Evaluating the Use of a Self-Advocacy Strategy as a Means of Improving Progress in the General Curriculum for Individuals with Cognitive Disabilities

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EVALUATING THE USE OF A SELF-ADVOCACY STRATEGY AS A MEANS OF IMPROVING PROGRESS IN THE GENERAL CURRICULUM FOR INDIVIDUALS WITH COGNITIVE DISABILITIES

by

Amy L. Schelling

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The purpose of this study was to evaluate if the use of a self-advocacy strategy, with high school students identified as having a mild cognitive disability, would increase student use of self-advocacy skills across multiple school settings. Participants in the study were also identified as participating in at least one general education class at the time the study was conducted.

A multiple baseline across participants and across settings design was applied to determine the effects of instruction on students’ use of a self-advocacy strategy before and after the instructional period and across settings. Use and generalization of a self-advocacy strategy was measured across two separate conference meeting settings. Additionally, use and maintenance of behaviors related to self-advocacy were measured across the special and general education classroom settings.

The data presented in the study shows that secondary students with a mild cognitive disability learned a self-advocacy strategy and were able to demonstrate use of the strategy across settings.
ACKNOWLEDGMENTS

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Amy L. Schelling
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CHAPTER I
SIGNIFICANCE OF THE STUDY

Since the late 1980’s, self-determination has increasingly been referred to as an important area of skill and knowledge development for persons with disabilities (Algozzine, Browder, Karvonen, Test, & Wood, 2001; Skouge, Kelly, Roberts, Leake, & Stodden, 2007; Wehmeyer, & Schalock, 2001). Those involved with the field of special education would agree that developing self-determination skills in individuals with disabilities is a worthy educational endeavor and necessary for individuals with disabilities to benefit from their educational experience and attain their post-school goals. According to Wehmeyer and Schwartz (1998) the component skills of self-determination include choice making, decision making, goal setting and attainment, problem solving, self-awareness, self-advocacy, self-regulation, and self-efficacy. Self-advocacy is an important component of self-determination and the development of self-advocacy skills is necessary for an individual to become self-determined. Specifically, “self-advocacy skills are those skills an individual uses to effectively communicate, convey, negotiate, or assert his or her own interests, desires, needs, and rights” (Van Reusen, Bos, Schumaker, Deshler, 2002, p. 1). Self-advocacy skills are needed in order for students to fully participate in their education and ensure that their educational and post secondary goals are met.

The theoretical framework that provides the foundation for this study is Bandura’s social cognitive theory. According to Bandura (1989) social cognitive theory includes the basic concepts of observational learning, self-efficacy, and
reciprocal determination and these concepts influence an individual’s acquisition of information and rules for the use of information. Self-determination’s purpose, component skills, instructional methods utilized to teach such skills, and the contexts in which self-determination and self-advocacy are utilized have their basis in social cognitive theory.

Specifically, observational learning includes the use of models, both verbal and imaginal (Grusec, 1992). The use of models is frequently utilized as a means of teaching individuals with disabilities skills and behaviors related to self-determination and self-advocacy. The concept of self-efficacy is an area of social cognitive theory within which self-determination and self-advocacy can also be grounded theoretically. According to Bandura, self-efficacy “enables people to serve as causal contributors to their own life course by selecting, influencing, and constructing their own circumstances” (1989, p. 8). An individual's learning, behavior, and experiences are influenced by the individual's perceived level of self-efficacy and an individual’s perceived level of self-efficacy is affected reciprocally by the learning, behavior, and experiences of the individual. Wehmeyer and Schwartz (1998) suggest that self-determination can be defined as the development of skills and behaviors that allow one to be the causal agent in their own life and contribute to the maintenance or improvement of quality of life. Therefore, the development of self-determination and self-advocacy skills is dependent on the development of self-efficacy. Additionally, Bandura’s (1989) concept of triadic reciprocal determination suggests that there is an interrelationship between the individual, behavior, and the environment and being a
causal agent in one’s own life includes the development of certain characteristics in an individual, the appropriate use of certain behaviors, and the ability to use the behaviors in a variety of environments, with each impacting the other.

