessment, it should not be used as
     an opportunity to instruct or correct a student, even if her/his answer is clearly wrong.
   • **Read the questions as written.** The wording of questions has been designed for specific
     purposes. For example, asking "How can you tell ________ is feeling this way?" encourages
     indication of physical cues in the photo, while the probe "What else makes you think s/he
     feels this way?" encourages students to relate to their own experiences. Resist the
     temptation to define unfamiliar terms, rephrase questions, or reinterpret questions. Many
     terms unfamiliar to children will likely be addressed in the Second Step program. In addition,
     on the posttest interviews, resist the temptation to cue the children with familiar phrases
     from Second Step lessons. Altering the wording at either pre- or posttest will compromise
     the results.
   • **Pace yourself.** Allow a "wait time" of at least 10 seconds before repeating a question or
     probe and before continuing on.
   • **Probe.** Repeat the probe until the student indicates s/he has nothing more to say, is silent
     for longer than 10 seconds, or repeats an answer already given. Answers to a probe are
     recorded above the probe in categories for the original question.
   • **Record answers.** Answer categories are provided for ease in recording and scoring. When you
     are unsure how or whether to categorize an answer, write the answer verbatim under "other."  
     Read the scoring instructions before interviewing; this will give you a clearer picture of how
     to record answers.
   • **Avoid discussing answers.** After the pretest, please avoid any discussion with students
     about the interview and their answers to the questions. Observing these precautions gives us
     confidence that the changes in test results are due to real changes in students' knowledge
     and skill acquisition, rather than to differences in testing conditions.

4. **Scoring.**
   It is more efficient to score the same question for the entire class set of tests and then score the
   next item for the whole class rather than separately scoring each individual student test from
   beginning to end. Scoring all of the same question at once allows for greater assurance that the
   scorer is applying the same standard of consistency to each question and increases the reliability of
   the scoring.

   Follow the scoring instructions closely. After scoring the interviews for the entire group, go back
   and total each individual student's score. Write in the total score at the top right hand corner of
   each Interview form for easy reference and summation.
When the Second Step Knowledge Assessment Interview is given as a pre- and posttest, it is important to use the same standards for scoring the pretests as the posttests. For many teachers it may seem odd to score the pretests, since students are being tested before being taught the material; however, this creates a baseline to calculate change after the posttest is scored. In order to keep the scoring consistent between the pre- and posttests, follow the scoring instructions closely. Many items test for knowledge that most children their age would not know without Second Step lessons. In those cases, do not be tempted to give them extra points just because it is reasonable for them to be lacking that information. Remember that the pretest must be allowed to reflect the knowledge that students lack and that they will gain from the Second Step curriculum. Therefore, it is fine if scores are low on the pretest.

Scoring Individual Items. Each item is scored separately, for up to 2 points awarded per item. Responses listed under “other” may be awarded 1 point if they adequately answer the question without repeating another answer. An example of a repetitive answer is “telling the teacher” and “telling her/his mother.” When scoring, be sure to read the student responses that are written, not just the check marks.

Below are specific scoring instructions for each item.

