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The Boost-Up Program and Student Characteristics:

Teacher Perceptions of Student Attitude towards School and Social Behavior

Karin Cebulla, Shannon Hart, and Kari Peterson

University of Wisconsin - River Falls

Abstract

SMART/Boost-Up is a program that was developed to increase the proportion of students who are ready to respond favorably to academic instruction through participation in multi-sensory activities in the classroom. These activities are aimed at addressing visual perception, auditory processing, attention, and eye-hand coordination, which have been identified as important factors for learning. There has been empirical evidence supporting academic gains related to the Boost-Up program, but there have not been any studies addressing the social/emotional outcomes of the program. The purpose of this study was to measure the relationship between the use of the Boost-Up program and teacher perceptions of student attitude toward school and social classroom behaviors. Results indicated that use of the Boost-Up program had positive effects on teacher perceptions of student attitude toward school and social behavior. Limitations of the study and suggestions for future research are discussed.

The Boost-Up Program and Student Characteristics: Teacher Perceptions of Student Attitude towards School and Social Behavior

The Stimulating Maturity through Accelerated Readiness Training (SMART) program (also known as Boost-Up) was developed to stimulate “high levels of pre-academic and early academic development skills among all children, from those at risk of failing to those fully prepared for academic learning.” (Minnesota Learning Resource Center Staff, 2003, p. 4) SMART/Boost-Up is a neuro-development stimulation program that addresses delays in visual perception, auditory processing, attention and impulse, eye-hand coordination, and physical balance that have been identified as neurological and physiological readiness gaps that contribute to difficulty in learning at school. By integrating neuro-development maturation techniques into the regular curriculum, SMART/Boost-Up accelerates the “acquisition, retention, and production of basic skills” for children in pre-kindergarten and early elementary school (Minnesota Learning Resource Center Staff, 2003, p.3).

The philosophy of SMART/Boost-Up is to "boost substantial increases in the proportions of the students who are ready to respond favorably to academic instruction in the foundational primary grades through a strong program of readiness stimulation” (Palmer, L., Proffit, K.O., & DeBoer, B., 2004, p. 2). Teachers who effectively implement SMART/Boost-Up into their curriculum are able to “teach more because attention, acquisition, retention, and production abilities are increased” (Palmer, L., Proffit, K.O., & DeBoer, B., 2004, p. 2). In addition, students with significant learning problems usually become evident early in the program, which promotes early identification of risk for learning failure and the provision of early remedial intervention services. (Palmer, L., Proffit, K.O., & DeBoer, B., 2004)

Program activities include physically active neuro-development stimulation of vestibular senses (balance, attention), kinesthetic movement (coordination, strength), and reflex maturation (movement, attention) combined with visual, auditory, and listening skill maturation exercises (including phonemic awareness), eye-hand coordination, pre-printing, pre-reading, and early math cognitive stimulation (Palmer, L. & DeBoer B, 2003). A consistently positive classroom environment provides a foundation for effective teaching that emphasizes direct instruction and modeling of content with review until mastery is achieved (Palmer, L. & DeBoer B, 2003). This multi-sensory approach is conducted in the classroom, floor, and playground and integrates music, obstacle courses, games and stations, spinning, rolling, and other activities.

History of the SMART/Boost-Up Program

A Chance to Grow first developed the SMART/Boost-Up program in the mid 1980s, in conjunction with Dr. Lyelle Palmer, to "help children struggling in school close their learning readiness gaps" (Minnesota Learning Resource Center Staff, 2003, p. 4). A non-profit agency based in Minneapolis, A Chance to Grow expanded SMART/Boost-Up in 1987 through a four-year collaboration with Minneapolis Public Schools (http://themlrc.org/about/about_history.htm) Since that time, support for and use of the SMART/Boost-Up curriculum has grown because of its reputation for closing academic readiness gaps among students. In 1999, A Chance to Grow's K-8 charter school, New Visions School, created the Minnesota Learning Resource Center (MLRC) with funding from the Minnesota State legislature to replicate this program for broader usage (Minnesota Learning Resource Center Staff, 2003). The MLRC has continued to work with Minnesota schools through reauthorized funding from the state legislature (http://www.themlrc.org/about/about_history_expansion.htm). As more Minnesota schools benefited from the MLRC's training and mentoring, interest grew nationwide. As a result, the