Although the professional literature has grown extensively on the topic of self-determination, based on a meta-analysis conducted by Algozzine et al. (2001), the authors found that the focus of much of the literature is related to providing a rationale for the importance of individuals with disabilities attaining self-determination skills and defining the components of self-determination. Currently, empirically-based research on the outcomes of self-determination interventions is lacking. Specifically for individuals with a cognitive disability research and practice has focused almost exclusively on the self-determination component of choice making despite the importance of self-advocacy skills for an individual’s educational and post-secondary success. Furthermore, according to Cohen and Spenciner (2009) research is needed to determine the effects of teaching self-determination and self-advocacy skills to children with disabilities and a lack of an empirical research base suggests that our knowledge of interventions is still evolving. Clearly the need exists to validate the efficacy of existing self-advocacy instructional strategies for individuals with disabilities, particularly the efficacy of the use of self-advocacy strategies for instructing individuals with a cognitive disability.

Given that recent legislative and policy initiatives are shifting the contexts within which students with disabilities, particularly those with cognitive disabilities, spend their school day, as well as the standards and curricular content in which
students are expected to receive instruction the need also exists to determine how and where instruction related to self-determination and self-advocacy skills will be provided to students (Carter, Lane, Pierson, & Stang, 2008). In a recent survey of teachers, who work with students with cognitive disabilities (Schelling & Rao, under review) across the state of Michigan, approximately half of the respondents indicated that their students needed to acquire self-advocacy skills in order to be successful in the general education setting. However, in the reality of today’s classrooms, a majority of these same teachers also indicated that more instructional time is being devoted to students meeting general curriculum standards and less time is being devoted to students developing skills that fall outside of the general curriculum standards, such as self-advocacy skills. Results of the study showed that an overwhelming majority of teachers of students with cognitive disabilities devote 75% to 100% of instructional time to teaching academic skills related to the general curriculum although they also indicate that a lack of self-advocacy skills is a barrier for successful access and progress in the general curriculum (Schelling & Rao, under review). As a result of recent instructional programming and instructional content changes for students with cognitive disabilities the time and opportunity afforded to teachers to teach self-advocacy skills is becoming increasingly limited. Therefore, determining the effectiveness of self-advocacy interventions within the context of teachers being able to deliver instruction and implement strategies in a timely manner is critical. Recently, the use of computer-based instructional technology has been found to be an effective way to deliver instruction to students with disabilities, while
maximizing the teachers effective use of instructional time (Lancaster, Schumaker, & Deshler, 2002; Langone, Clees, Rieber, & Matzko, 2003; Mechling, 2005)

Computer-based instruction has been used as a tool to teach students with disabilities skills including decoding and word identification, phonological awareness, and sight word reading as well as drill and practice of math facts and concepts (Mechling, Gast, & Thompson, 2008). Many research studies have cited specific use of computer-based instruction to teach functional and community skills to students with cognitive disabilities (Ayers & Langone, 2008; Mechling et al., 2008). Fewer research studies appear describing the use of computer-based instruction to teach a set of complex skills to individuals with cognitive disabilities. Whether or not the use of computer-based instruction is a viable and effective means of teaching students with cognitive disabilities complex skills, such as self-advocacy skills, is relatively unknown at this time and research in this area is warranted.

The Self-Advocacy Strategy was designed to teach individuals with high incidence disabilities “skills they can use when preparing for and participating in any type of education or transition planning conference” (Van Reusen et al., 2002, p. 2). The Self-Advocacy Strategy can be taught via live instruction or via a combination of live and computer-based instruction. “The steps of the strategy provide students with a way of getting organized before a conference and with techniques that can be used to effectively communicate during a variety of conferences or meetings.” (Van Reusen et al., 2002, p. 2). The steps include developing an inventory of a students strengths, needs, and goals, and then during a conference or meeting providing their
inventory information, listening and responding appropriately, asking questions, and naming their goals. In previous research studies students have demonstrated the ability to complete the instructional sequence and learn the Self-Advocacy Strategy in approximately 6 hours (Van Reusen et al., 2002).

