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Amy M. Whitcomb
Eastern Illinois University

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Examination of Teachers' Perceptions of the Importance of Academic Enablers, Feasibility of Academic Enabler Instruction, and Academic Enabler Instruction Practices

BY

Amy M. Whitcomb

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
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Examination of Teachers' Perceptions of the Importance of Academic Enablers, Feasibility of Academic Enabler Instruction, and Academic Enabler Instruction Practices

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Abstract

Academic enablers are beliefs, attitudes, and behaviors that help an individual to succeed academically. The four academic enablers identified by DiPerna and Elliott (2000) and measured by the Academic Competence Evaluation Scales (DiPerna & Elliott, 2000) include engagement, interpersonal skills, motivation, and study skills. A wealth of literature has detailed the critical importance of academic enablers to academic success, as well as identified specific ways which teachers can instruct students in development of these skills. While DiPerna and Elliott (2000) note that teachers' perceptions of the importance of these skills and related behaviors can assist in informing intervention for individual students, research has not examined the perceived importance of academic enablers at the classroom level, or how perceived importance relates to perceived feasibility of and actual practice of instruction in these skills. The current study examines how important teachers perceive academic enablers, how feasible they perceive instruction in these skills, and how often they engage in instruction in these skills in the classroom. Results from the study indicate that teachers perceive all academic enablers (and related behaviors) to be at least moderately important, and instruction in the core academic enablers to be at least moderately feasible. Participating teachers reported engaging in instruction in each of the four core enablers on average between once a month and once a week. Differences among grade clusters (e.g., K-2, 3-5, and 6-8) in average ratings of these variables were found to be miniscule, if present at all. Among the three variables, only Average Feasibility Rating and Average Instruction Frequency were found to be significantly correlated. Limitations of the current study, as well as suggestions for future research, are discussed.

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Examination of Teachers' Perceptions of the Importance of Academic Enablers, Feasibility of Academic Enabler Instruction, and Academic Enabler Instruction Practices

Introduction

The current study examined how important teachers perceive academic enablers, how feasible they perceive instruction in these skills, and how often they engage in direct instruction in these skills in the classroom. In order to have a clear understanding of these variables, however, some background knowledge is necessary. Researchers argue that academic competence is comprised of two domains: academic skills and academic enablers (DiPerna & Elliott, 2002). Academic skills, according to DiPerna and Elliott (2002), are "the basic and complex skills that are the primary focus of academic instruction in elementary and secondary schools" (pp. 293-294), including reading, mathematics, and critical thinking. Academic enablers, on the other hand, are "attitudes and behaviors that allow a student to participate in, and ultimately benefit from, academic instruction in the classroom" (p. 294), such as interpersonal skills, engagement, motivation, and study skills.

The Academic Competence Evaluation Scales (ACES; DiPerna & Elliott, 2000), discussed in further detail later, measures both academic skills and academic enablers. In conjunction with academic skills, academic enablers work to promote academic success. A wealth of literature (e.g., Caldarella et al., 2009; DiPerna et al., 2001; Rozalski, 2008; Willingham et al., 2002) has detailed the critical importance of academic enablers to academic success, as well as identified specific ways which teachers can instruct students in the development of these skills. DiPerna and Elliott (2000) note that teachers'

perceptions of the importance of academic enablers can assist in informing intervention for individual students, but research has not examined the perceived importance of academic enablers at the classroom level. In other words, teachers have not been asked which of these four academic enablers are most important to academic success for all students. Additionally, the relationship between importance and perceived feasibility of and actual practice of direct instruction in these skills has not been investigated.

Academic Enablers

Academic enablers are skills and attitudes that support, or enable, academic success. The four academic enablers included in the model are engagement, interpersonal skills, motivation, and study skills. Engagement refers to a collection of behaviors that indicate a child's active participation in the classroom. Interpersonal skills are those skills that allow children to maximize positive interactions with others and minimize negative interactions with or negative responses from others. Motivation refers to an individual's beliefs regarding his or her performance in a specific task or domain. Study skills are cognitive processes and skills that allow a child to effectively and efficiently take in new information. Based on their research, DiPerna, Volpe, and Elliott (2002) propose a model of the specific way the various academic enablers interact to promote achievement. This model illustrates that the academic enablers are directly or indirectly related to a child's current level of academic achievement. For example, according to the model, motivation has an indirect but essential role in promoting academic achievement. Motivation is influenced by a student's prior achievement and interpersonal skills, which are two other factors that directly influence each other. It was hypothesized that motivation directly influences engagement and study skills, which in

turn directly influence current academic achievement. In the hypothesized model, prior achievement is directly associated with current academic achievement, but also is indirectly linked to it through motivation. The authors argue that this model is unique and important because it "include[s] student skills, attitudes, and behaviors that are empirically supported correlates of academic outcomes" (p. 301). This model is illustrated in Figure 1. In later research, DiPerna (2006) proposed a broader model describing how academic enablers work in the larger school context to promote academic achievement. He proposed that classroom instruction is directly related to students' attitudes and behaviors (academic enablers); academic enablers then mediate the relationship between classroom instruction and growth of academic skills. At the same time, classroom instruction quality is directly related to students' academic skill development. Together, these constructs work together and are related to students' academic achievement. This model is illustrated in Figure 2.

Literature suggests that an understanding of how academic enablers are associated with academic achievement can help inform assessment and intervention. For example, DiPerna (2006) argues that academic enablers are critical in aiding classroom learning and should be included in a wide-ranging assessment plan for a student experiencing difficulties in school. He argues that focusing on making improvements to content or skill-focused instruction alone may not be adequate to facilitate a positive academic change. In order to fully incorporate all constructs that should be considered with regard to assessment and intervention (including academic enablers), DiPerna (2006) argues that practitioners must have an understanding of each of the enablers and how each is related to academic development. A detailed description of each of the academic enablers

(motivation, engagement, interpersonal skills, and study skills) follows.

Motivation

Motivation is one academic enabler that plays a central role in academic achievement. Linnenbrink and Pintrich (2002) identify motivation as a complex, multifaceted construct that is not fixed but varies with different subjects and classroom environments. They identify four "categories" of motivation: self-efficacy, attributions, intrinsic motivation, and goal orientations. Self-efficacy is defined as "individuals' beliefs about their performance capabilities in a particular context or a specific task or domain" (Linnenbrink & Pintrich, 2002, p. 315); contrary to self-esteem (which is a broad belief about oneself), it is profoundly context/domain specific. Academically, higher self-efficacy has been related to higher achievement and learning, as well as more persistent effort and work on difficult tasks. Higher self-efficacy has also been shown to be correlated with higher engagement (another academic enabler) and self-regulation, as well as higher overall achievement (Linnenbrink & Pintrich, 2002).

The second "category," attribution, refers to one's analysis of the origin of/reason for success or failure. As Linnenbrink and Pintrich (2002) note, the literature suggests that adaptive, internal attributions (e.g., ability, skill, talent) are important for success. They argue that adaptive attributions are associated with increased self-efficacy and positive affect, which in turn are associated with better engagement, study skills, and overall achievement.

Intrinsic motivation, defined by Linnenbrink and Pintrich as "motivation to engage in an activity for its own sake" (p. 318), is comprised of personal and situational interest and also plays an important role in academic success. An individual's interest in

the material is associated with greater attention and persistence, higher engagement, and greater overall achievement.

The fourth and last area of motivation introduced by Linnenbrink and Pintrich (2002) is goal orientations. They discuss that an individual's goals when completing a task can be mastery-based or performance-based. With regard to outcomes of each of these types of goals, mastery-based goals (i.e., goals based on developing skills and improving competence based on self-referenced standards) are associated with positive outcomes in motivational, cognitive, and achievement domains, including stronger self-efficacy in the face of failure, decreased anxiety, and increased focus and engagement. They note that empirical evidence demonstrates that mastery goals are positively associated with school learning, along with other academic enablers including engagement and study skills. On the other hand, performance-related goals, or those based on competition with others, are associated with maladaptive outcomes, including increased anxiety and distraction, which can lead to decreased focus and engagement.

Similar to Linnenbrink and Pintrich (2002), DiPerna (2006) describes motivation as a multifaceted construct that includes self-efficacy, intrinsic motivation, and goal orientation. He notes that high self-efficacy has been linked to higher achievement, persistence, and effort. Intrinsic motivation, "an individual's willingness to engage in an activity for its own sake" (p. 8), is related to higher persistence and engagement, as well as higher achievement overall. Development of mastery goals, goals related to increased understanding of a subject, is related to higher engagement, study skills, and achievement overall (DiPerna, 2006).

Regardless of the specific way motivation is conceptualized, literature has

continually supported the important role it plays in academic achievement. Consistent with DiPerna, Volpe, and Elliott's (2002) model, its role in fostering achievement has been shown to be indirect but imperative. Its relationship with academic achievement comes primarily through interaction and association with other academic enablers, including engagement and study skills.

Promoting motivation in the classroom. Because motivation plays a central role in academic achievement, teachers should take care to incorporate activities and lessons that promote motivation. The literature describes many ways in which this can be done. For example, Linnenbrink and Pintrich (2002) discuss that teachers can foster self-efficacy in their students by providing them with a wide range of tasks and opportunities (e.g., a wide range of assignments such as essays, projects, or portfolios) within their abilities so that they can develop new abilities through them. They also suggest that to foster adaptive attributions in students, teachers should monitor their own reactions to students' success or failure, as teachers' reactions can influence how students perceive their own success or failure. In addition to these suggestions, they also argue that teachers can foster students' interest (intrinsic motivation) to promote success by including exciting, engaging activities (e.g., science experiments, a fun new computer program) into lessons, as well as focusing on the broader utility of the material being taught (i.e., how and when the material will be useful elsewhere). Further, they argue that teachers can promote development of mastery-related goals by re-structuring the way they carry out routines in their classrooms, including evaluating students, assigning tasks, and setting up rules. With regard to assigning tasks, they suggest that teachers should favor tasks that emphasize hands-on engagement, that are challenging, and that help

students apply the lesson to other situations outside of the classroom. They also suggest that teachers can promote development of mastery-related goals by stepping back and allowing students to have more autonomy.