Photograph 1

1. Award 1 point for “sad/unhappy,” “mad/angry,” “disappointed,” or “hurt” (up to a maximum of 2 points). Award 0 points for “bad.”
2. Award up to 2 points for more than one cue. More than one body or facial cue is not considered a repetitive answer. For example, “head down” and “shoulders down” are separate cues, as are “forehead wrinkled” and “frowning.” Young children may say “eyes” or “mouth” or indicate the forehead—these responses are acceptable for credit. You may give a point for “face” or “body” if nothing more specific is listed (such as “eyes”). Children may repeat the story in various ways to answer the question; give 1 point for citing the story (check “because of situation” on the interview form).
3. Award 1 point for each solution (maximum 2 points), whether it is positive or negative. Award 0 points for “do something else” or “find other friends,” etc., as these solutions do not answer the question. Be aware of repeat answers.
4. Award 1 point each (maximum 2 points) for answers that entail making a comment or asking a question about the play situation. Award 1 point each for “ask to play,” “ask to share/trade/take turns,” or other acceptable responses.
5. Award 1 point for each plausible consequence cited (maximum 2 points). Be aware of possible repeats.
6. Award 1 point each (maximum 2 points) for answers that entail making a comment or asking a question about the play situation. Award 1 point each for “ask to play,” “ask to share/trade/take turns,” or other acceptable responses.
7. Award 1 point for a prosocial solution that is different than the one given for Item 6. “Telling a grown-up” or “do something else” are acceptable. Note that 2 points are possible for this item, just as for other items in the interview.
Photograph 2
8. Award 1 point for “sad/unhappy,” “mad/angry,” “disappointed,” or “hurt” (maximum 2 points).
9. Award 1 point per cue (maximum 2 points). More than one body or facial cue is not considered a repetitive answer. For example, “head down” and “shoulders down” are separate cues, as are “forehead wrinkled” and “frowning.” Young children may say “eyes” or “mouth” or indicate the forehead—theses responses are acceptable for credit. You may give a point for “face” or “body” if nothing more specific is listed (such as “eyes”). Children may repeat the story in various ways to answer the question; give 1 point for citing the story (check “because of situation” on the interview form).
10. Award 1 point for each solution (maximum 2 points), whether it is positive or negative. Award 0 points for “do something else,” as this does not answer the question. Be aware of possible repeats.
11. Award 1 point each for plausible consequences cited (maximum 2 points). Be aware of possible repeats.
12. Award 1 point for any of the following (maximum 2 points): “trading,” “taking turns,” “waiting,” “sharing,” “asking.” Award 0 points for “tell a grown-up.”
13. Award 1 point for any of the solutions listed above that was not given as a response to Item 12. A point may be given for “tell a grown-up” or “do something else.” Note that 2 points are possible for this item, just as for other items in the interview.

Photograph 3
14. Award 1 point each for “happy” or “excited” (2 points maximum).
15. Award points for the following cues: “smiling,” “teeth showing,” “eyes open,” “eyebrows.” Points may be awarded for “mouth,” “eyes,” etc., or for indicating the forehead. Award points for “face” or “body” if nothing more specific is listed. A maximum of 2 points is possible.

Photograph 4
16. Award 1 point each (2 points maximum) for “surprised” or its synonym (for example, “astonished,” “shocked”), and other similarly-expressed emotions (for example, “amazed,” “afraid”).
17. Award points for the following cues: “mouth open,” “eyes open wide,” “eyebrows up.” Points may be awarded for “mouth,” “eyes,” and so on, or for indicating forehead. Award points for “face” or “body” if nothing more specific is listed. A maximum of 2 points is possible.

Photograph 5
18. Award 1 point each for “mad,” “angry,” or other synonyms (2 points maximum).
19. Award points for the following cues: “fists,” “frown,” “eyebrows,” “chin wrinkled,” “forehead wrinkled,” “teeth showing.” Points may be awarded for “mouth,” “eyes,” and so on, or for indicating forehead. Award points for “face” or “body” if nothing more specific is listed. A maximum of 2 points is possible.
20. Award points (2 points maximum) for listed answers and/or the following responses: “being alone,” “saying ‘calm down’;” or “slow down.”
**Second Step Implementation**

**Totalling students’ scores.** Two different totals can be used to interpret interview results:

- **Basic Skills Total.** To compute the Basic Skills Total, count only one correct answer for each item for a maximum of 20 points. This is an index of the child’s basic skill knowledge.
- **Extra Credit Total.** To calculate the Extra Credit Total, look at each item again. If the child gave more than one correct answer for an item, give the child an "extra credit" score of 1 point for that item. Even if the child gave many scorable answers for a given item, give only 1 extra credit point for that item. (Otherwise, the item would be given disproportionate emphasis compared to the other skills assessed in the interview.) Although unlikely, a maximum of 20 points is possible for the Extra Credit Total. Note that it is possible for students to score extra credit on particular items even if their Basic Skills Total is below the maximum of 20 points.

**5. Interpreting the data.**
The purpose of using a pretest and posttest format is to show the growth, or change, that results from students’ experience learning the concepts and skills in the Second Step curriculum. You may find it helpful to compute the percentage of change for students’ total scores in the following way.

After administering and scoring the pretest and posttest, create a chart that includes each student’s name and total score as shown in the example below. A computer spreadsheet may also be used for this task. Make one of these charts for the pretest scores and another for the posttest scores.

<table>
<thead>
<tr>
<th>Student</th>
<th>Basic Skills Total</th>
<th>Extra Credit Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pam</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Doug</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Allison</td>
<td>16</td>
<td>1</td>
</tr>
</tbody>
</table>

**Calculating percentage of change.** To calculate the percentage of change, you will only use the scores of students who took both the pretest and posttest. Using your score charts, identify the subset of students who took both tests. For example, if Doug did not take the posttest, you would only consider Pam and Allison’s scores.