Historically, the Self-Advocacy Strategy has been taught to and used successfully with students with learning disabilities, behavior disorders, and mild emotional disturbances (VanReusen, et al., 2002; VanReusen, Deshler & Schumaker, 1989; Lancaster et al., 2002; Hammer, 2004; Test & Neale, 2004). To date there are no studies of the effectiveness of using this strategy to teach students with an identified cognitive disability self-advocacy skills. Additionally, previous studies have included evaluating the effectiveness of the Self-Advocacy Strategy related to increasing student use of self-advocacy skills in settings such as Individualized Education Planning meetings and Transition Planning meetings exclusively. There is no empirical evidence regarding the use of the Self-Advocacy Strategy for increasing the progress of students with disabilities in the general curriculum. As a result of the No Child Left Behind Act (NCLB) of 2001 and the Individuals with Disabilities Education Improvement Act (IDEA) of 2004, progress in the general curriculum for students with mild cognitive disabilities has become a priority and greater numbers of students with a cognitive disability are participating in general education courses and are expected to make progress in the general curriculum. Therefore, a study evaluating the use of a self-advocacy strategy, as a means of improving progress of students with cognitive disabilities progress in the general curriculum given the
current instructional time restraints in the classroom, is warranted and would be a beneficial addition to the existing research-base.

The primary objectives of this study are to assess whether secondary students in grades nine through twelve, who participate in a categorical classroom setting, meaning that their classroom program consists of students who require extensive support and typically spend less than half of their school day in the general education setting, and with a documented cognitive disability, also referred to as intellectual disability, cognitive impairment, and mental retardation (1) demonstrate knowledge of a self-advocacy strategy, (2) generalize use of self-advocacy skills across educational settings, and (3) maintain use of self-advocacy skills over time. This study is designed to answer the following research questions:

1. Do secondary students, identified as having a cognitive disability, demonstrate knowledge of a self-advocacy strategy following instruction in the Self-Advocacy Strategy, as measured by their relevant (verbal) response score, on a ten question probe, during a conference with a special education teacher?

2. Do secondary students, identified as having a cognitive disability, generalize self-advocacy skills across the following educational settings; a conference with a general education teacher as measured by their relevant response (verbal) score on a ten question probe, the special education and the general education classroom settings as measured by the frequency of behaviors identified as behaviors related to self-advocacy that are observed in the classroom setting?

3. Do secondary students, identified as having a cognitive disability, maintain use of self-advocacy skills, as measured by the frequency of behaviors identified as behaviors related to self-advocacy that are observed in the classroom setting over time?

In summary, as a result of NCLB (2002) and IDEA (2004) policies related to accountability through assessment and progress in the general curriculum, educational
programming for students with cognitive disabilities has changed. Students with cognitive disabilities are now spending a greater amount of time in the general education setting, are expected to progress in the general curriculum, and a greater amount of instructional time is being devoted to academic instruction. The current educational focus allows little time for teachers to incorporate instruction related to functional and adaptive behavior skills including self-determination and self-advocacy skills although these skills are needed for successful progress in the general curriculum and attainment of post-school outcomes. As a result, students with cognitive disabilities may be asked to participate and progress in the general curriculum and classroom without the necessary skills to be successful, which include self-advocacy skills. Providing students with self-advocacy skills, through explicit instruction, may lead to greater success for students with cognitive disabilities within a variety of school settings and beyond.
CHAPTER II

REVIEW OF THE LITERATURE

Conceptual Framework

Many research studies support the notion that the development of self-determination and self-advocacy skills in individuals with disabilities is an important goal and should be explicitly taught to students beginning at a young age (Fiedler & Danneker, 2007; Kling, 2000; Phillips, 2001; Test & Neale, 2004). At the same time, recent policy implementation reflects the beliefs of many that students with disabilities have access to and progress in the general curriculum. As a result, students with disabilities, particularly those with mild cognitive disabilities, are spending a greater amount of time in the general education classroom and with the general curriculum, which results in a greater amount of instructional time being devoted to academic instruction. This focus on academics does not however, diminish the importance of a student’s ability to become self-determined and develop self-advocacy skills. Therefore, careful consideration of how and when self-advocacy skills should be addressed and taught to students with disabilities must take place. The use of computer-based instruction combined with teacher directed instruction may be a viable way to teach self-advocacy skills to students given the time constraints of current educational programming. It may seem that a student’s acquisition of self-advocacy skills is at odds with progress in the general curriculum, however a student’s ability to progress in the general curriculum may indeed be
dependent on his or hers possession of self-advocacy skills (Fiedler & Danneker, 2007).