MLRC received a major grant in the fall of 2001 through the U.S. Department of Education that allowed for program replication in schools around the country. As of the 2004-05 school year, the MLRC has worked with 75 elementary schools and pre-school sites across Minnesota and an additional 94 schools nationwide (http://themlrc.org/about/about_history.htm).

Evidence of SMART/Boost-Up Program Effectiveness

A scientific component is included as part of recent SMART/Boost-Up program funding. High levels of SMART/Boost-Up program effectiveness have been reported among various program sites, Title 1 schools, metropolitan districts, and rural schools (Palmer, L. & DeBoer, B., 2004). High levels of SMART/Boost-Up program effectiveness have been reported consistently between various program sites, Title 1 schools, metropolitan districts, and rural schools. Although data is not always comparable because a variety of assessment methods are used, pre-academic and early academic development skills are consistently superior among students who participate in SMART/Boost-Up programming. A brief overview of report findings from South Dakota, Tennessee, Wisconsin, and Minnesota are included below.

Research Findings from Minnesota. Impressive results have been measured in Minnesota for all years the SMART/Boost-Up program has been in use among kindergarteners, first graders, transition first graders, and second graders. Reported by Minnesota Learning Resource Center Staff in 2001, kindergarteners that received SMART/Boost-Up instruction showed advantages over control classes in visual and listening readiness, reading, and printing based on median comparisons during the school year 2000-01. Measures of smooth eye-hand pursuit, near-point visual convergence, auditory discrimination, sound blending, reading 32 most common words, reading 37 basic words, and printing skills all demonstrate SMART/Boost-Up students scoring higher than their peers in control classes. Similarly, comparison of median

percentages among first graders showed advantages for SMART/Boost-Up students in smooth eye-hand coordination, near point convergence, auditory discrimination, written spelling, manuscript printing quality, oral reading rate using curriculum-based measurement, oral reading fluency-accuracy, math facts per minute, and math fact accuracy.

Also impressive was the ability for students placed in transition first grade (students considered to be in the lowest quartile of ability and skill but who did not qualify for special education) to catch up with their peers (Minnesota Learning Resource Center Staff, 2001). After a year of receiving the first grade curriculum with SMART/Boost-Up stimulation, transition first graders were able to catch up to their peers in the following measures: smooth eye-hand coordination, near-point visual convergence, recognition of 32 most common words, letter word identification using the Woodcock Johnson Revised, math fact rate, printing quality, and written spelling (Minnesota Learning Resource Center Staff, 2001). Additionally, second graders showed developmental and academic gains superior to their peers in control classes for smooth eye-hand coordination, auditory discrimination phonemic awareness, written spelling proficiency, math fact mastery, and neuro-developmental maturation of the Laudau Reflex (a neck reflex that is thought to impact attention, concentration, and academic progress, including reading difficulty, if immature) (Minnesota Learning Resource Center Staff, 2001).

Comparable results were found among SMART/Boost-Up students during the 2002-03 and 2003-04 Minnesota school years. From their 2003 report, Palmer and DeBoer emphasized the advantage of attending all-day/daily kindergarten versus half-day/alternate day kindergarten. Gains were striking for printing quality and early literacy using curriculum-based measures. For example, high proficiency printing was achieved by an additional one-fourth of students who attended all-day/daily kindergarten compared to the half-day/alternate day kindergarten.

Likewise, the all-day/daily kindergarten group was better prepared for successful reading in first grade as measured by word recognition from a list of the most common words to be encountered in first grade (Brigance, 2000) or a 32-word list. In every comparison, advantages were realized among students in all-day/daily kindergarten.