Engagement

As with motivation, the literature describes engagement as a complex, multifaceted construct. DiPerna (2006) explains that engagement reveals students' active participation in what is going on in the classroom and comprises writing, task participation, reading aloud, asking questions, and answering others' questions. Greenwood, Horton, and Utley (2002) echo this conceptualization, explaining that engagement is a collection of specific behaviors such as writing, participating in tasks, reading aloud, reading silently, discussing academics, and asking and answering questions. Moreover, past research on engagement (e.g., Greenwood et al., 2004, as cited by DiPerna, 2006) categorizes these various tasks into several sub-constructs: academic responding behaviors, task-management responding behaviors, and inappropriate behaviors. Academic responding behaviors (including reading and writing) have been positively associated with academic achievement, while inappropriate behaviors (e.g., off-task behaviors such as looking around) have been negatively associated with achievement. Task-management behaviors, for example, looking at the teacher, have been found to have no notable relationship with achievement.

Alvarez and Frey (2012) also argue that the construct of engagement is comprised of several components, including behavioral engagement, emotional engagement, and cognitive engagement. Behavioral engagement involves participation in both classroom and extracurricular activities. Emotional engagement involves interactions (both positive

and negative) in the domains of interaction with teachers, interaction with peers, academics, and school. Cognitive engagement involves willingness/effort on the part of the student to complete assigned work. All three types of engagement are important components of academic success. For example, Alvarez and Frey (2012) argue that behavioral engagement is positively correlated with academic outcomes and negatively associated with school drop-out, while emotional engagement plays a key role in a student's willingness to complete school work.

Promoting Engagement in the classroom. Literature has consistently supported the argument that engagement is related to the classroom environment. For example, Dotterer and Lowe (2011), in their research with the young adolescent population, found that classrooms with high-quality instruction, a warm socio-emotional environment, and low student-teacher conflict yielded higher engagement behaviors from students. Simply put, they observed that students who feel supported and enriched in the classroom are more likely to engage themselves in classroom activities. Schussler (2009) argues that, in order to promote optimal student engagement, a classroom must: 1) have opportunities for success, 2) have flexible avenues for learning to occur, and 3) make students feel respected and supported by the teacher. She suggests that teachers can help foster engagement through their instructional techniques (e.g., using an enthusiastic presentation style, and using personal experience to supplement material and to make it more relatable).

Interpersonal Skills

DiPerna (2006) defines social skills (or interpersonal skills) as "learned behaviors that enable a person to interact with others in ways that elicit positive responses and assist

in avoiding negative responses" (p. 10). He argues that these skills have a significant relationship with academic achievement. For example, he notes that past research (e.g., Malecki & Elliott, 2002; Wentzel, 1993) has supported the connection between social skills and academic achievement, particularly with regard to standardized achievement test scores. Other literature supports the important role that interpersonal skills play in academic achievement as well. For example, Wentzel and Watkins (2002) argue that academic achievement is associated with peer relationships and collaborative interactions with peers. They note that literature has consistently proposed that positive peer status and peer acceptance is associated with academic achievement, while peer rejection and non-acceptance is related to negative academic outcomes. They argue that one explanation for the connection between peer relationships and positive academic outcomes can be termed the behavioral styles theory, which argues that the two are closely connected because many behaviors that are linked to peer acceptance (e.g., sharing, helping, cooperating) are also related to higher academic achievement, and vice versa: behaviors that are linked to peer rejection (e.g., aggression, inappropriate behavior) are also linked to academic difficulty.

Another explanation for the connection between these two constructs lies in motivational outcomes. For example, a student who feels well-liked and accepted by peers will be more apt to enjoy going to school and will show more interest, whereas a student who feels rejected by peers will not be as motivated to attend and participate in school every day. This perspective has been well-supported in the literature. Wentzel and Watkins (2002) cite several studies (e.g., Hymel, Bowker & Woody, 1993; Wentzel, 1994) in observing that peer acceptance has been positively associated with school

satisfaction, motivation to learn and behave in ways that are socially appropriate, and perceived academic capability.

Other researchers, including Martin and Dowson (2009), present other hypotheses with regard to the specific linkage between interpersonal skills and academic success. They too propose that interpersonal relationships are a crucial component of academic success, stating that interpersonal relationships in the classroom help students to learn values and beliefs necessary to be successful in the educational environment. Adaptive beliefs learned through interpersonal relationships then lead to better self-regulation, persistence, and goal striving.

The authors present several ways to look at this correlation between interpersonal relationships and motivation. One way is through the need to belong hypothesis, which argues that human beings have a drive to form and maintain at least some positive, lasting relationships with others, and when this need is fulfilled, a positive emotional response results. In the context of the educational setting, the positive emotional responses to positive interpersonal relationships influence a student's classroom behaviors, including response to challenging material and self-regulation. Relatedly, the authors also note that the relationship-motivation connection can also be viewed as an indirect one. In other words, they argue that peer relationships positively affect students' motivation and behavior by positively affecting other self-processes that are related to achievement motivation. They argue that positive interpersonal relationships help to promote, among other things, feelings of self-worth and self-esteem. Increased self-worth and self-esteem is then related to higher levels of achievement motivation. They further argue that interpersonal relationships positively affect important psychological needs in such a way

to foster achievement motivation.

Promoting Interpersonal Skills in the Classroom. Much literature has discussed ways that interpersonal skills can be fostered in the classroom as well. For example, Wentzel and Watkins (2002) proposed collaborative learning, which "involves the joint structuring of an activity with shared participation of two students in which outcomes for each individual are typically documented" (p. 370). As they noted, literature has proposed that engagement and intellectual skill development can be fostered through the peer interaction involved in collaborative learning situations. Apart from engagement, other academic enablers positively influenced by peer collaborative learning include intellectual enablers such as problem solving skills and increased recall and comprehension, as well as negotiation and social communication (specific academic enabling behaviors falling under the "interpersonal skills" category). With guidance from teachers, the authors argue that collaborative learning situations can be used to help students with disabilities such as ADHD. This was supported by a study done evaluating a social skills intervention done with a group of boys with ADHD, which found that increased guidance by trained partners significantly increased collaborative participation and mature problem solving and decreased solitary participation, dominance, and simplistic problem solving for the boys with ADHD.

Martin and Dowson (2009) also present suggestions for promoting interpersonal skills in the classroom. They suggest approaching intervention with regard to interpersonal relationships using a three-tiered model: at the level of the individual student, the level of the classroom, and the level of the whole school. At the student level, they recommend interventions such as extracurricular activity (e.g., music groups,

dance, church), cooperative learning, mentoring, and programs targeting at-risk populations. At the classroom level, they recommend the use of classroom-wide efforts to promote positive relations (and thus promote engagement and motivation) through the use of connective instruction, which includes showing students warmth, support, and acceptance. It is also important to consider classroom composition. In other words, the number of students in the classroom, where they sit and by whom they sit, with whom they work, with whom they get along, etc. At the whole-school level, a focus on cohesiveness and sense of belonging among the student body and faculty/staff can help to promote positive interrelations and thus, motivation and achievement. Effective leadership with regard to faculty and staff is also important at this level.

Other research regarding facilitation of interpersonal skills in the classroom was done by Ashdown and Bernard (2011). These researchers examined the efficacy of a program known as the You Can Do It! Early Childhood Education Program (YCDI) in promoting the social-emotional development, well-being, and academic achievement of 100 students in a Catholic school located in Melbourne, Australia. One group of students (one preparatory class and one grade 1 class) went through the program, while the other group did not, thereby serving as the control group. The results of the study indicated that, compared to the control group, the treatment group had significant social-emotional gains, as well as gains in social skills. With regard to academic achievement, the researchers found that students who had earned the lowest reading scores made significant improvements in reading achievement after the YCDI program (significantly more so than those who did not receive the program). On the importance of these findings, the researchers maintained that these findings provide further support for the

argument that socio-emotional competence is a core component of children's achievement and well-being, as well as the argument that improvement in these domains can be fostered through direct instruction in socio-emotional competence.

Further researchers, including Caldarella and colleagues (2009), have found similar support for specific programs to promote students' interpersonal skills. Caldarella and colleagues (2009) examined the efficacy of a Social and Emotional Learning (SEL) program called Strong Start, and found that among a group of second grade students, significant increases in pro-social behavior and significant decreases in internalizing behavior were seen in those who received the program. They found that this change was most marked in at-risk students. While this study itself did not examine academic performance, it can help to draw important conclusions when considered with the other literature: interpersonal skills are a critical component of academic success, and teachers can promote both academic and social success by incorporating into their daily classroom schedules specific techniques or lessons that foster interpersonal skills.

Study Skills

DiPerna (2006) cites Devine (1987) in describing that "study skills include a variety of cognitive skills and processes that help students acquire new information efficiently and effectively" (p. 9). These skills and processes include "recording, organizing, synthesizing, remembering, and applying information" (pp. 9-10). He notes that employment of study skills has been associated with higher scores on standardized tests and a higher rate of homework completion. Rozalski's (2008) conclusions on the construct of study skills agree with those of DiPerna (2006). He outlines a series of specific tasks that can be grouped into the category of "study skills," including note

taking, listening, memory, thinking and analysis, and test-taking skills. He argues that students with disabilities (including emotional and behavioral disabilities) often have difficulty mastering these skills that are crucial for academic success. However, both Rozalski (2008) and DiPerna (2006) argue that guided instruction can help to foster these important skills. Rozalski argues that receiving instruction in these skills has been shown to be instrumental in increasing students' abilities. Similarly, DiPerna (2006) argues that effective studying is a skill that requires direct instruction and practice to master.

Promoting Study Skills in the classroom. Rozalski (2008) discusses several ways teachers can incorporate lessons on these important skills into their regular classroom curriculum. For younger students, he suggests that playing listening games (including Simon Says) and having listening centers (i.e., where students can listen to a song or a story on tape and then re-tell or explain the story) are effective ways to promote listening skills. In classrooms for older students, where lectures become commonplace, some ways to promote listening skills include a game called Listening Bingo, and a "find the error" activity, in which the teacher intentionally includes an incorrect/incongruent fact in a lecture connected to the students' assigned reading, and the students must identify that incorrect fact.