There are three purposes for this literature review. The first is to identify the component skills of self-advocacy and to identify studies that describe the efficacy of existing instructional programs for teaching students with cognitive disabilities self-advocacy skills. The second purpose for this literature review is to describe the current educational context for students with disabilities, particularly those with cognitive disabilities as it relates to access to and progress in the general curriculum and setting, including identifying studies that describe the skills required of students and effective strategies for such participation. The third purpose for this literature review is to identify studies that describe the efficacy of using computer-based instruction for teaching complex skills to students with disabilities, particularly those with cognitive disabilities and as an instructional format that minimizes teacher directed instruction while maximizing student learning.

Self-Advocacy

Self-advocacy is the first topic of study included in this literature review. The terms self-determination and self-advocacy are often used interchangeably in the literature and by professionals in the field of special education (Hammer, 2004). For the purposes of this study, self-advocacy will be viewed as a necessary skill required for one to become self-determined; this is based on the results of a study conducted by Wehmeyer, Kelchner, and Richards (1996) that identified self-advocacy as an essential characteristic that defined self-determined behavior.
All literature included for review were located using the WilsonSelectPlus via First Search, Academic Search Premier (EBSCO), and PsycINFO electronic educational databases. In addition, for this portion of the literature review, The Self-Advocacy Strategy manual (Van Reusen et al., 2002) was also utilized. The search terms for the self-advocacy skills literature review included self-advocacy, self-determination, access to general education curriculum, self-advocacy programs, transition planning, and self-advocacy skills. The criteria for including literature related to self-advocacy in the literature review were that the literature include a definition of self-advocacy and its components, evidence that the study was conducted with individuals with a cognitive disability, was geared toward use of the skill in a general education context, included minimal teacher directed instruction, and was empirically-based. There were no studies from the current literature review that met all criteria.

Based on a meta-analysis of self-advocacy intervention studies Test, Fowler, Brewer and Wood (2005) developed a conceptual framework of self-advocacy that includes the component skills of knowledge of self, knowledge of rights, communication, and leadership. This framework is supported by a definition offered by Skinner (1998) that states “Students become self-advocates when they (a) demonstrate understanding of their disability, (b) are aware of their legal rights, and, (c) demonstrate competence in communicating rights and needs to those in positions of authority” (p. 280). This framework is further supported by a definition offered by Pocock et al. (2002) that states self-advocacy instruction includes teaching students
about their rights and responsibilities, how to communicate and negotiate effectively, and how to identify and request needed accommodations and modifications.

Additionally, Schreiner (2007) states advocating requires a level of self-awareness and self-realization that many individuals with disabilities do not possess and need to be taught explicitly. According to Schreiner, self-awareness and self-realization include recognition of ones likes, dislikes, wants, needs, strengths and limitations and advocating those to others involves the ability to communicate effectively and have the opportunity to do so in authentic settings (2007). Throughout the literature, the components of self-advocacy are most frequently described or cited as one of or a combination of the above skills, despite the fact that there appears to be no definitive consensus on the definition of self-advocacy among the current literature sources.

The content review of self-advocacy intervention studies conducted by Test et al. (2005) found 25 self-advocacy studies that involved individuals with disabilities. Based on the descriptions of the studies, provided in the meta-analysis by Test et al. (2005), only three of the studies indicated including individuals with cognitive disabilities in the study. Furthermore, none of the studies described the use of self-advocacy skills in a conference with a general education teacher or reported results related to generalization of skills to the general education classroom as a means of promoting access to and progress in the general education setting. Therefore, the criteria for inclusion of studies in this portion of the literature was expanded to include empirically-based studies that held the promise of being effective for teaching students with cognitive disabilities self-advocacy skills and could be adapted for use
in conferences with general and special education teachers, with minimal teacher
directed instructional time.