In their 2004 report of preliminary findings of Minnesota program sites, Palmer and DeBoer emphasized the cumulative benefit of continued participation in SMART/Boost-Up beyond kindergarten. For first graders, after two years in SMART/Boost-Up, 88% of their word recognition skills were above the first quartile (25th percentile), 69% were above the mean in word recognition skills, 88% made at least one year of progress in reading, and the median word recognition was at the 2.3 grade level. Similarly, for second graders who had participated in a second or third year of SMART/Boost-Up instruction, 92% scored above the first quartile on word recognition, 92% advanced by one year in word recognition, and 95% scored above the first quartile for auditory discrimination (Palmer, L. & DeBoer, B., 2004).

Research Findings from South Dakota, Tennessee, and Wisconsin. Findings from research conducted at program sites in South Dakota, Tennessee, and Wisconsin also yielded advantages for students who participated in SMART/Boost-Up. The 2001-2003 National Projects Summary Report (Minnesota Learning Resource Center Staff, 2003) of SMART/Boost-Up programming in rural Title 1 schools in rural South Dakota, Tennessee, and Wisconsin focused on kindergarten readiness for first grade and early literacy in grades K-2 and compared data between students who received SMART/Boost-Up instruction with those who did not. The Metropolitan Readiness Test-6th Edition, a nationally standardized school readiness measure, was used to assess kindergarteners' end-of-year skill levels in May and produced scores for Beginning Reading Skills, Story Comprehension, Qualitative Concepts, and a Pre-Reading

Composite. For the years 2001-02, a median range of 68-82% of SMART/Boost-Up students scored above the national mean compared with 46-57% of students in the 2002 Wisconsin control group. In the Pre-Reading Composite, “32% more of the student population was considered to have good readiness for reading compared with both the national norms and the control group” (Minnesota Learning Resource Center Staff, 2003, p. 14). The research suggests a conservative expectation that “25% more of the students would be ready to read in rural Title 1 school populations” by participating in SMART/Boost-Up programming (Minnesota Learning Resource Center Staff, 2003, p. 14).

Impressive results were also reported among Title 1 Schools in Huron, South Dakota (Palmer, L., Proffit, K.O., & DeBoer, B., 2004) and Wisconsin in 2004 (Palmer, L., Proffit, K.O., & DeBoer, B., 2004). In Huron, preliminary results were reported for regular education students in kindergarten through second grade in Title 1 schools and with low SES who participated in SMART/Boost-Up for more than one year. Students were evaluated in September and May for word identification and oral text accuracy fluency and reading levels using the Developmental Reading Assessment (DRA), phoneme differentiation using the Wepman Auditory Discrimination Test, and kindergarten printing. In all measures, “high medians of class medians and high proportions of students at average range or higher were found” (Palmer, L., Proffit, K.O., & DeBoer, B., 2004, p.1). In addition, class medians showed that students participating in SMART/Boost-Up were reading “about a half-year advanced at each grade level on the DRA” (Palmer, L., Proffit, K.O., & DeBoer, B., 2004, p.1).

Similar results were found in rural Wisconsin Title 1 schools among kindergarten through third graders who participated in SMART/Boost-Up as compensatory enrichment (because of low SES) for a second year (kindergartners had participated in pre-kindergarten). Participation in

SMART/Boost-Up resulted in “high proportions of students above the first quartile and above the norm means” (Palmer, L., Proffit, K.O., & DeBoer, B., 2004, p.1). More than one year of experience with the program increased standard scores and the proportion of students above the first quartile. In addition “pre-kindergarten and kindergarten participation produced readiness and early literacy improvement for large proportions of students to normal and superior levels” (Palmer, L., Proffit, K.O., & DeBoer, B., 2004, p.1).