With regard to note-taking, Rozalski (2008) argues that many students may struggle because they attempt to write every detail, rather than identifying and noting the main ideas in the lecture. He suggests that teachers can help students by providing pre-completed notes or a summary prior to the lecture. This is not the most effective method, however. Literature (e.g., Hamilton, et al., 2000) has suggested that taking and reviewing notes on one's own yields better academic performance. Further, all students will

eventually be in an academic situation where it will not be possible for the teacher to provide notes. As such, other methods may be more effective. Some suggestions include teaching students to write in shorthand/abbreviations, as well as teaching them effective note-taking strategies such as a three-column system wherein students take notes by carrying out tasks before, during, and after the lecture; other suggestions include the "think-pair-share" activity (wherein students think by themselves about the problem/question presented, pair up with another student to discuss, and then share thoughts with the class) and the K-W-L method (wherein students monitor their understanding by asking themselves "What do I Know?," "What do I Want to Learn?," and after material is presented, "What did I Learn?").

To promote thinking and analysis skills, Rozalski (2008) cites Algozzine and colleagues (1997) in suggesting several specific techniques that teachers can use. One such technique is to teach students to think aloud when solving a problem. Another technique that should be taught is the "How do you know that?" (HDYKT) process; in other words, it is beneficial for students to critically evaluate information (i.e., answers given by other students) by asking "How do you know that?" This especially will promote thinking and analysis skills by teaching students to back up their statements/answers with sources. Another suggested method for promoting thinking and analysis skills is the "SQ3R Method," a multi-step approach to reading and understanding material that includes *surveying* the material, *question* (i.e., identifying what the purpose of the material), and the "3 Rs," Reading effectively, Reciting important points, and Reviewing. Many students, especially those with emotional and behavioral difficulties, may also have difficulty remembering material. In order to promote students' recall of

important material, teachers can employ various "memory strategies" including rhymes/songs, acronyms, and mnemonics.

A way that teachers can promote good test-taking skills is by introducing students to and posting a visual reminder of the *DREAMS* strategy (particularly when students take a recognition test, such as a multiple choice or true/false test), which reminds students of helpful test-taking behaviors such as fully reading directions (D), reading all possible answers before selecting one (R), answering easy questions before moving on to more difficult ones (E), remembering that answers with "absolute" words (e.g., "sometimes," "never") are usually incorrect (A), marking questions as they read them (e.g., putting a star next to ones that he/she needs to go back to) (M), and remembering that similar and absurd answer options are usually incorrect (S). No matter what type of test the students will be taking, teachers can help promote good study skills by emphasizing the importance of organization. For example, by having students record test dates in their planner/calendar and by creating study guides that students can use to study prior to the exam. Teachers can further help by allotting a portion of class time for the students to form study groups to prepare for the test together.

In summary, the four core academic enablers are engagement, interpersonal skills, motivation, and study skills. As noted by DiPerna, Volpe, and Elliott's (2002) model, these four academic enablers are inextricably linked and work among one another to have a positive relationship with academic achievement, including homework completion, standardized test scores, and school satisfaction. There are many things teachers can do within their classrooms to enhance development of these critical skills. One factor to consider in examining which of these skills teachers may choose to focus on – either for

an individual child or for the class as a whole – is teachers' perceived importance of these skills.

Perceived Importance of Academic Enablers

The literature is clear that academic enablers, such as interpersonal skills, engagement, motivation, and study skills, are important to academic achievement, but little information exists about the value teachers place on academic enablers. In the manual of the ACES, DiPerna and Elliott (2000) cite Gresham and Elliott (1990) in explaining the inclusion of the importance ratings in the teacher form of the ACES, noting that these ratings can be instrumental in prioritizing specific behaviors to target with intervention. More specifically, areas that are at the "developing" level (labeled as performance or acquisition problems), but that teachers rate as "important" or "critical" will receive primary intervention attention.

Not only are the importance ratings an essential component in prioritizing target behaviors for intervention, but in a broader context, they can also help to reveal what area or areas a teacher might choose to emphasize in his or her classroom. In other words, if, for example, a particular teacher rated motivation and engagement as being more important than social skills and study skills, one might predict that that teacher will tend to, or at least be more willing to, spend more time fostering and incorporating engagement and motivation into lessons and less time doing so with study skills and social skills.

While teachers' ratings of the importance of academic enablers can provide a considerable amount of useful information, further examination of the importance ratings of the academic enablers and the various academic enabling behaviors in each category is

The fourth question asked how teachers' academic enabler importance ratings, their ratings of feasibility of academic enabler instruction, and the frequency with which they engage in academic enabler instruction are correlated with one another. Very little literature, if any, exists examining the relationship between these three specific variables. However, a wealth of literature suggests that the more feasible an individual perceives an intervention, the more likely that individual will be to implement that intervention with integrity. It can also be hypothesized that, the more important an individual perceives a certain area or topic to be, the more time he or she will spend devoted to that particular topic/area. Additionally, it can be hypothesized that one will be more open to, or more willing to "make room in the day for" activities or discussion on an area or topic that he or she feels is important. Thus, it was predicted that all three variables, importance, feasibility, and frequency of instruction, would be positively correlated with one another.

necessary. The ACES manual is lacking in this regard, failing to supply information regarding importance ratings of each of the individual academic enablers and of individual items in the standardization sample. More data in these areas may provide further information regarding intervention and, on a broader scale, teachers' day-to-day practices in the classroom.

Feasibility of Academic Enabler Instruction in the Classroom:

Another question regarding the academic enabler literature is the extent to which teachers believe that academic enabler instruction is feasible in the classroom. Little research has explicitly investigated teachers' feelings toward the feasibility of incorporating instruction or intervention focusing on academic enablers. However, broader literature on behavioral interventions may be instrumental in understanding what kind of academic enabler interventions may be considered most feasible in the classroom. For example, research examining teachers' perspectives on acceptability of behavioral interventions was done by Witt and Martens (1983). Their subject pool of 180 preservice and student teachers were given a case study to read, and then rated the acceptability of the hypothetical intervention using a 20-item rating form. The data were analyzed using principle component factor analysis, and this analysis yielded five areas considered in judging the acceptability of interventions: 1) the intervention's suitability for the mainstream classroom, 2) the risk the intervention poses for the child or children, 3) the amount of time it would take for the teacher to implement the intervention, 4) the potential negative side effects the intervention might have on the child or children, and 5) whether or not the teacher has the skills needed to implement the intervention. It can be predicted that, because these areas are considered important criteria for judging the

feasibility of implementing behavioral interventions in the classroom, they may also be considered important criteria for judging the feasibility of implementing other types of intervention or instruction as well, such as that for academic enablers.

Martens and colleagues (1985) also conducted research regarding teachers' acceptability ratings of school-based interventions and found two key variables that relate to their perceptions: direct implementation and timeliness. In other words, teachers rated interventions as most acceptable when they could be implemented by the teachers themselves and when they took a short amount of time to implement. This may hold true in classroom instruction of academic enablers as well. A teacher may be more likely to spend time teaching specific academic enabler skills if the instruction can be done by the teacher on his or her own, and if the instruction does not take up an extraordinary amount of time (e.g., if it can be worked into existing lessons).

Elliott (1988) also discusses several considerations that are related to teachers' intervention preferences. One such factor is the severity of the child's problem, or the problem of the class as a whole. Treatment has been shown to be considered more acceptable when the problem is more severe. In relation to teaching of academic enablers in the classroom, it suggests that teachers may be more willing to provide explicit instruction in the domain(s) in which the students in the classroom seem to be struggling the most. For example, if in a 6th grade science classroom, the teacher is having great difficulty getting students to participate in discussions and answer questions, that teacher may be more likely to spend time doing activities that foster engagement rather than focusing his or her energy on fostering study skills or interpersonal skills. Another factor found to affect acceptability ratings is reported effectiveness of a treatment (Elliott,

1988). Logically, teachers will be more willing to spend the time implementing a treatment that has been proven to work than one that has been shown to be ineffective. Applying this to classroom instruction of academic enablers, it can be hypothesized that a teacher may be more willing to spend time on instruction in a domain that has been proven to have a more direct relationship with academic success.

The Current Study

The literature provides overwhelming support for the argument that academic enablers, including interpersonal skills, engagement, motivation, and study skills, have a direct relationship with academic achievement. They interact with one another (DiPerna, Volpe, & Elliott, 2002) and in the broader school context (DiPerna, 2006) to promote academic success. Strategies that can be used by teachers to help promote academic enabler skills have also been well-documented in the literature (e.g., Dotterer & Lowe, 2011; Linnenbrink & Pintrich, 2002; Rozalski, 2008; Wentzel & Watkins, 2002). These strategies include broader techniques such as incorporating a wide range of activities into classroom lessons, as well as more specific techniques such as the SQ3R Method. Though there is ample evidence that academic enablers are important and that teachers can implement interventions to increase these skills and thereby increase students' academic achievement, little information exists regarding which enablers teachers perceive as most important, and whether teachers feel that academic enabler interventions are feasible in the classroom.

The ACES Manual (DiPerna & Elliott, 2000) briefly discusses that importance ratings are included in the teachers' edition of the ACES particularly because of the way they can potentially inform intervention. Unfortunately, the manual does not discuss

which of the enablers and which specific enabler-related behaviors teachers overall rate as most important, and there is a lack of discussion of the subject in the research literature as well. Additionally, while research literature on acceptability of behavioral interventions may provide some insight, there is also a lack of research regarding how feasible teachers believe direct instruction in academic enablers to be. It is essential to attain more information in these areas, as it may provide valuable insight regarding teachers' practices and attitudes (including their willingness to engage in recommended practices), and can help to further inform intervention.

The current study aims to close the aforementioned gaps and to answer these questions. There were four broad research questions in the current study: 1) How important do teachers perceive each of the academic enablers (Interpersonal Skills, Study Skills, Motivation, and Engagement), and specific behaviors that fall within those categories, to be? 2) How feasible do teachers believe it is to implement academic enabler instruction in the classroom? 3) Do teachers spend time teaching these skills in the classroom? If so, how much time do they devote to doing so? 4) How are teachers' importance ratings, their ratings of feasibility of instruction, and the frequency with which they engage in academic enabler instruction correlated?

The first question asked how important teachers perceive each of the academic enablers. Because each of the academic enablers contributes significantly to academic achievement, it was predicted that teachers would rate all as at least moderately important. However, as DiPerna, Volpe, and Elliot's (2002) model demonstrates, motivation is the vehicle through which all other academic enablers influence achievement. In other words, all other academic enablers go through or stem from

motivation to be related to academic success. Therefore, it was predicted that teachers would rate Motivation, as well as Motivation-related specific behaviors, as most important. Specific predictions regarding which of the individual enabler-specific behaviors would be rated as most important were not made because the literature does not currently suggest which of these behaviors are more important. Importance ratings were compared across grade clusters.