The first study of a self-advocacy program that met at least some of the criteria
that was reviewed was called the ASSERT Strategy by Beverly Kling (2000). This
strategy uses a mnemonic to help students recall the steps in the ASSERT process.
The ASSERT steps are as follows: (1) Awareness of disability, (2) State disability, (3)
State strengths and limitation, (4) Evaluate problem and solutions, (5) Role play
solution and (6) Try it in the real setting. The article included a description of the
program and a definition of self-advocacy and its components but did not include data
related to actual student participants, amount of instructional time to complete
strategy instruction, or amount of teacher directed instruction. The author indicated
that the strategy could be used with students with a variety of disabilities and that the
steps of the strategy need not be taught in a linear fashion (Kling, 2000). Although no
empirical data is described in the article and little information regarding the
instructional process is available, the strategy does appear to have promise for being
used to promote access to and progress in the general education setting.

The second study of a self-advocacy program that was included for review
was called the Self-determination Learning Model of Instruction (SLDMI), by
Wehmeyer, Palmer, Agran, Mithaug, and Martin (2000). The strategy was developed
based on the author’s concluding that “students need to learn how to advocate for
their own needs and interests by taking action to change circumstances that pose
obstacles to their pursuits” (Wehmeyer et al., 2000, p. 441) and has been empirically
validated for use with individuals with disabilities. This strategy has been widely used to teach students with disabilities self-determination skills. The instructional model is comprised of a sequence of problem-solving scenarios “that moves them from where they are (an actual state of not having their needs and interests satisfied) to where they want to be (a goal state of having those needs and interests satisfied)” (Wehmeyer et al., 2000, p. 442). Each instructional phase poses a problem the student must solve. Throughout the instructional sequence of the model students answer questions which connect their needs and interests to their actions and results based on their identified goals and plans. A total of 40 students received instruction from teachers using the model. Thirteen of the students were identified as having mental retardation (Wehmeyer et al., 2000). Results of the study indicated that close to half of the students receiving instruction using the model attained educationally relevant goals at the level expected by their teacher and over 80% of students made some progress toward their goal receiving instruction using the model. Additionally, the authors reported that nearly 60% of students with cognitive disabilities achieved or exceeded their goals. This suggests that the SDLMI may be a viable program for teaching students with cognitive disabilities self-determination skills closely related to self-advocacy skills. The authors did not report the amount of instructional time required of students to complete the program, the amount of teacher directed instructional time to implement the program, or indicate how use of the program could assist students in accessing the general education curriculum. The authors note that use of the strategy does require teachers to supplement the instructional mode
with educational supports and they attempt to identify some strategies and supports that could be used to successfully implement the model but these increase the amount of teacher directed instruction.

The third study of a self-advocacy program that was included for review was called the *Self-Advocacy Strategy*, originally reported in the literature by Van Reusen et al., (1989). Since that time, reports of additional research to determine the efficacy of the strategy have surfaced in the literature (Hammer, 2004; Lancaster et al., 2002; Test & Neale, 2004; Van Reusen et al., 2002). The Self-Advocacy program has been empirically validated for use with individuals with disabilities. In each of these studies, the Self-Advocacy Strategy was implemented specifically to teach students with high incidence disabilities, including learning disabilities and emotional or behavioral disabilities, how to use self-advocacy skills in individualized educational planning (IEP) or transition planning meetings. The literature supports the efficacy of using the Self-Advocacy Strategy to increase student's abilities to contribute relevant responses during educational and transition planning meetings as well as generate and articulate appropriate goals (Van Reusen et al., 2002). The amount of instructional time required to teach the Self-Advocacy Strategy ranged from three to four hours and was consistent across studies. Only the study conducted by Test and Neale (2004) reported having any participants with a cognitive disability and the number of students in that study described as having a cognitive disability was one. Although none of the aforementioned studies specifically addressed the use of the strategy for increasing access to and progress in the general curriculum as well as
the use of the strategy in an educational conference with a general education teacher, the Self-Advocacy Strategy appears to be the most likely strategy for teaching students with cognitive disabilities self-advocacy skills, due to the number of empirically-based studies that have demonstrated its success with students identified in other disability categories. It also appears to be the strategy most adaptable for use in meetings with general and special education teachers to promote progress in the general curriculum and setting. Furthermore, the validation of an interactive hypermedia program version by Lancaster et al. (2002) and then the subsequent study conducted by Hammer (2004) demonstrating the effectiveness of the interactive hypermedia version of the Self-Advocacy Strategy offers the opportunity to maximize student learning while minimizing teacher directed instruction, allowing the possibility that the program can be successfully implemented within the current context of educational programming for students with cognitive disabilities. The interactive hypermedia version of the Self-Advocacy Strategy developed and validated by Lancaster et al. will be described in detail in the methods section.