Gaps in SMART/Boost-Up Program Research

As demonstrated in the preceding overview of research findings, a positive relationship between the SMART/Boost-Up program and pre-academic and early academic development skills has been established. High levels of SMART/Boost-Up program effectiveness have been reported consistently between various program sites, Title 1 schools, metropolitan districts, and rural schools. But pre-academic and early academic development skills are only one dimension of program effectiveness. Could the SMART/Boost-Up program be related to other desirable aspects of the learning environment, such as students’ social classroom behavior and attitude toward school? Although anecdotal references of increased student confidence and fewer behavior problems and referrals to special education are reported (Palmer, L., Proffit, K.O., DeBoer, B, 2004; Minnesota Learning Resource Center Staff, 2001), the nature of the relationship between the SMART/Boost-Up program and non-academic aspects of the learning environment has not been examined empirically. An opportunity to better understand the SMART/Boost-Up program exists because of these gaps in current research.

Purpose of This Research Study

The purpose of this study was to launch an investigation into the nature of the relationship between the SMART/Boost-Up program and non-academic aspects of the learning environment

based on teacher perceptions. Specifically, the following research questions and hypotheses were developed:

a) What is the nature of the relationship between teacher use of the SMART/Boost-Up program and teacher perceptions of students' attitude towards school? It is hypothesized that there will be a positive relationship between teacher perceptions of students' attitude towards school and their use of the SMART/Boost-Up program.
b) What is the nature of the relationship between teacher use of the SMART/Boost-Up program and teacher perceptions of students' social classroom behavior? It is hypothesized that there will be a positive relationship between teacher perceptions of students' social classroom behavior and their use of the SMART/Boost-Up program.

This study is important because the results will provide preliminary information about the nature of the relationship between the SMART/Boost-Up program and students' attitude and behavior based on teacher perceptions. Although additional research will be required, a positive relationship between SMART/Boost-Up and desirable student attitudes and behaviors would expand the program's reputation for closing academic readiness gaps to also promoting improved social classroom behavior and attitudes toward school among students. Further, empirical data that supports a positive relationship between the SMART/Boost-Up program and desirable student attitudes and behaviors could provide additional rationale for continued program funding through the MLRC at a state and national level.

METHOD

Participants

163 elementary teachers completed a survey designed to measure teacher perceptions of students' social classroom behavior and attitude toward school. This represents a 54 percent rate of return. Of the teachers that participated in this study, 92.6% were female and 7.4% were male. The ethnicity of the teachers was 95.1% Caucasian American and 4.9% African American. Of the states chosen from a list provided by A Chance To Grow, 34.4% of schools were chosen from Wisconsin, 34.4% schools were chosen from Minnesota, 12.3% schools were chosen from South Dakota, 9.2% schools were chosen from Florida, 4.9% schools were chosen from Delaware and 4.9% schools were chosen from Iowa. Additionally, the location of the teachers' schools was 65.6% rural, 22.1% suburban and 12.3% urban. Regarding grade level, 28.2% of teachers taught first grade, 28.2% taught second grade, 23.3% taught third grade, and 20.2% taught fourth grade. Also as part of the survey, participants were asked about years of experience. Teachers indicated that 9.8% of them had 0-5 years, 12.9% of them had 6-10 years, 13.5% had 11-15 years, 16.6% had 16-20 years, 33.1% had 21-30 years, and 14.1% had more than 31 years of experience teaching. Overall, 56.4% of teachers used the Boost-up/SMART curriculum in their classrooms and 43.6% did not.

Instrument

Using a likert scale, teachers rated their students' attitude toward school and social classroom behavior by marking a "0" indicating Never to a "6" indicating Always. Items on the survey were created based upon characteristics that have been commonly associated with attitude toward school and social behavior in both the literature and in the experimenters' clinical experience. The teachers were asked to also provide demographic information, including:

location of school, grade taught, years of classroom teaching experience, teacher ethnicity, and teacher gender. Additional information on the survey is provided in a later section of the current study (see Appendix).