The second question asked how feasible teachers perceive implementation of academic enabler instruction in the classroom. Because so many suggested strategies for implementing academic enabler instruction in the classroom, including collaborative learning opportunities (Wentzel & Watkins, 2002), using an enthusiastic style and including personal stories into lessons (Schussler, 2009), and incorporating hands-on, engaging activities (Linnenbrink & Pintrich, 2002), can be well-incorporated into existing schedules and lessons, it was predicted that teachers would rate the incorporation of academic enabler instruction as at least moderately feasible. Differences in feasibility ratings across grade clusters were examined.

The third question asked if teachers spend time teaching academic enabler skills in the classroom, and if they do, how often they do so. Research explicitly examining how much time teachers spend teaching academic enabler skills has not been done. However, as discussed previously, it was hypothesized that teachers spend more time focusing on that which they perceive as most important. Thus, because the current study hypothesized that teachers would perceive motivation as most important, it was predicted that teachers would report spending the most time teaching motivation skills. Differences in academic enabler instruction trends across grade clusters were examined.

Methods

Participants

Eighty-three teachers in the Midwest in grades kindergarten through eight participated in the study. Response sets from five participants were discarded due to incomplete data (e.g., the participants agreed to the consent form and were forwarded on to the survey, but did not respond to any of the survey questions). Therefore, data from 78 participants were analyzed and used in determining results. Table 1 details the demographic information (i.e., sex, number of years teaching, current grade level assignment, type of teaching certification, type of school (public or private), and school PBIS status) for the final sample of participants. While both general and special education certified teachers were included in the participant pool, the group did not include teachers from alternative schools, nor did it include teachers of "special subjects" (e.g., art, physical education, music).

Procedure

Participants were recruited through convenience sampling. E-mail addresses of teachers were compiled through school district websites and used to invite them to participate in this study. The e-mail contained a link to the survey, which took approximately 10 minutes to complete. No incentive was offered for completion of the survey. The Qualtrics survey program was used to collect all information and is described in greater detail below. Consent was collected electronically. Participants completed a brief demographic questionnaire followed by the survey designed for this study.

Qualtrics. Data were collected on teachers' importance ratings, feasibility ratings, and academic enabler instruction patterns using Qualtrics (www.qualtrics.com), an online survey program offered free to Eastern Illinois University students, faculty, and staff members. Specifically, the survey was created using the Quick Survey Builder. Teachers received a link to this online survey through e-mail and responded to it from their own computers. Consent to participate was given from within the survey within the context of a multiple choice question (A. Agree, B. Decline) asked prior to the questions in the body of the survey. The information necessary to gain informed consent was delivered in the body of the question. If a teacher declined to accept the terms of the study and selected "decline" to the informed consent question, that individual was directed to the end using the Skip Logic feature, a feature that allows the survey to direct individuals to different places within the survey based on their answers.

Measures

Academic Competence Evaluation Scales (ACES; DiPerna & Elliott, 2000). The Academic Enablers scale of the ACES Teacher form was used to inform the creation of the survey used in this study. Specifically, the survey included the academic enabler behaviors found on the Academic Enablers scale on the ACES Teacher Form, as well as the 0-3 importance rating scale found within that scale. However, it is important to note that the ACES Teacher Form itself was not used in this study. Teachers did not directly complete the ACES-Teacher Form, and there are critical differences between the ACES Teacher Form and the survey used in this study. For example, the ACES itself is designed to assess the academic functioning of a specific student; on the contrary, the survey used in the current study asks questions through the lens of the classroom as a

whole. The ACES Teacher Form is described below to provide the reader with information regarding the original intent of the ACES. This is followed by a description of the *Academic Enabler Beliefs and Practices Survey*, which was created for the current study.

The ACES is an instrument used to evaluate academic functioning in students from kindergarten through grade 12, as well as college-age students, by measuring the student's level of academic skills (reading/language arts, mathematics, and critical thinking) and academic enabler skills (motivation, study skills, interpersonal skills, and engagement). Several versions of the ACES are available: a Teacher Form, a Student Form, and a College Student Form. The current study used the Teacher Form for inspiration in creating the *Academic Enabler Beliefs and Practices Survey*.

Of particular interest in the current study was the academic enabler importance rating section found in the Teacher Form of the ACES. On the Academic Enabler Importance Rating scale, teachers are asked to rate the importance of all individual academic enabler behaviors (e.g., "*Follows classroom rules*" under the category of Interpersonal Skills) on a scale of 1 (*Not Important*) to 3 (*Critical*). The authors explain the inclusion of the importance ratings in the Teacher Form by noting that an understanding of this variable can assist in the development of appropriate interventions. The manual notes that, after standardization, the majority of items had importance ratings near 2.0 (*Important*). The authors provide an overview table of per-item mean importance ratings by scale, grade cluster, and educational status (p. 86). For example, the mean importance rating per academic enabler item for general education students in the kindergarten – second grade cluster was 2.43, and the mean importance rating per

academic enabler item for general education students in the sixth through eighth grade cluster was 2.60. However, the manual does not discuss precise mean importance ratings for each academic enabler or for each individual academic enabler behavior.

The standardization sample of the ACES Teacher Form included 1,000 children in four grade clusters (kindergarten – second grade, third through fifth grades, sixth through eighth grades, and ninth through twelfth grades) each comprised of 250 children. This same grade cluster organization was used to group participants in the current study. Overall the standardization sample of the ACES included 498 males and 502 females. Gender distribution within each grade cluster was generally even except for in the kindergarten – second grade cluster, which was 51% male and 49% female. The rest of the demographic considerations, including race/ethnicity, region of residence, educational status, and socioeconomic status, were nationally representative and consistent with October 1998 U.S. Census data.

Overall, evidence found in the ACES Manual (DiPerna & Elliott, 2000) supports the claim that the ACES Teacher Form is a reliable and valid measure. Evidence of reliability was demonstrated high internal consistency of academic enablers (.98-.99 in all grade clusters). Reliability was also demonstrated by high test-retest reliability for academic enablers (.96), as well as adequate interrater agreement. When rated by two separate teachers, interrater agreement ranged from .31 to .62 in the Academic Enabler scales. The Standard Error of Measurement (SEM) was generally low across scales and across grade clusters in the ACES – Teacher Form, providing further support for reliability. In the Academic Enablers scale, the SEM ranged between 1.83-4.54 in the kindergarten through second grade cluster, 1.44-4.73 in the third through fifth grade

cluster, 1.58-3.66 in the sixth through eighth grade cluster, and 1.47-3.63 in the ninth through twelfth grade cluster.

Validity of the ACES-Teacher form, as presented in the ACES Manual (DiPerna & Elliott, 2000), was supported in part through the determination of content validity. As previously discussed, the mean per-item importance rating across both the academic skills and the academic enabler scales on the final version of the ACES-Teacher Form was near 2.0 (important). Also on the academic enabler scale, the "Never" baseline was used very little, if ever, across grade clusters. Validity was also demonstrated through construct validity. Factor analysis yielded two broad factors – Academic Skills and Academic Enablers, and four factors within the Academic Enablers subscale (Motivation, Interpersonal Skills, Engagement, and Study Skills). Research has also examined the extent to which the ACES correlates with other measures designed to measure similar and different constructs. Research also found at least small negative correlations between the ACES Academic Enablers scale and the Social Skills Rating System (SSRS) Problem Behavior Scale (DiPerna, 1999). Additionally, classification analyses indicated that the ACES-Teacher scale correctly classifies nearly 86% of assessed students into one of two groups – General Education Student or At Risk/Identified as LD. This finding provides support for the overall validity of the ACES by demonstrating the measure's criterion validity. In sum, the research presented in the ACES Manual (DiPerna & Elliott, 2000) provides ample support for the claim that the ACES is a psychometrically sound (reliable and valid) measure of students' academic functioning.

Academic Enabler Beliefs and Practices Survey. The Academic Enabler Beliefs and Practices Survey was developed by the researcher and the research advisor

for the sole purpose of this study. As such, no psychometric properties are available for this survey. This survey included each of the specific academic enabler behaviors (e.g., "*follows classroom rules*," "*speaks in class when called upon*") under the categories of the four broad academic enablers (interpersonal skills, study skills, engagement, and motivation) found on the ACES academic enablers scale. See Appendix A for an example of this survey. For each of the broad academic enablers, the following questions were asked: How important is this skill in your classroom? How feasible is it to spend time teaching this skill to your class? If you teach the skill, how often do you do it? The importance rating section of this survey was taken directly from the Importance Rating scale on the ACES teacher form. Each item was presented with a three- to six-point Likert-type rating scale. For example, for importance questions, the Likert scale mirrored that used in the ACES: 1-*Not Very Important*, 2-*Somewhat Important*, and 3-*Very Important*. The scale used for feasibility was as follows: 1-*Not Feasible*, 2-*Somewhat Feasible*, 3-*Very Feasible*. The instruction frequency scale was a six-point Likert-type scale: 1-*Never*, 2-*Once or Twice a Year*, 3-*Three to Four times a Year*, 4-*Monthly*, 5-*Weekly*, 6-*Daily*. While this survey was presented to participating teachers online through Qualtrics, a hard copy of this survey can be found in Appendix A.

Demographic Questions

After providing consent, teacher participants were asked questions regarding their personal characteristics, including gender, years of teaching experience, type of teaching certificate (e.g., general education, special education), grade level of current teaching assignment, and name of school and district. As previously alluded to, current grade levels were grouped into three grade clusters based on the grouping of the ACES

standardization sample (DiPerna & Elliott, 1999): Cluster 1 (kindergarten – second grade), Cluster 2 (third through fifth grades), and Cluster 3 (sixth through eighth grades). It was of particular note that the majority (28.2%) of participants reported having over 20 years of teaching experience. Other questions that were asked include: Is your school a PBIS school? Is your school in a rural, urban, or suburban area? and, Are you in a private or public school?

Privacy and Confidentiality Summary

Efforts were made to ensure the privacy of the data collected from the survey. Qualtrics pages are username and password protected, and survey response data can be accessed by only the survey creator and those whom the creator authorizes as partners. With regard to the current research, survey response data were able to be accessed by only the researcher and the research advisor. The survey data were downloaded into a password-protected Microsoft Excel spreadsheet. Data were eliminated from both sources upon the completion of research.