Accessing the General Curriculum

The second topic included in this review of literature is related to how students with a cognitive disability, specifically, access the general curriculum (see Glossary of Terms). Since the implementation of IDEA (1997) access and progress in the general curriculum for students with disabilities (see Glossary of Terms) has been mandated. A plethora of empirical studies have surfaced since that time describing how students with learning, emotional or behavioral, and health impairments access
the general curriculum including what instructional programs and strategies are most effective in promoting progress in the general curriculum. Fewer empirical studies related to how students with cognitive disabilities access and progress in the general curriculum have been conducted. The importance of all students, regardless of type or severity of the disability, accessing and progressing in the general curriculum has become a priority and is supported through the implementation of recent legislative policy, namely NCLB (2002) and IDEA (2004).

The search terms for the accessing the general curriculum literature review included general education curriculum, access to general education curriculum, inclusive education, general curriculum and individuals with intellectual disabilities, special education policy, and special education reform. The criteria for including literature related to accessing the general curriculum in the literature review were that the study include either a description of how the current educational policy context has impacted educational programming for individuals with disabilities, particularly students with cognitive disabilities or intellectual disabilities, or describe strategies or best practices for improving individuals access to and progress in the general education curriculum or setting, or contained content related to the use of self-determination or self-advocacy skills as a means of promoting progress in the general education curriculum.

The current literature supports the notion that despite broad agreement among researchers and practitioners regarding the importance of promoting self-determination and self-advocacy skills in students with disabilities, there still remain a
great number of students who lack these skills (Carter et al., 2008). At the same time, current policy initiatives have altered the contexts, standards, and curricular content in which students are expected to receive instruction (Carter et al., 2008). Both IDEA (2004) and NCLB (2002) require that students with disabilities access the same curriculum as their peers without disabilities. According to Lane, Wehby, & Robertson (as cited in Carter et al., 2008) this has resulted in increased demands being placed on teachers to provide instruction to students with disabilities across a diversified curriculum, which begs the following questions for researchers and practitioners alike. Given the many demands placed on valuable, yet limited instructional time, how can instruction related to developing self-determination skills and instruction related to the content standards of the general curriculum be done simultaneously? Must educators working with individuals with disabilities, particularly those with cognitive disabilities, sacrifice content related to self-determination and other functional skills to provide instruction related to the general curriculum, which is largely comprised of academic content or visa versa?

Although some of the literature supports the notion that teaching self-determination skills is in competition with or incompatible with teaching skills connected to the general curriculum (Bassett & Kochhar-Bryant, 2006) others believe the general curriculum may provide a promising context for promoting self-determination skills and further support is noted in the literature for self-determination skills being a point of access to the general curriculum for students
with disabilities (Carter et. al., 2008; see also Fiedler & Danneker, 2007; Palmer, Wehmeyer, Gipson, & Agran, 2004).