Use of SMART/Boost-Up programming. The independent variable in this study was the extent to which a teacher implemented SMART/Boost-Up programming in his or her classroom. This was measured as a continuous variable by one item on the survey that asked the teacher to rank, on a scale from zero (Never) to six (Always), his or her use of SMART/Boost-Up procedures in the classroom. Use of SMART/Boost-Up was also analyzed as a categorical variable based upon whether the teacher chose "0" (no use of SMART/Boost-Up) or a numeral from one to six (use of some SMART/Boost-Up).

Attitude toward school. The first dependent variable in this study was teacher perception of students' attitude toward school. Teachers were asked to rate their class as a whole on this variable. Attitude toward school was measured as a continuous variable based upon the teacher's response to five "attitude" questions on the survey. For example, one "attitude" question from the survey was, "My students are enthusiastic about learning." The five items loaded onto a single factor (attitude) and this factor had an alpha reliability of .73. Questions one, two, five, seven, and ten represented the items measuring Attitude toward school (see Appendix).

Social classroom behavior. The second dependent variable in this study was teacher perception of students' social classroom behavior. Again, teachers were asked to rate their class as a whole on this variable. Social classroom behavior was measured as a continuous variable based upon the teacher's response to five "social" questions on the survey. These items were intended to measure teacher perceptions of positive social skills in the classroom. For example, one "social" question from the survey was "My students are cooperative." The five items loaded

onto a single factor (social) and this factor had an alpha reliability of .62. Questions three, four, six, eight, and nine represented the items measuring Social classroom behavior (see Appendix).

Procedure

A list of addresses of schools using Boost-up was provided by A Chance To Grow. Using this list, surveys were sent to individual teachers working within the schools. The surveys were sent by mail along with a cover letter and a stamped return address envelope. Once returned, the surveys were analyzed using the Statistical Package for the Social Sciences. Some items on the survey were reverse-coded so that all items reflected positive statements. The items that were reverse-coded were items two, three, five, and ten (see Appendix).

RESULTS

Attitude Toward School

A bivariate correlation was performed to determine if there was a significant relationship between the amount of teacher use of SMART/Boost-Up and teacher perceptions of students' attitude toward school (see Table 1). A marginally significant correlation emerged for the relationship between amount of use of SMART/Boost-Up and teacher perceptions of students' attitude toward school, such that perceptions of student attitude toward school became increasingly more positive as the teachers used more SMART/Boost-Up (r=.14; p<.07).

Additionally, independent samples t-test was performed to detect differences between the teachers that used Boost-up and the teachers that did not use Boost-up on the attitude variable (see Table 2). Teachers who used SMART/Boost-Up had higher perceptions of students' attitude toward school in comparison to teachers who did not use SMART/Boost-Up (t=-1.95; p<.05).

Social Classroom Behavior.

A bivariate correlation was performed to determine if there was a significant relationship between the amount of teacher use of SMART/Boost-Up and teacher perceptions of students' social classroom behavior (see Table 1). There was no significant relationship between amount of SMART/Boost-Up use and perceptions of social classroom behavior.

Additionally, independent samples t-test was performed to detect differences between the teachers that used Boost-up and the teachers that did not use Boost-up on the social behavior variable (see Table 3). Use of SMART/Boost-Up produced a marginally significant effect on this variable, such that teachers who used SMART/Boost-Up had higher perceptions of their students' social classroom behavior than teachers who did not use Boost-up (t=-1.84; p<.07).

Additional Findings

When further comparisons were made using the demographic information provided by the survey, other main effects were found. These effects could potentially have influenced the outcome of the research data, and are therefore included in the present study.

A one-way analysis of variance was performed for each of the dependent variables (attitude and social) with the following demographic indicators: location (rural, suburban, or urban), grade (first through fourth), years of classroom experience (by category), teacher ethnicity, and teacher gender. All analyses were performed using a significance level of .05. No significant effects were found for years of classroom experience, teacher ethnicity, or teacher gender.