Additionally, efforts were made to protect the privacy of the study participants. As described previously in the discussion regarding demographic questions, some categorical information (e.g., grade level of current teaching assignment, general environment in which the individual's school is located) was collected for the purpose of the study. However, participants were not asked to reveal personally identifying information (including name, age, birth date, exact geographic location, etc.).

Results

Because the survey used in this study was created solely for this particular study – and therefore no psychometric data were available – reliability of each enabler subscale (and associated specific behaviors) was calculated using Cronbach's Alpha. Results indicated that scales for the four enablers (engagement, interpersonal skills, motivation, and study skills) had good internal consistency. Cronbach's alphas were .88, .83, .82, and .82 for Interpersonal Skills, Engagement, Motivation, and Study Skills, respectively.

Research Question 1. The first research question in this study asked how important teachers perceive each of the academic enablers (Engagement, Interpersonal Skills, Motivation, and Study Skills), and specific behaviors that fall within those categories to be. The scale asked teachers to rate the importance of each enabler and specific behavior on a scale from 1 (Not Very Important) to 3 (Very Important). The first step in answering this question was to examine the overall average importance rating, as well as the endorsement percentage of each importance level, for each academic enabler and each of the specific behaviors. The second step in answering this question was to examine the differences in average importance ratings among the three grade clusters.

With regard to the academic enabler Engagement, the average importance rating was 2.9 ($M = 2.90$, $SD = .30$). The percentage of included teachers who indicated Engagement as "Very Important" (3) was 73.1%, while 7.7% indicated it as "Moderately Important" (2); 19.2% of included participants did not indicate a rating on this item. Table 2 lists the mean importance ratings and standard deviations for each of the Engagement behaviors for the total sample, as well as the number of participants who

endorsed each importance level. Mean importance ratings for engagement behaviors ranged from 2.1 to 2.9. The behavior "Volunteer to read aloud" had the lowest average importance rating, while the behaviors "Asks questions when confused" had the highest average rating. See Table 2 for more detailed results.

The academic enabler Interpersonal Skills received an average importance rating of 2.8 ($M = 2.8$, $SD = .41$). The majority of included participants (71.8%) rated Interpersonal Skills as being "Very Important" (3), while 11.5% rated the enabler as "Moderately Important" (2), and only 1.3% rated it as "Not Very Important" (1); 15.4% of participants declined to rate the item. Table 2 lists the mean importance ratings and standard deviations for each of the Interpersonal Skills behaviors, along with the number of participants who endorsed each importance level, in the total sample. Average importance ratings for Interpersonal Skills behaviors ranged from 2.8 to 3.0. The behavior "Accept suggestions from teachers" received the lowest average importance rating, while the behavior "Correct inappropriate behavior when asked" received the highest average rating. See Table 2 for more detailed results.

The academic enabler Motivation received an average importance rating of 2.9 ($M = 2.9$, $SD = .26$). The majority of included participants (71.8%) rated Motivation as "Very Important" (3), while 5.1% rated it as "Moderately Important" (2); 23.1% declined to rate this item. Table 2 lists the mean importance ratings and standard deviations for each of the Motivation behaviors, along with the number of participants who endorsed each importance level, in the total sample. Average importance ratings for Motivation behaviors ranged from 2.4 to 2.9. The Motivation behavior "Prefer challenging tasks" received the lowest average importance rating, while the behavior "Attempt to improve

on past performance" received the highest average rating. See Table 2 for more detailed results.

The fourth academic enabler, Study Skills, yielded an average importance rating of 2.8 ($M = 2.8$, $SD = .47$). The majority of participants (62.8%) rated this enabler as "Very Important" (3), while 7.7% rated it as "Moderately Important" (2), and only 2.6% rated it as "Not Very Important" (1); 26.9% of participants declined to rate this item. Table 2 lists the mean importance ratings and standard deviations for each Study Skills behavior, along with the number of participants who endorsed each importance level, in the total sample. Average importance ratings for Study Skills behaviors ranged from 2.4 to 3.0. The behavior "Takes notes in class" received the lowest average importance rating, while the behavior "Pay attention in class" received the highest average rating. See Table 2 for more detailed results.

The second part of the first research question aimed to compare average importance ratings among the grade clusters; to do this, a series of Multivariate Analyses of Variance (MANOVAs) were conducted. A MANOVA was conducted on average importance rating to determine if there were significant differences among the three grade clusters with regard to average importance ratings of each of the four academic enablers. The independent variable was Grade Cluster, and the dependent variable was Average Importance Rating for each academic enabler. Results showed that there was a significant interaction between grade cluster and average importance rating for Study Skills, $F(2, 50) = 4.50$, $p = .02$. Further examination of between-group differences using Scheffe's test indicated that Grade Cluster One (kindergarten through second grade) rated the enabler Study Skills as significantly less important than did Grade Cluster Two (third

grade through fifth grade) ($M = .40$, $p = .04$) and Grade Cluster Three (sixth grade through eighth grade) ($M = .33$, $p = .04$). However, there was no significant difference between the Study Skills importance ratings of Grade Clusters Two and Three, and no significant differences among the three grade clusters with regard to importance ratings of any of the other three enablers.

A Multivariate Analysis of Variance (MANOVA) was conducted on Average Importance Rating to determine if there were significant differences among the three grade clusters with regard to average importance ratings of each of the Engagement-related behaviors. The independent variable was again Grade Cluster, and the dependent variable was the Average Importance Rating of each Engagement behavior. Results indicated that there were significant differences in average feasibility ratings among the three grade clusters for the behavior "Speak in class when called upon," $F(2, 69) = 4.3$, $p = .02$. Further examination of between-group differences using Scheffe's test indicated that participants in Grade Cluster Two (third grade through fifth grade) rated "Speak in class while called upon" as significantly more important than did participants in Grade Cluster One (kindergarten through second grade) ($M = .45$, $p = .03$) or Grade Cluster Three (sixth grade through eighth grade) ($M = .38$, $p = .05$). No other significant differences were found among grade clusters with regard to average importance ratings of any of the other Engagement-related behaviors.

A Multivariate Analysis of Variance (MANOVA) was conducted on Average Importance Ratings to determine if there were any significant differences in average ratings of each Interpersonal Skills behavior among the three grade clusters. The independent variable was Grade Cluster, and the dependent variable was the Average

Importance Rating of each Interpersonal Skills behavior. Results indicate that there were no significant differences among the three grade clusters with regard to importance ratings of each of the Interpersonal Skills behaviors.

A Multivariate Analysis of Variance (MANOVA) was conducted on Average Importance Ratings to determine if there were any significant differences among grade clusters in ratings of each Motivation behavior. The independent variable was again Grade Cluster, and the dependent variable was the Average Importance Rating of each Motivation behavior. Results indicated that there were significant differences among the three grade clusters with regard to average importance ratings of the behavior "Critically evaluate own work," $F(2, 66) = 5.17, p < .01$. Further examination of between-groups differences using Scheffe's test indicated a significant difference in average importance ratings of this skill between Grade Cluster One (kindergarten – second grade) and Grade Cluster Three (sixth grade through eighth grade), $M = .42, p = .01$. No significant differences were found with regard to average importance ratings of this skill between Grade Clusters One and Two or Two and Three, and no other significant differences were found among grade clusters with regard to average importance ratings of the other Motivation behaviors.

A Multivariate Analysis of Variance (MANOVA) was conducted on Average Importance Ratings to examine differences in ratings of Study Skills behaviors across grade clusters. Results indicated that there were significant differences in ratings among grade clusters with regard to the behavior "Complete homework," $F(2, 53) = 3.28, p = .05$, but post hoc analyses did not reveal individual significant differences among the three grade clusters. There were also significant differences in average ratings of the

behavior "Prepare for tests," $F(2, 53) = 3.40$, $p = .04$. Further examination of between-group differences using Scheffe's test indicated that participants in Grade Cluster Two (third grade through fifth grade) rated "Prepare for tests" as significantly more important than participants in Grade Cluster One (kindergarten through second grade), $M = .50$, $p = .04$. Table 3 displays between-group differences by listing mean importance ratings for each enabler and enabler behavior for each grade cluster.

Research Question 2. The second research question asked how feasible teachers perceive classroom instruction in the four academic enablers to be. To answer this question, the average feasibility ratings, along with the endorsement percentage at each feasibility level, were examined for each of the four enablers; further, differences in average feasibility ratings among each of the three grade clusters were examined. Table 4 lists the average feasibility ratings and standard deviations for each of the four academic enablers, along with the number of participants who endorsed each feasibility level, in the total sample.

A Multivariate Analysis of Variance (MANOVA) was conducted on Average Feasibility Rating to determine if average feasibility ratings differed among the three grade clusters for each of the four academic enablers. The independent variable was Grade Cluster, and the dependent variable was Average Feasibility Rating for each academic enabler. Results indicate that there were no significant differences in average feasibility ratings among the three grade clusters for any of the four academic enablers. Table 5 lists mean feasibility ratings for each academic enabler for each grade cluster.

Research Question 3. The third research question asked how frequently teachers spend time teaching the four academic enablers in the classroom. To answer this

question, average instruction frequency ratings and endorsement percentages for each frequency level were examined for each of the four academic enablers. Further, differences in average frequency ratings among grade clusters were examined. Table 6 lists the average instruction frequency ratings and standard deviations for each of the four academic enablers, along with the number of participants who endorsed each frequency level, in the total sample.

A MANOVA was conducted on Average Instruction Frequency to determine if there were significant differences among the three grade clusters with regard to average frequency of instruction. Results indicated that there were significant differences among grade clusters in average instruction frequency rating for Interpersonal Skills, $F(2, 63) = 5.40$, $p < .01$. Further examination of between-groups differences using Scheffe's test indicated that participants in Grade Cluster One (kindergarten through second grade) on average reported spending significantly more time in the classroom teaching interpersonal skills than did participants in Grade Cluster Three (sixth grade through eighth grade), $M = 1.18$, $p = .02$. No significant differences were found between Grade Clusters 1 and 2 or Grade Clusters Two and Three with regard to average frequency ratings for Interpersonal Skills instruction, and no significant differences were found among the three grade clusters with regard to average frequency ratings for any of the other three academic enablers. Table 7 lists the average instruction frequency for each academic enabler for each grade cluster.