In an article written by Spooner, Dymond, Smith, & Kennedy (2006) the authors suggested that strategies and best practices for ensuring students with disabilities have access to and progress in the general curriculum are still evolving. Despite the fact that the knowledge-base related to promoting access to and progress in the general curriculum is still evolving, the authors suggest that there are at least four approaches that have documented support in the literature. The four approaches are peer supports, self-determination, universal design for learning, and teaching and accessing content standards (Spooner et al., 2006). “Instruction in the areas such as goal setting, problem-solving, self-determination, and student-directed learning can also provide effective curriculum augmentation strategies that can be used in an effort to access the general curriculum for students with intellectual disabilities (Spooner et al., 2006, p. 179). A study conducted by Carter et al. (2008) supports the previous study that states the development of self-determination skills in students with disabilities as an important practice for accessing the general curriculum. The Carter et al. (2008) study consisted of surveying 340 general and special education teachers on the importance of teaching the seven components of self-determination and found that skills such as problem solving, decision making, self-management, and goal setting were judged to be fairly high instructional priorities, even in relation to other curricular priorities, thus reinforcing the notion that development of self-determination skills is critical to student success within the general education
classroom and curriculum. The authors of the study did however report that general and special educators ranked the self-advocacy and self-awareness components as less important than the other five self-determination components (choice making, decision making, goal setting and attainment, problem solving, self-advocacy and leadership skills, self-awareness and self-knowledge, and self-management and self-regulation skills) which suggests that instruction related to self-advocacy skill attainment for students with disabilities may not be being addressed in general or special education classroom settings to the extent necessary at this time. Carter et al. (2008) suggested although teaching self-determination skills may be compatible with the general curriculum, the need for educators to seek out supplemental instructional contexts for developing student's self-advocacy and self-awareness skills specifically may be required and necessary. Additional studies cite the need to provide direct instruction related to self-advocacy and self-awareness skills for students with disabilities (Brinckerhoff, 1994; Hammer, 2004; Kling, 2000; Skinner & Lindstrom, 2003).

**Computer-Based Instruction**

The third topic included in the current review of literature is related to the use of computer-based instruction as a means of teaching a variety of skills to students with disabilities. Recent technology initiatives, such as the National Educational Technology Plan of 2004, created by the federal Department of Education Office of Educational Technology (OET), have challenged educators to improve education and meet the challenges of NCLB through technology. The search terms for the literature review related to computer-based instruction included *computer-based instruction*,


computer-based video instruction, interactive hypermedia and instruction, computer-based instruction and students with disabilities, computer-based instruction and individuals with cognitive disabilities, and assistive technology. The criteria for including literature related to computer-based instruction were that the study was controlled, included participants with cognitive disabilities or developmental disabilities, and provided a description of the use of technology to teach a specific set of academic or functional skills.

A growing body of literature supports the use of computer-based instruction as a means of increasing access to educational materials and content as well as important community-related skills for students with disabilities (Ayres & Langone, 2002; Langone et al., 2003; Mechling, 2005). Some of the most promising uses of computer-based technologies for instructing students with cognitive disabilities employ the use of video technology to provide situated cognition, anchored instruction, modeling of academic, functional, and social behaviors, and computer-based simulations, all of which have been well documented in the literature as being effective instructional methods for teaching individuals with disabilities a variety of skills and academic content and increasing generalization of these skills to a community setting (Hutcherson, Langone, Ayres, & Clees, 2004; Lee & Vail, 2005; Miller, Brown, & Robinson, 2002). Specifically, situated cognition provides the means for connecting academic concepts to real life situations in real life contexts and anchored instruction refers to the educational approach that uses video anchors to create scenarios for students to develop knowledge-based skills through engagement
in naturalistic problem-solving environments (Langone et al., 2003; see also Mechling, Gast, & Langone, 2002).

The first study included in the literature review of computer-based instruction authored by Ayres and Langone (2002) involved the use of interactive computer-based instruction including video to teach students with a disability a functional skill. The purpose of the study was to determine if a standalone multimedia program could effectively teach a student the “dollar plus” skill and, in turn, facilitate generalization of the learned skill to a natural environment (Ayres & Langone, 2002, p. 16). Three students with mild to moderate cognitive disabilities participated in the study. A multiple probe across participants across settings was used to determine if students could learn the “dollar plus” strategy and generalize the skill to a real life context, in this case a grocery store purchase. The study procedures consisted of generalization probes, before and after the intervention, taking place in a national chain grocery store (five trials/one session). During the generalization probes the researcher acted as the cashier and participants were prompted to pay for an item using the dollar plus strategy. Participants also engaged in computer-based probes and training, working one-on-one with the researcher in the special education classroom setting (ten trials/two sessions, ten trials/three sessions). The computer-based training sessions included participants viewing video’s demonstrating the use of the dollar plus strategy in a grocery store setting and interactive video sessions prompting participants to use the dollar plus strategy. Participants’ number of trials performed correctly during generalization probes and computer-based probes was recorded. A correct response
was recorded when (a) the participant initiated the strategy within five seconds of the cashier announcing the total, (b) the transaction was completed in fifteen seconds, and (c) the transaction resulted in the participant handing the cashier no more than a dollar plus (Ayres & Langone, 2002).