A significant difference was found between geographic location categories. A Scheffe post hoc test revealed that there was a statistically significant difference between urban and suburban teacher perceptions of student attitude toward school (F=4.14; df=2; p=.018) and social

classroom behavior (F=9.6; df=2; p<.001), such that the two variables were more positive in the suburban teachers' classrooms. There was not a significant difference between rural locations and the other two groups (suburban, urban) on either attitude toward school or social classroom behavior.

A significant difference for attitude toward school was also found between grades (F=4.07; df=3; p=.008). A Scheffe post hoc test revealed that there was a significant difference between the perceptions of teachers in the first grade and in the third grade on the attitude toward school variable. The teachers in first grade perceived their students as having a more positive attitude toward school than the teachers in the third grade. On the social classroom behavior variable, there were no differences between grades.

Discussion

Prior to this study, the relationship between the SMART/Boost-up program and non-academic aspects of learning, such as attitude towards school and social behavior, had not been examined empirically. However, there has been some anecdotal evidence to suggest that students using the program may have had increased confidence and fewer behavioral problems, compared to students who did not participate in the program. Building upon this anecdotal evidence, the purpose of this study was to examine the relationship of the SMART/Boost-up program on teacher perceptions of their students' attitude toward school and social classroom behavior. It was hypothesized that there would be a positive relationship between use of the program and perceptions of attitude toward school and social behavior.

Results of the current study provided preliminary evidence that using the SMART/Boost-Up program in the classroom may be beneficial when looking at students' attitudes toward school and social classroom behavior. When looking at the amount of Boost-up usage in the classroom

("none" to "always"), there was a marginally significant positive correlation with amount of program usage and teacher perceptions of attitude toward school. This indicates that, as teachers use more Boost-Up in their classrooms, their perceptions of student attitude toward school increase. Additionally, whether or not teachers used Boost-Up at all in their classroom ("yes" or "no" use of Boost-Up) resulted in a significant effect on perceptions of both attitude toward school and social classroom behaviors. The teachers who used Boost-Up had higher perceptions of their students' attitude toward school and social behaviors, compared to teachers who did not use the program. Overall, this study indicates that there may be a positive effect of using Boost-Up on both attitude toward school and social classroom behavior. Because the effects were marginal, further research is suggested to validate this conclusion.

However, within this study, additional variables were found to affect the perceptions of teachers. As part of the survey sent to teachers, demographic data was gathered on years of classroom experience, ethnicity and gender of teacher, location of school, and grade taught. Statistical data indicated that there was no effect for years of classroom experience, teacher ethnicity, or teacher gender on perceptions of attitude toward school or social classroom behavior. However, there was a significant difference between geographic location of urban and suburban teachers, suggesting that the suburban teachers perceived their students as having a more positive attitude toward school and more positive social classroom behaviors. There was also a significant difference found between grades, such that first grade teachers perceive their students to have a more positive attitude toward school than third grade teachers. These additional findings are important to note because these variables could have been confounding variables, and may have influenced the outcome of the research questions. It is suggested that these variables should be controlled for in future studies.

Limitations of Study

Limitations of this study include the elimination of kindergarten teachers from the sample, the unknown history of student experience with SMART/Boost-Up prior to the 2005 school year, the time of year the survey was mailed, and the use of perception as a basis of evaluation. Although SMART/Boost-Up is used in kindergarten, teachers of kindergarten were not included in the sample because of the variability of kindergarten schedules (e.g., all-day, every day versus half-day, alternate day). As presented in the review of literature, significant differences in pre-academic and early academic skills had been reported between all-day/every day and half-day/alternate day kindergarten classrooms whom use SMART/Boost-Up programming. Kindergarten classes were consequently eliminated from the sample to avoid a potential confounding variable. Additionally, the history of students' experience with SMART/Boost-Up was not captured in this study because the survey was based on teachers' perception of their students as a whole rather than as individuals. If repeat exposure to SMART/Boost-Up creates a cumulative effect among students' attitude and behavior as the research suggests it does in pre-academic and early academic skills, the results of this study could be influenced by students' prior experience with SMART/Boost-Up. Also, because the survey was to be returned by November 15th, only two months into the school year, the SMART/Boost-Up program may not have realized its full effect. Consequently, results may have been different closer to the end of the school year. Finally, this study was based on teacher perceptions of their students; we cannot know whether those perceptions are accurate reflections of students' beliefs about their own attitude and behavior.