Once you’ve identified this subset of students, add their scores together to come up with separate pretest and posttest totals. The formula below is used to calculate percentage of change for the Basic Skills and Extra Credit Totals:

\[
\text{Percentage (\%)} \text{ of change} = \frac{\text{Posttest total} - \text{Pretest total}}{\text{Pretest total}} \times 100
\]
If the percentage of change for a total is a positive number, this will indicate an increase from pre- to posttest; a negative percentage change will indicate a decrease over time. Looking at the percentage change for students from pre- to posttest is akin to “eyeballing” the results. However, percentage change does not tell you whether the change is statistically significant, that is, whether the change is reliable.

**Testing the significance of student change.** The use of a statistical test (such as a t-test) is necessary to determine if students’ pre/post change is reliable and not due to a chance occurrence. Students’ individual change can be tested statistically if individuals are tracked from pre- to posttest. On the other hand, if students are surveyed anonymously, a statistical test will assess aggregated rather than individual change. Aggregated change refers to the comparison of school means at pre- and posttest, requiring the participation of multiple schools in the evaluation.

**Displaying your results.** Bar and line graphs are helpful for displaying results (that is, total scores across students) and showing changes from pre- to posttest.

**Interpretation of statistical significance.** If statistical tests were used to assess pre- and posttest scores, your results will indicate whether student change was statistically significant. Statistical significance indicates that the results were reliable and not likely due to a chance occurrence. Note that statistical “power” for detecting significant change will be contingent on the number of students being evaluated—the more students involved, the better the probability of detecting true change.

**Interpretation of “social significance.”** Determining the “social significance” or real-world impact of the program will be aided greatly by the use of comparison schools. A significant difference between schools that receive the program and those that do not is good evidence that the program had an impact on students.

**Concluding a program effect.** Student outcomes can be affected by a variety of factors beyond the program. A lack of positive change from pre- to posttest may be related to low statistical power because too few students participated in the evaluation. Another possible explanation for the specific results is the particular group of students sampled and interviewed. The greater the number of students involved across classrooms and schools, the more reliable the results will be. A strong evaluation design (for example, use of multiple and/or comparison schools) will allow you to attribute outcomes to the program more confidently.

Process (or implementation) evaluation also can be extremely helpful in interpreting outcome results. By documenting what the program was like “in action,” you can assess the degree to which the program was implemented as intended. The higher the implementation quality, the greater will be your probability for demonstrating positive findings and capacity for concluding program effectiveness.

**Social-emotional knowledge goals for students.** Norms are not available with which to compare your school/district results. However, a “socially significant” goal would be for students, in general, to indicate competence in all the skills and concepts tapped in the Second Step interview. A Basic
Skills total of 20 would indicate a basic level of social-emotional competence. Greater competence in a particular area may be indicated by consistently attaining Extra Credit points for similar items. For example, the ability to generate more than one prosocial solution to a problem is associated with greater social-emotional competence (and less aggressive behavior). Thus, two correct answers each for Items 3, 4, 6, 10, and 12 and/or at least one correct answer for Items 7 and 13 are helpful indicators of competent problem-solving skill.

References

Interview Evaluation Instrument for
Second Step®: A Violence Prevention Curriculum

Boys’ Form

Child’s Name: ________________________________

Child’s ID Number: __________________________

Grade/Age: _________________________________

Interviewer: ________________________________

Date: ________________________________

☐ Pretest
☐ Posttest
Directions for the Interviewer
The purpose of this interview is to assess the degree of knowledge and skills a student has at present. The interview must not be used as an opportunity to instruct or correct a student, even if her/his answer is clearly wrong. Read the questions as written. The interview text in **bold** print is information you will say aloud to the student. The plain text is not spoken to the child. (See Interview Guide for complete instructions.)

Introduction
Hi, my name is ___________. What is your name? How old are you? I want to know how children think about things. I've got some pictures of children to show you. I will tell you a little story about each picture, and then I will ask you some questions. Pretend that all the children in the pictures are your age.

Photo 1
Here is the first picture. This is Jessie. Point to the child on the left. **He really wants to play with these two boys.** Point to the boys playing kitchen. **Which one is Jessie? Can you point to him? Who does Jessie want to play with? What are the two boys playing? Yes, they are playing “house” or “kitchen.”** State what the boys are playing if need be.