Research Question 4. Question four examined the correlations between Average Importance Rating, Average Feasibility Rating, and Average Instruction Frequency Rating. To answer this question, Pearson correlations were conducted on Average

Importance Rating and Average Feasibility Rating, on Average Importance Rating and Average Frequency Rating, and on Average Feasibility Rating and Average Frequency Rating. Results indicated that Average Feasibility Rating and Average Instruction Frequency rating were significantly correlated, r (65) = .604, $p < .01$ (two-tailed). In other words, the higher participants tended to rate the feasibility of classroom instruction in the academic enablers, the more frequently they tended to rate actually spending time in instruction in these skills. Average Importance Rating was negatively, but not significantly correlated with Average Feasibility Rating [r (65) = -.18)], and was not significantly correlated with Average Frequency Rating [r (65) = .03].

Discussion

The purpose of the current study was to examine teachers' perceptions of the importance of academic enablers, their perceptions of how feasible it is to teach these skills in the classroom, and how often they teach these skills in the classroom. Although much research has been conducted regarding the importance of academic enablers and their connections to academic success, this past research has not examined these particular variables (i.e., the importance of the enablers at a classroom-wide level, perceived feasibility of instruction in these skills, and actual practice of instruction). The current study fills this gap, providing important insights into teachers' beliefs and how they are put into practice at the classroom level.

The first research question asked how important teachers perceive each of the academic enablers and related behaviors to be. It was predicted that all would be rated as at least moderately important; however, based on the model proposed by DiPerna, Volpe, and Elliott (2002), it was predicted that participants would rate Motivation, along with Motivation-related behaviors, as the most important. Results indicated that all academic enablers and specific enabler behaviors received an average rating of at least "Moderately Important," with the lowest average importance rating being 2.4 out of 3. While participants did agree that Motivation is very important, with an average rating of 2.9 out of 3, it was not the single most important enabler, receiving an equal average rating with engagement. Further, average ratings of Motivation-related behaviors were equal to ratings of other enabler-related behaviors. This may be due to the nature of academic enablers. Although they are interconnected and influence one another, teachers likely

also see them all as separate and nearly equally important entities in the classroom. Relatedly, while Motivation and many of its associated behaviors (e.g., "Prefer challenging tasks") are more internal to the child, Engagement and related behaviors (e.g., "Speak in class when called upon") are more concrete and directly observable in the moment. It is likely that teachers deem these direct, concrete behaviors to be as important as underlying, more internal behaviors in the classroom because they can see immediately their impact on learning.

No specific predictions were made regarding differences in importance ratings among grade clusters, but were examined. Overall, participants in Grade Cluster Two (third grade through fifth grade) had the highest average importance ratings for each of the academic enablers; the exception to this was Motivation, wherein Grade Clusters One (kindergarten through second grade) and Two both had an average importance rating of 3.0 out of 3. While significant differences were noted among grade clusters in ratings of at least one specific behavior for the majority of the four academic enablers, this was found not to be the case for the enabler Interpersonal Skills. No significant differences among grade clusters were found for Interpersonal Skills or specific Interpersonal Skills behaviors, and this is likely because interpersonal skills, in some form, are consistently necessary and important at any age. Under the enabler Engagement, the behavior "Speak in class when called upon" was rated as significantly more important by Grade Cluster Two (third grade through fifth grade) than by the other two grade clusters. One reason for this trend may be the nature of the classroom and curriculum at varying grade levels. Class material is presented more frequently in lecture format for older students and knowledge acquisition is more frequently assessed through written measures (exams and

papers). At the same time, discussion may not yet be a part of the curriculum in younger classrooms, as more abstract thinking abilities have not begun to develop yet. Verbal processing may play a significant role in third through fifth grade classrooms, particularly as children are increasingly learning to think abstractly and organize their ideas. In other words, as children around this age gradually move toward abstract thinking ability characteristic of Piaget's Formal Operational stage, and will soon be more required to utilize this skill in higher grade levels, teachers may feel that it is important that children develop these skills through active participation in the classroom (particularly forming ideas and sharing them with the class).

Question two asked how feasible teachers believe it is to teach the four academic enabler skills in the classroom. Informed by the myriad of research that details strategies for developing and fostering these skills (e.g., Schussler, 2009), it was hypothesized that teachers would rate instruction of each enabler as at least moderately feasible. This hypothesis was confirmed, as average feasibility ratings for all of the enablers fell into the Moderately Feasible range, ranging from 2.3 (i.e., Interpersonal Skills and Motivation) to 2.6 (i.e., Study Skills) out of 3. Further, the majority of participants rated Engagement and Study Skills as being Very Feasible, and Interpersonal Skills and Motivation as being Moderately Feasible.

No hypothesis was formulated regarding differences in feasibility ratings among grade clusters, but data were collected and analyzed. For the majority of the academic enablers, there was a negative relationship between feasibility ratings and grade level; average feasibility ratings were lower for the higher grade clusters; average ratings for Engagement were the same between Clusters Two (third grade through fifth grade) and

Three (sixth grade through eighth grade), but were higher than the average feasibility rating from Cluster One (kindergarten through second grade). This trend may be influenced by the nature of classrooms; as students get older, academic schedules become fuller and more demanding, and there is less time to focus on teaching skills such as engagement or interpersonal skills. The trend seen in the other three enablers was the opposite for Study Skills. Clusters Two and Three had equal average feasibility ratings (2.6), and both were higher than the average rating from Cluster One (2.5). Feasibility ratings could range from 1 to 3. This trend may also be related to day-to-day classroom routines, for example, children in kindergarten or first grade are likely not routinely required to turn in homework assignments and correct their own work; it may not be until the somewhat older years (fifth grade or sixth grade) that teachers make this a priority. Also related to this may be the trend of increased examination at higher grade levels; for example, students in kindergarten and first grade are likely not going to be asked to take examinations on Social Studies or Science material as are students in middle school. As such, because examination does not play as significant of a role in curriculum in lower grade levels, teachers are likely not going to find it necessary or feasible to focus on those skills in their classrooms.

The third research question asked how frequently participants teach the four academic enabler skills in the classroom. Although prior research on academic enablers has not provided insight into this question, it was hypothesized that people would focus more time on that which they perceive as most important. Specifically, because it was hypothesized in the first research question that participants would rate Motivation as most important, it was then also hypothesized that they would report spending the most time

teaching that skill. Participants indicated spending a nearly identical amount of time teaching each of the four skills. Average instruction frequency ratings for each of the four enablers fell into the "Monthly" category. It is important to note here that the majority of participants in this study had 20 or more years of teaching experience; as such, these teachers may be more conservative in their educational views, not spending a more significant amount of time teaching these skills as they believe that is the role of parents (while theirs is to teach academic material). It also must be noted, however, that the increased number of options may have brought the average down slightly and made it somewhat misleading. For each of the enablers, the majority of participants indicated that they engage in instruction of that particular skill daily. The reason that the frequency ratings of each of the enablers were so similar and no particular one came out "on top" may have to do with the myriad of ways teachers can foster these skills in the classroom. The current study did not distinguish between direct and indirect instruction methods, and as such, participating teachers may have considered both when providing the rating.

Although overall ratings of the four Academic Enablers were nearly identical, Motivation (4.5) had a slightly lower average instruction frequency than the other three enablers (4.6). It is likely that this was the case because, due to the intrinsic nature of motivation (versus the more extrinsic nature of the other enablers), participating teachers felt as though motivation is indeed somewhat more difficult to teach.

The fourth research question asked how the three variables – Importance Rating, Instructional Feasibility Rating, and Frequency of Instruction – are correlated. It was hypothesized that all three variables would be positively correlated with one another. As predicted, Average Feasibility Rating was significantly correlated with Average

Instruction Frequency Rating. Average Frequency and Average Feasibility both had a positive relationship with Average Importance Rating, but neither was significantly correlated with Average Importance Rating. This may be due to the fact that, even with regard to skills teachers believe to be very important, other classroom demands may make it difficult to link these beliefs to practice.

Future Directions

The current study sheds light on the importance teachers place on academic enabler skills with regard to success in the classroom, and how these perceptions translate to their beliefs about and actual practice of fostering development of these skills in the classroom through instruction. This is an important "first step" in that it allows us to make inferences about what we may see in the classroom. At the same time, it opens the door to discussion of future research directions in the area of academic enablers. For example, the current study did not distinguish between direct (explicit) and indirect instruction. Future research should distinguish between direct and indirect instruction, as this distinction is likely to have an impact on teachers' perceptions of feasibility and their report of actual practice of instruction. Additionally, because academic enablers impact children's academic achievement so significantly, future research should explore the relationship between teachers' instruction in these skills and students' general achievement in the classroom. Although research of this sort may be difficult because of the many factors that impact achievement, a deeper understanding of how instruction in these skills can impact students' performance in the classroom over time would be invaluable, particularly in linking academic enablers to a Response to Intervention (RtI) framework, at the Tier 1 level and beyond. Further, while the current study indicates that

teachers believe that it is at least moderately feasible to engage in instruction of the four broad academic enabler skills in the classroom, it may be of value for future research to examine the criteria teachers use when examining the feasibility of this instruction. This information may be particularly valuable in informing the development of instructional strategies that help students learn and develop skills that are critical to academic success.

Limitations

Although important information and directions for future research can be taken from the current study, the study had several limitations that should be noted. One such limitation was the small sample size from a relatively small area (primarily Illinois). Data from a larger number of teachers from a more diverse array of locations would likely have illuminated any differences (e.g., among grade clusters, in overall average importance ratings of each of the enablers) more clearly. Another limitation of this study lies in the way importance ratings were selected. While the way the current study went about attaining this information was a valid way of doing so, framing the question in other ways (e.g., asking participants to choose the enabler that they believe to be the most important, or asking participants to rank the enablers in order of importance) may have more clearly shown any differences among the enablers/specific behaviors with regard to perceived importance. A third limitation of the current study is in the unequal number of participants among the three grade clusters. As Table 1 indicates, Grade Cluster Three had the highest number of participants, while Grade Cluster Two saw the fewest. If each grade cluster had had an equal number of participants, this would have made calculations of average ratings for the clusters more equal, and comparisons would have been more accurate.