Suggestions for Future Research

Opportunities for future research in this area are vast because the nature of the relationship between the SMART/Boost-Up program and non-academic aspects of the learning environment has been largely unexplored. Because the results of our study supported a positive relationship between SMART/Boost-Up and desirable attitudes toward school and social classroom behavior, this area warrants further exploration.

One suggestion for future research would be to survey teachers closer to the end of the school year or in both September and May to achieve pre and post-test measures. A second suggestion would be to survey students in September and May to explore their attitude toward school and social classroom behavior prior to and after experiencing SMART/Boost-Up over the course of a school year. This method would be particularly appealing because it would eliminate perception as an uncontrollable variable. A third suggestion would be to analyze each "attitude toward school" and "social classroom behavior" statement individually and design a study focusing on the specific statements that correlated positively with SMART/Boost-Up exposure. This would provide a more comprehensive understanding of the relationship between SMART/Boost-Up and students' attitude and behavior. For all suggestions, a control group could be created from separate schools and balanced based on demographics (e.g., school size, school location) rather than having it fall from the sample.

The current study is important because it could encourage future research into the nature of the relationship between the SMART/Boost-Up program and non-academic aspects of the learning environment. Empirical support of a positive relationship between the program and desirable student attitudes and behaviors could expand SMART/Boost-Up's reputation for closing academic readiness gaps to also contributing to a more desirable classroom environment.

This would not only further our understanding of the SMART/Boost-Up program but also provide additional rationale for continued program funding through the MLRC at a state and national level.

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Table 1

Bivariate Correlations with Amount of Boost-up Use

	Pearson Correlation (*r*)	2-tailed sig. (*p*)
Attitude	.143	.069
Social	.105	.183

Table 2

Group Statistics for Use of SMART/Boost-Up on Attitude Variable

	n	*M*	*SD*	*SEM*
No Boost-up	92	20.32	3.43	.357
Yes Boost-up	71	21.28	2.71	.322

Independent samples t-test for equality of Attitude means

t	*df*	*p* (2-tailed)	*M* difference
-1.95	161	.053	-.966

Table 3

Group Statistics for Use of SMART/Boost-Up on Social Variable

	n	*M*	*SD*	*SEM*
No Boost-up	92	19.52	3.48	.363
Yes Boost-up	71	20.44	2.68	.318

Independent samples t-test for equality of Social means

t	*df*	*p* (2-tailed)	*M* difference
-1.84	161	.068	-.915

Appendix

Survey Sent to Teachers

0=Never

1=Almost Never

2=Seldom

3=Half the Time

4=Usually

5=Almost Always

6=Always

1. My students are enthusiastic about learning	0 1 2 3 4 5 6
2. My students lack confidence in their academic abilities	0 1 2 3 4 5 6
3. My students do not respect their classmates' feelings	0 1 2 3 4 5 6
4. My students have age-appropriate social skills	0 1 2 3 4 5 6
5. My students do not take initiative in daily academic tasks	0 1 2 3 4 5 6
6. My students have very few behavioral problems	0 1 2 3 4 5 6
7. My students like coming to school	0 1 2 3 4 5 6
8. My students listen to and follow directions	0 1 2 3 4 5 6
9. My students are cooperative	0 1 2 3 4 5 6
10. My students are off-task and lack concentration skills	0 1 2 3 4 5 6
11. I integrate the Boost-Up/SMART curriculum in my classroom	0 1 2 3 4 5 6