1. How do you think Jessie is feeling right now?
   - Sad/unhappy
   - Mad/angry
   - Disappointed
   - Hurt
   - Other:

2. How can you tell Jessie feels ________________________?
   - Facial expression:
   - Body:
   - Staring at kids
   - Because of situation (retells story)
   - Child relates own experience (“Once when I...”)
   - Other:
   Probe: **What else makes you think he feels______________________?**
   Repeat probe.
Child's ID Number: __________________

3. What can Jessie do so the two other boys will want to play with him?
   - Say something:
   - Ask to play
   - Stand there and wait
   - Join in
   - Ask the teacher for help
   - Give them something to play with (another pot, etc.)
   - Other: __________________________

   Probe: What else could he do?
   Repeat probe.

4. If Jessie said something to the boys, what could he say?

   Probe: Pretend you're Jessie and I'm one of the boys, and say it to me.

5. What might happen if Jessie pushed his way in and started playing?
   - Kids would get mad
   - Start a fight
   - Get in trouble
   - Someone could get hurt
   - They won't play with him
   - Other: __________________________

   Probe: Let's think of all the things that might happen. What else might happen?
   Repeat probe.

6. If you were Jessie, and you wanted to play with these two kids, what would you do or say?

7. If that didn't work, then what would you do or say?
Photo 2
Here is another picture. This is Daren, and this is Todd. Daren has been playing with the fire engine for a long time. Now Todd wants to play with the fire engine, but Daren keeps playing with it. Who's been playing with the fire engine for a long time? You can point. That's right—Daren. Who wants to play with it? That's right—Todd.

8. How do you think Todd is feeling? Point to Todd.
   - Sad/unhappy
   - Mad/angry
   - Disappointed
   - Hurt
   - Other: __________________________

9. How can you tell Todd feels __________________________?
   - Facial expression: __________________________
   - Body: __________________________
   - Staring at Daren
   - Because of situation (retells story)
   - Child relates own experience (“Once when I…”)
   - Other: __________________________

   Probe: What else makes you think he feels __________________________?
   Repeat probe.

10. What could Todd do so he could have a chance to play with the fire engine?
    - Trade
    - Take turns
    - Ask for it
    - Wait
    - Share
    - Tell the teacher
    - Other: __________________________

    Probe: Let's think of all the things Todd could do. What else could he do?
    Repeat probe.
Child's ID Number: __________________

11. What might happen if Todd grabs the fire engine away from Daren?
   - Daren would get mad
   - Start a fight
   - Get in trouble
   - Someone could get hurt
   - Cause hurt feelings
   - Daren won't play with him
   - Other: __________________________

   Probe: Let's think of all the things that might happen. What else might happen?

   Repeat probe.

12. What would you do if you were Todd and you wanted to play with the fire engine?

   ________________________________

13. If that didn’t work, then what would you do?

   ________________________________

Now I am going to show you some pictures of children’s faces. I want you to tell me how you think each child is feeling.

**Photo 3**

14. How do you think this child is feeling?
   - Happy
   - Excited
   - Other: __________________________

15. How can you tell?

   ________________________________

   Probe: What else makes you think she feels ____________________________ ?

**Photo 4**

16. How do you think this child is feeling?
   - Surprised
   - Other: __________________________

17. How can you tell?

   ________________________________

   Probe: What else makes you think he feels ____________________________ ?
Photo 5
18. How do you think this child is feeling?
   - Mad/angry
   - Other: ________________________

19. How can you tell?
   Probe: What else makes you think he feels ____________________?

20. What could he do to calm down?
   - Breathe deeply
   - Count slowly
   - Run/exercise
   - Tell himself to calm down
   - Do something quiet and fun by himself
   - Talk to someone
   - Other: ________________________

   Probe: What else could he do?

   Repeat probe.
Interview Evaluation Instrument for
*Second Step®: A Violence Prevention Curriculum*

**Girls’ Form**

Child’s Name: ________________________________

Child’s ID Number: __________________________

Grade/Age: _________________________________

Interviewer: ________________________________

Date: ____________________________
SECOND STEP IMPLEMENTATION

Basic Skills Total  
Extra Credit Total  

Pretest  
Posttest

Child's ID Number: ____________________________
Intervener: ____________________________ Date: ____________________________

Directions for the Interviewer
The purpose of this interview is to assess the degree of knowledge and skills a student has at present. The interview must not be used as an opportunity to instruct or correct a student, even if her/his answer is clear wrong. Read the questions as written. The interview text in bold print is information you will say aloud to the student. The plain text is not spoken to the child. (See Interview Guide for complete instructions.)