Summary

Academic enablers are characteristics within an individual that help him or her excel in the classroom; they include engagement, interpersonal skills, motivation, and study skills. The current study examined how important teachers perceive these academic enablers (and related behaviors) to be, how feasible they believe it is to engage in instruction in the four academic enablers, and how frequently they do so. Further, the current study examined the relationship among these three variables. Overall, participants perceived each of the academic enablers and related behaviors to be at least moderately important, and instruction in the academic enablers to be at least moderately feasible. Participants reported engaging in instruction of these skills on average once a month to once a week. There were only minor differences, if any at all, in trends when compared among grade clusters. A significant positive relationship was found between average feasibility ratings and average instruction frequency ratings, but not among any other combination of the variables. The current study provides insight regarding teachers' perceptions of academic enablers and how these perceptions may translate to practice in the classroom. However, much more research needs to be done in the area of academic enablers in order to fully understand how they can be developed and used in the classroom to foster academic success.

References

Alvarez, M. E. & Frey, A. J. (2012). Promoting academic success through engagement. *Children & Schools, 34*, 1-2. doi: 10.1093/cs/cdrOOS

Ashdown, D. M. & Bernard, M. E. (2011). Can explicit instruction in social and emotional learning skills benefit the social-emotional development, well-being, and academic achievement of young children? *Early Childhood Education Journal, 39*, 397-405. doi: 10.1007/s10643-011-0481-x

Caldarella, P., Christensen, L., Kramer, T. J. & Kronmiller, K. (2009). Promoting social and emotional learning in second grade students: A study of the *Strong Start* curriculum. *Early Childhood Education Journal, 37*, 51-56. doi: 10.1007/s10643-009-0321-4

DiPerna, J. C. (2006). Academic enablers and student achievement: Implications for assessment and intervention services in the schools. *Psychology in the Schools, 43*, 7-17. doi: 10.1002/pits.20125

DiPerna, J. C. & Elliott, S. N. (2000). Academic Competence Evaluation Scales Manual K-12. Psychological Corporation.

DiPerna, J. C. & Elliott, S. N. (2002). Promoting academic enablers to improve student achievement: An introduction to the mini-series. *School Psychology Review, 31*, 293-297.

DiPerna, J. C., Volpe, R. J., & Elliott, S. N. (2001). A model of academic enablers and elementary reading/language arts achievement. *School Psychology Review, 31*, 298-312.

Dotterer, A. M. & Lowe, K. (2011). Classroom Context, school engagement, and academic achievement in early adolescence. *Journal of Youth and Adolescence, 40*, 1649-1660. doi: 10.1007/s10964-011-9647-5

Elliott, S. N. (1988). Acceptability of behavioral treatments: Review of variables that influence treatment selection. *Professional Psychology: Research and Practice, 19*, 68-80. doi: 0735-7028/88

Greenwood, C. R., Horton, B. T. & Utley, C. A. (2002). Academic engagement: Current perspectives on research and practice. *School Psychology Review, 31*, 328-349.

Linnenbrink, E. A. & Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School Psychology Review, 31*, 313-327.

Martens, B. K., Witt, J. C., Elliott, S. N. & Darveaux, D. X. (1985). Teacher judgments concerning the acceptability of school-based interventions. *Professional Psychology: Research and Practice, 16*, 191-198. doi: 0735-7028/85

Martin, A. J. & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research, 79*, 327-365. doi: 10.3102/0034654308325583

Rozalski, M. E. (2008). Practice, practice, practice: How to improve students' study skills. *Beyond Behavior*, *17*, 17-23.

Schussler, D. L. (2009). Beyond content: how teachers manage classrooms to facilitate intellectual engagement for disengaged students. *Theory Into Practice*, 48, 114-121. doi: 10.1080/00405840902776376

Wentzel, K. R. & Watkins, D. E. (2002). Peer relationships and collaborative learning as contexts for academic enablers. *School Psychology Review*, 31, 366-377.

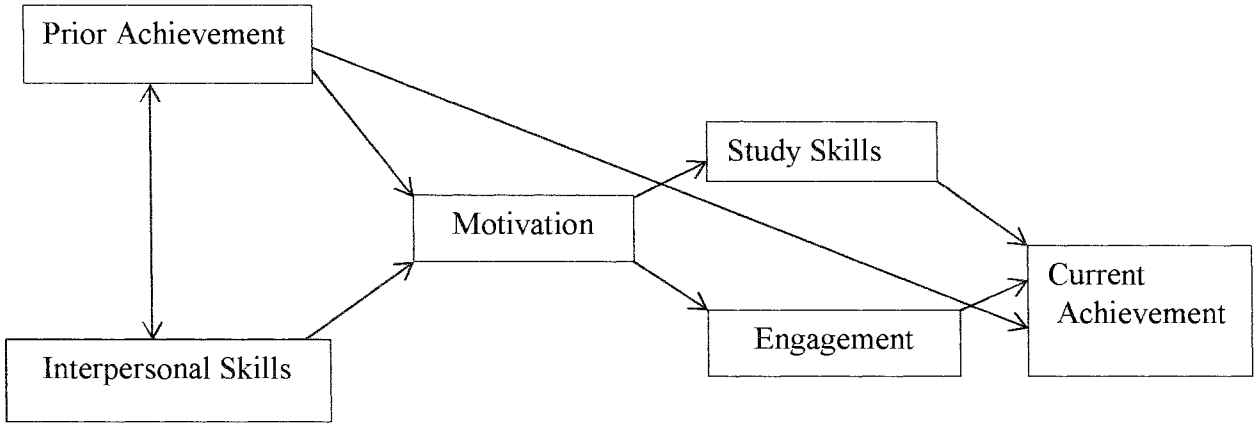

Figure 1: DiPerna, Volpe, & Elliott's (2002) Model of Academic Enabler Interaction

Figure 2: DiPerna's (2006) Model of Academic Enabler Interaction with the Broader Classroom Context

Table 1: Demographic Information

Characteristic	*N*	Percent
Sex		
Male	9	11.5
Female	68	87.2
Not Specified	1	1.3
Grade Cluster		
1 (Kdg – 2nd)	24	30.8
2 (3rd – 5th)	17	21.8
3 (6th – 8th)	37	47.4
Certification		
General Ed.	74	94.9
Special Ed.	4	5.1
Years Teaching		
Less than 1 year	2	2.6
1 – 3 yrs	5	6.4
4 – 5 yrs	2	2.6
6 – 10 yrs	15	19.2
11 – 15 yrs	18	23.1
16 – 20 yrs	14	17.9
Over 20 yrs	22	28.2
School Location		
Rural	7	9.0
Urban	25	32.1
Suburban	46	59.0
School Type		
Public	59	75.6
Private	17	21.8
PBIS Status		
Yes	69	88.5
No	9	11.5

Table 2. Mean Enabler Importance Ratings and Rating Percentages: Total Sample

Academic Enablers	Items			Not Very Important		Moderately Important		Very Important	
		M	SD	*N*	%	*N*	%	*N*	%
Engagement	Speak in class when called upon	2.7	.52	2	2.6	19	24.4	52	66.7
	Ask questions abt tests/projects	2.7	.52	2	2.6	18	23.1	53	67.9
	Participate in discussions	2.7	.47	1	1.3	17	21.8	55	70.5
	Volunteer to answer questions	2.4	.58	3	3.8	36	46.2	34	43.6
	Assume leadership in group situations	2.2	.53	4	5.1	49	62.8	20	25.6
	Volunteer to read aloud	2.1	.69	15	19.2	38	48.7	20	25.6
	Initiate conversations appropriately	2.7	.49	1	1.3	20	25.6	52	66.7
	Ask questions when confused	2.9	.31	1	1.3	3	3.8	68	87.2
Interpersonal Skills	Follow classroom rules	2.9	.32	1	1.3	4	5.1	70	89.7
	Correct inappropriate behavior when asked	3.0	.28	1	1.3	2	2.6	72	92.3
	Express dissatisfaction appropriately	2.8	.42	1	1.3	11	14.1	63	80.8
	Accept suggestions from teachers	2.8	.43	1	1.3	12	15.4	62	79.5
	Work effectively in a large-group activity	2.9	.34	4	5.1	10	12.8	64	82.1
	Interact appropriately with adults	2.9	.32	1	1.3	4	5.1	70	89.7

Table 2 (Continued)

Academic Enablers	Items			Not Very Important		Moderately Important		Very Important	
		M	SD	*N*	%	*N*	%	*N*	%
Motivation	Be motivated to learn	2.9	.28	0	0.0	6	7.7	65	83.3
	Prefer challenging tasks	2.4	.52	1	1.3	43	55.1	28	35.9
	Produce high-quality work	2.9	.28	1	1.3	6	7.7	65	83.3
	Critically evaluate own work	2.7	.50	0	0.0	22	28.2	49	62.8
	Attempt to improve on previous performance	2.9	.23	0	0.0	4	5.1	68	87.2
	Make the most of learning experiences	2.9	.35	0	0.0	10	12.8	62	79.5
	Persist when task is difficult	2.9	.23	1	1.3	4	5.1	68	87.2
	Look for ways to academically challenge self	2.6	.53	1	1.3	29	37.2	41	52.6
	Assume responsibility for own learning	2.9	.36	0	0.0	6	7.7	65	83.3
	Be goal-oriented	2.7	.53	0	0.0	19	24.4	51	65.4
	Stay on-task	2.9	.26	0	0.0	5	6.4	67	85.9
Study Skills	Complete homework	2.7	.48	1	1.3	16	20.5	52	66.7
	Correct own work	2.7	.54	2	2.6	20	25.6	48	61.5
	Finish own classwork on time	2.7	.45	0	0.0	19	24.4	51	65.4
	Prepare for tests	2.8	.58	5	6.4	7	9.0	58	74.4
	Prepare for class	2.8	.46	2	2.6	9	11.5	58	74.4
	Turn in homework on time	2.7	.51	2	2.6	15	19.2	52	66.7
	Take care of materials	2.8	.40	0	0.0	14	17.9	56	71.8

Table 2 (Continued)

Academic Enablers	Items	*M*	SD	Not Very Important		Moderately Important		Very Important	
				N	%	*N*	%	*N*	%
Study Skills (continued)	Pay attention in class	3.0	.12	0	0.0	1	1.3	68	87.2
	Complete assignments according to direction	2.9	.32	0	0.0	8	10.3	61	78.2
	Take notes in class*	2.4	.72	7	9.0	20	25.6	32	41.0
	Review material*	2.7	.63	5	6.4	9	11.5	44	56.4