Introduction
Hi, my name is _____________. What is your name? How old are you? I want to know how children think about things. I've got some pictures of children to show you. I will tell you a little story about each picture, and then I will ask you some questions. Pretend that all the children in the pictures are your age.

Photo 1
Here is the first picture. This is Jessie. Point to the child on the left. She really wants to play with these two girls. Point to the girls playing kitchen. Which one is Jessie? Can you point to her? Who does Jessie want to play with? What are the two girls playing? Yes, they are playing “house” or “kitchen.” State what the girls are playing if need be.

1. How do you think Jessie is feeling right now?
   - Sad/unhappy
   - Mad/angry
   - Disappointed
   - Hurt
   - Other: ____________________________

2. How can you tell Jessie feels ____________________________?
   - Facial expression: ____________________________
   - Body: ____________________________
   - Staring at kids
   - Because of situation (retells story)
   - Child relates own experience (“Once when I...”)
   - Other: ____________________________
   
   Probe: What else makes you think she feels ____________________________?
   Repeat probe.
Child's ID Number: ____________________

3. What can Jessie do so the two other girls will want to play with her?
   - Say something: ____________________
   - Ask to play
   - Stand there and wait
   - Join in
   - Ask the teacher for help
   - Give them something to play with (another pot, etc.)
   - Other: ____________________

   Probe: What else could she do?
   Repeat probe.

4. If Jessie said something to the girls, what could she say?
   ____________________

   Probe: Pretend you're Jessie and I'm one of the girls, and say it to me.

5. What might happen if Jessie pushed her way in and started playing?
   - Kids would get mad
   - Start a fight
   - Get in trouble
   - Someone could get hurt
   - They won't play with her
   - Other: ____________________

   Probe: Let's think of all the things that might happen. What else might happen?
   Repeat probe.

6. If you were Jessie, and you wanted to play with these two kids, what would you do or say?
   ____________________

7. If that didn't work, then what would you do or say?
   ____________________
Photo 2
Here is another picture. This is Darla, and this is Amy. Darla has been playing with the fire engine for a long time. Now Amy wants to play with the fire engine, but Darla keeps playing with it. Who's been playing with the fire engine for a long time? You can point. That's right—Darla. Who wants to play with it? That's right—Amy.

8. How do you think Amy is feeling? Point to Amy.
   - Sad/unhappy
   - Mad/angry
   - Disappointed
   - Hurt
   - Other: __________________________

9. How can you tell Amy feels __________________________?
   - Facial expression: __________________________
   - Body: __________________________
     - Staring at Darla
     - Because of situation (retells story)
     - Child relates own experience ("Once when I...")
     - Other: __________________________
   Probe: What else makes you think she feels __________________________?
   Repeat probe.

10. What could Amy do so she could have a chance to play with the fire engine?
    - Trade
    - Take turns
    - Ask for it
    - Wait
    - Share
    - Tell the teacher
    - Other: __________________________
   Probe: Let's think of all the things Amy could do. What else could she do?
   Repeat probe.
Child's ID Number: ______________________

11. What might happen if Amy grabs the fire engine away from Darla?
   - Darla would get mad
   - Start a fight
   - Get in trouble
   - Someone could get hurt
   - Cause hurt feelings
   - Darla won't play with her
   - Other: ______________________

   Probe: Let's think of all the things that might happen. What else might happen?
   Repeat probe.

12. What would you do if you were Amy and you wanted to play with the fire engine?

   ______________________

13. If that didn’t work, then what would you do?

   ______________________

Now I am going to show you some pictures of children’s faces. I want you to tell me how you think each child is feeling.

**Photo 3**

14. How do you think this child is feeling?
   - Happy
   - Excited
   - Other: ______________________

15. How can you tell?

   Probe: What else makes you think she feels ______________________?

**Photo 4**

16. How do you think this child is feeling?
   - Surprised
   - Other: ______________________

17. How can you tell?

   Probe: What else makes you think he feels ______________________?
Photo 5
18. How do you think this child is feeling?
   ☐ Mad/angry
   ☐ Other: __________________________

19. How can you tell?
   _________________________________________________________________________
   Probe: What else makes you think he feels ____________________________?

20. What could he do to calm down?
   ☐ Breathe deeply
   ☐ Count slowly
   ☐ Run/exercise
   ☐ Tell himself to calm down
   ☐ Do something quiet and fun by himself
   ☐ Talk to someone
   ☐ Other: __________________________

   Probe: What else could he do?

   Repeat probe.
Point or draw lines to the parts of your body that show you are angry.
Kindergarten Unit 3

- Face feels hot
- Heart beats fast
- Muscles feel tight
Kindergarten Unit 3

Tell the three steps to Calming Down Strong Feelings

1. Hands on Tummy

2. Say Stop

3. Name your feeling
Kindergarten Unit 3

Be a detective. What clues from your body can you use to figure out how you feel?
Kindergarten Unit 3

Be a detective what clues from your body can you use to figure out how you feel?
5th Grade Unit 2

Jayla is experiencing a strong emotion of frustration. What situation makes you feel frustrated?

What are the 3 steps Jayla could use to calm down?

1.
2.
3.
5th Grade Unit 2

Jaya is experiencing a strong emotion.

What are the 3 steps she could use to calm down?

1. Stop
2. Name Your Feeling
3. Calm Down
5th Grade Unit 2

Chase is experiencing the strong emotion of Anger. What are three ways he could calm down?

1.

2.

3.
5th Grade Unit 2

Chase is experiencing the strong emotion of Anger. What are three ways he could calm down?

1. Deep Centered Breathing
2. Counting
3. Using Positive Self-Talk
Appendix D “K-5 Second Step Lesson Observation Form”

### Second Step Lesson Observation Form

This form is for use by trainers or administrators when observing lesson presentations. Lines printed in bold are general statements followed by examples of how teachers might demonstrate that teaching strategy.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Lesson Number</th>
<th>Date</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson Title</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Storytelling and Group Discussion
- Maintained interest with good pacing and personalized examples:
  - Read at a comfortable and grade-appropriate listening pace
  - Read with a clear reading voice
  - Used personal examples or anecdotes
  - Resolved questions being raised without getting bogged down

#### Followed lesson outline completely and sequentially:
- Defined key concepts clearly and used terms correctly
- Focused on lesson themes and objectives
- Checked for comprehension and corrected students who were confused
- Related concepts to student experience
- Reviewed lesson theme at end of session

#### Used empathetic and nonjudgmental responses with students:
- Used nonjudgmental responses (“That’s one idea. What’s another?” rather than “Good idea.”)
- Responded empathetically to student-related experience (listened, nodded)
- Demonstrated active-listening skills (maintained eye contact, rephrased or repeated students’ words)

#### Encouraged participation of all students:
- Arranged classroom to include all students
- Displayed photo and/or skill-steps poster to all students
- Called on a variety of students
- Waited a bit before calling on someone (occasionally waited for all hands up)
- Used a variety of discussion techniques (pair and share, small group)
### Role-Play or Activity

**Guided student generation of behavioral-skills steps:**
- Asked for steps
- Asked for best sequence
- Asked leading questions or suggested steps when students were not forthcoming

**Modeled skill steps or concept simply and accurately:**
- Model role-play clearly illustrated theme
- Emotional expression and voice tone was obvious and appropriate
- Modeled positive self-reinforcement

**Facilitated student role-play or activity:**
- Gave clear and focused instructions
- Provided coaching and cueing during role-plays or activity
- Had students repeat role-play or activity to clarify key skills or concepts

**Guided students in evaluating the role-plays:**
- Referenced steps
- Phrased questions to elicit specific, constructive, informative feedback
- Phrased questions to elicit feedback on delivery quality (voice tone, eye contact)

### Overall

**Facilitated transfer of learning:**
- Targeted times, places, or situations when students might use skills
- When necessary, discussed times when it might not be appropriate or safe to use a skill

**Appropriately managed student behavior:**
- Cued appropriate behavior by citing positive rules
- Redirected inappropriate responses ("That's one idea. What's another?")
- Used nondisruptive means to stop disruptive behaviors (nonverbal signals)
- If separation was necessary, placed student so that participation from a distance was still possible
What the teacher did well:

Suggestions and ideas for the teacher to strengthen the lesson:

Appendix E “Observation Emotion Management Student Tally”
## Emotion Management Student Tally

<table>
<thead>
<tr>
<th>Date(s)/Location</th>
<th>Student Name</th>
<th>Calm Down Strategies (Emotion Management)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>When Frustrated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Used</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Did Not Use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Used</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Did Not Use</td>
</tr>
</tbody>
</table>