* = items intended for participants teaching 3rd – 8th grades only

Table 3. Mean Importance Ratings by Grade Cluster

Academic Enablers	Items	Cluster 1 (K-2nd)		Cluster 2 (3rd-5th)		Cluster 3 (6th-8th)	
		M	SD	*M*	SD	*M*	SD
Engagement	**Overall Engagement**	2.9	.32	3.0	.00	2.9	.34
	Speak in class when called upon	2.6	.51	3.0	.00	2.6	.60
	Ask questions about tests or projects	2.6	.59	2.9	.25	2.7	.53
	Participate in class discussions	2.8	.52	2.9	.34	2.7	.49
	Volunteer to answer questions	2.4	.66	2.6	.51	2.4	.54
	Assume leadership in group situations	2.1	.55	2.3	.48	2.2	.55
	Volunteer to read aloud	2.1	.67	2.3	.68	2.0	.72
	Initiate conversations appropriately	2.6	.58	2.9	.34	2.7	.48
	Ask questions when confused	2.9	.43	3.0	.00	2.9	.29
Interpersonal Skills	**Overall Interpersonal Skills**	2.8	.51	2.9	.26	2.8	.41
	Follow classroom rules	2.8	.49	3.0	.00	2.9	.24
	Correct inappropriate behavior/asked	2.9	.46	3.0	.00	3.0	.17
	Express dissatisfaction appropriately	2.8	.52	2.9	.33	2.8	.38
	Accept suggestions from teachers	2.7	.56	2.9	.24	2.8	.38
	Work effectively in large grp setting	2.8	.43	3.0	.00	2.9	.36
	Interact appropriately w/ adults	2.8	.49	3.0	.00	2.9	.24

Table 3 (continued)

Academic Enablers	Items	Cluster 1 (K-2nd)		Cluster 2 (3rd-5th)		Cluster 3 (6th-8th)	
		M	SD	*M*	SD	*M*	SD
Motivation	**Overall Motivation**	3.0	.23	3.0	.00	2.9	.31
	Be motivated to learn	2.9	.35	3.0	.00	2.9	.29
	Prefer challenging tasks	2.4	.50	2.3	.60	2.4	.49
	Produce high-quality work	2.9	.35	3.0	.00	2.9	.29
	Critically evaluate own work	2.4	.60	2.6	.50	2.9	.36
	Attempt to improve on past performance	2.9	.29	2.9	.25	3.0	.17
	Make most of learning experiences	2.8	.43	3.0	.00	2.9	.36
	Persist when task is difficult	2.9	.35	3.0	.00	3.0	.17
	Look for ways to academically challenge self	2.4	.60	2.6	.51	2.7	.49
	Take responsibility for own learning	2.8	.53	2.9	.34	3.0	.17
	Be goal-oriented	2.6	.58	2.7	.48	2.7	.52
	Stay on-task	2.9	.31	2.9	.25	3.0	.17
Study Skills	**Overall Study Skills**	2.5	.63	3.0	.00	2.9	.37
	Complete homework	2.5	.51	2.9	.34	2.8	.48
	Correct own work	2.4	.68	2.8	.45	2.8	.43
	Finish own classwork on time	2.7	.47	2.8	.40	2.7	.46
	Prepare for tests	2.4	.82	3.0	.00	2.9	.44
	Prepare for class	2.7	.57	2.9	.34	2.9	.44
	Turn in homework on time	2.5	.51	2.8	.41	2.8	.52

Table 3 (continued)

Academic Enablers	Items	Cluster 1 (K-2nd)		Cluster 2 (3rd-5th)		Cluster 3 (6th-8th)	
		M	SD	*M*	SD	*M*	SD
Study Skills (continued)	Take care of materials	2.9	.37	2.7	.48	2.8	.39
	Pay attention in class	3.0	.00	3.0	.00	3.0	.00
	Complete assignments according to direction	2.8	.42	2.9	.25	2.9	.29
	Take notes in class*	--	--	2.5	.51	2.6	.56
	Review materials*	--	--	2.8	.40	2.9	.36

*=Items intended for participants teaching 3rd-8th grades only

Table 4: Mean Academic Enabler Feasibility Ratings and Rating Percentages – Total Sample

Academic Enablers	*M*	SD	Not Very Feasible		Moderately Feasible		Very Feasible	
			N	%	*N*	%	*N*	%
Engagement	2.4	.61	6	7.7	30	38.5	33	42.3
Interpersonal Skills	2.3	.65	5	6.4	36	46.2	29	37.2
Motivation	2.3	.67	8	10.3	34	43.6	26	33.3
Study Skills	2.6	.56	2	2.6	27	34.6	40	51.3

Table 5: Mean Academic Enabler Feasibility Ratings by Grade Cluster

Grade Cluster	1 (K-2nd)		2 (3rd-5th)		3 (6th-8th)	
Academic Enablers	*M*	SD	*M*	SD	*M*	SD
Engagement	2.6	.51	2.3	.71	2.3	.69
Interpersonal Skills	2.6	.51	2.3	.60	2.2	.65
Motivation	2.5	.51	2.3	.58	2.2	.77
Study Skills	2.5	.69	2.6	.50	2.6	.50

Table 6: Mean Enabler Instruction Frequency – Total Sample

Academic Enablers	*M**	SD	Never		1-2x/yr		3-4x/yr		Monthly		Weekly		Daily	
			N	%	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%
Engagement	4.6	1.7	6	7.7	4	5.1	7	9.0	9	11.5	12	15.4	29	37.2
Interpersonal Skills	4.6	1.5	3	3.8	5	6.4	8	10.3	9	11.5	15	19.2	27	34.6
Motivation	4.5	1.6	4	5.1	6	7.7	11	14.1	4	5.1	15	19.2	26	33.3
Study Skills	4.6	1.4	2	2.6	4	5.1	11	14.1	9	11.5	19	24.4	21	26.9

Note: *Range 1 = Never, 2 = 1 to 2 times per year, 3 = 3 to 4 times per year, 4 = Monthly, 5 = Weekly, 6 = Daily

Table 7: Mean Instruction Frequency by Grade Cluster

Academic Enablers	Cluster 1 (Kdg – 2nd)		Cluster 2 (3rd – 5th)		Cluster 3 (6th – 8th)	
	M	SD	*M*	SD	*M*	SD
Engagement	5.0	1.4	4.4	1.7	4.3	1.7
Interpersonal Skills	5.2	1.1	5.1	.77	4.0	1.7
Motivation	4.8	1.5	5.1	1.1	4.0	1.8
Study Skills	4.5	1.6	5.3	.83	4.2	1.4

Note: *Range 1 = Never, 2 = 1 to 2 times per year, 3 = 3 to 4 times per year, 4 = Monthly, 5 = Weekly, 6 = Daily

Appendix A: Academic Enabler Beliefs and Practices Survey

		How important is this skill in your classroom?			How feasible is it to spend time teaching this skill to your class?			If you teach the skill, how often do you do it?					
		Not Very Important	Moderately Important	Very Important	Not Very Feasible	Moderately Feasible	Very Feasible	Never	1-2/yr	3-4/yr	Monthly	Weekly	Daily
	Interpersonal Skills	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Follows classroom rules	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Corrects inappropriate behavior when asked	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Expresses dissatisfaction appropriately	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Accepts suggestions from teachers	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Works effectively in a large group activity	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Interacts appropriately with adults	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Listens to what others have to say	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Gets along with people who are different	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Works effectively in a small group activity	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Interacts appropriately with other students	1	2	3	1	2	3	1	2	3	4	5	6
	Engagement	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Speaks in class when called upon	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Asks questions about tests or projects	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Participates in class discussions	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Volunteers to answer questions	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Assumes leadership in group situations	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Volunteers to read aloud	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Initiates conversations appropriately	1	2	3	1	2	3	1	2	3	4	5	6
[illegible]	Asks questions when confused	1	2	3	1	2	3	1	2	3	4	5	6

	How important is this skill in your classroom?			How feasible is it to spend time teaching this skill to your class?			If you teach the skill, how often do you do it?					
	Not Very Important	Moderately Important	Very Important	Not Very Feasible	Moderately Feasible	Very Feasible	Never	1-2/yr	3-4/yr	Monthly	Weekly	Daily
Motivation	1	2	3	1	2	3	1	2	3	4	5	6
Is motivated to learn	1	2	3	1	2	3	1	2	3	4	5	6
Prefers challenging tasks	1	2	3	1	2	3	1	2	3	4	5	6
Produces high-quality work	1	2	3	1	2	3	1	2	3	4	5	6
Critically evaluates own work	1	2	3	1	2	3	1	2	3	4	5	6
Attempts to improve on previous performance	1	2	3	1	2	3	1	2	3	4	5	6
Makes the most of learning experiences	1	2	3	1	2	3	1	2	3	4	5	6
Persists when task is difficult	1	2	3	1	2	3	1	2	3	4	5	6
Looks for ways to academically challenge self	1	2	3	1	2	3	1	2	3	4	5	6
Assumes responsibility for own learning	1	2	3	1	2	3	1	2	3	4	5	6
Is goal-oriented	1	2	3	1	2	3	1	2	3	4	5	6
Stays on-task	1	2	3	1	2	3	1	2	3	4	5	6
Study Skills	1	2	3	1	2	3	1	2	3	4	5	6
Completes homework	1	2	3	1	2	3	1	2	3	4	5	6
Corrects own work	1	2	3	1	2	3	1	2	3	4	5	6
Finishes own class work on time	1	2	3	1	2	3	1	2	3	4	5	6
Prepares for tests	1	2	3	1	2	3	1	2	3	4	5	6
Prepares for class	1	2	3	1	2	3	1	2	3	4	5	6
Turns in homework on time	1	2	3	1	2	3	1	2	3	4	5	6
Takes care of materials (e.g.: textbooks, desk)	1	2	3	1	2	3	1	2	3	4	5	6
Pays attention in class	1	2	3	1	2	3	1	2	3	4	5	6
Completes assignments according to direction	1	2	3	1	2	3	1	2	3	4	5	6
Takes notes in class (*grades 3-12 only)	1	2	3	1	2	3	1	2	3	4	5	6
Reviews materials (*grades 3-12 only)	1	2	3	1	2	3	1	2	3	4	5	6