The authors found that the use of computer-based instruction alone did not lead to generalization of the skill to the community setting but student's ability to perform the task did increase. One of the limitations of this study is that there were only three participants therefore generalizing the results is problematic. However, the study did demonstrate that the use of computer-based instruction, including simulations does appear to have a positive effect on student learning (Ayres & Langone, 2002).

A second study included in the literature review, authored by Lancaster, Schumaker, and Deshler (2002) provides evidence that students with high incidence disabilities (learning disabilities, emotional or behavioral disorders, and other health impairments) can learn a complex chain of skills, specifically self-advocacy skills using computer-based instruction that employs the use of instructional features such as “including detailed explanations, scaffolded practice, feedback, anchored instruction, and interactivity” (Lancaster et al., 2002, p 279). The specific purposes of this study were to determine if students with high incidence disabilities could learn and use self-advocacy skills when instruction in the Self-Advocacy Strategy was largely provided via an interactive hypermedia version and to validate the use of the Self-Advocacy instructional CD-ROM. There were 22 high school student
participants identified as having either a learning disability, behavior disorder, or other health impairment. The study included two experimental instructional groups and one control group. The experimental groups were provided self-advocacy instruction via a computer-based instructional format or through a live instructional format. The results of the study showed that students who participated in the interactive hypermedia experimental group learned the self-advocacy strategy and were able to generalize the strategy to an educational planning conference meeting (Lancaster et al., 2002). Due to the study's positive results, the Self-Advocacy CD-ROM (Lancaster & Lancaster, 2005) was validated as an effective tool for teaching the Self-Advocacy Strategy, as well as a means of teaching self-advocacy skills to students with disabilities when time and opportunity to teach such skills is lacking. Although the number of participants in this study exceeds the previous study cited, no individuals with cognitive disabilities were included in the study, so the ability to generalize these results to the population of students that have cognitive disabilities is diminished.

The third study included for review related to computer-based instruction was authored by Mechling (2004) and employed the use of computer-based instruction, including video captions and still photographs to teach three elementary aged individuals, with intellectual disabilities, how to identify and read grocery aisle words and phrases. The study included the use of a multiple probe across participants design. The instructional sequence of the study involved students engaging in watching video captions of locating specific items in the grocery store, and reading
the grocery aisle signs via still photographs of actual grocery aisle signs. After the instructional period, student's ability to generalize the skills of reading grocery aisle signs, and picking out specific grocery items within an aisle was evaluated. The author found that each of the three students included in the study improved their ability to read grocery aisle signs and locate items on a grocery list as a result of computer-based instruction (Mechling, 2004). Although the study did demonstrate student's ability to learn a complex chain of skills, a limitation of the study is that it was conducted with only three participants, so generalizing the results to a large population of individuals with cognitive disabilities is difficult at this time.

Although there is an increasing amount of literature related to the effectiveness of using computer-based instruction as a means of teaching academic and functional skills to students with disabilities there is less research related to teaching complex skills to students with cognitive disabilities. Furthermore, much of the existing literature is representative of descriptions of studies that are not empirically-based or controlled. Therefore, the need exists to conduct empirically-based studies of the use of computer-based instruction to teach students with cognitive disabilities complex skills, such as self-advocacy skills.

Summary of the Literature

The importance of teaching self-determination and self-advocacy skills to students with disabilities, particularly those with cognitive disabilities is widely accepted in the field of special education as evidenced by the plethora of literature addressing self-determination and self-advocacy, as well as the number of curricula that have been
developed in recent years. Despite the recognized importance of providing students with disabilities the opportunity to learn self-determination skills and engage in self-determined behavior and the availability of instructional resources, unfortunately there are still a great number of students that do not become self-determined individuals who can advocate for their needs, goals, and desires. Lack of teacher knowledge of how to teach self-determination and self-advocacy skills are often cited as a reason for this. Given the current educational context in which access to and progress in the general curriculum is a primary focus of educational programming for students with disabilities, time to provide instruction and adequate time to practice self-determination skills are also lacking. Additionally, although there are several instructional programs available, very few have been empirically validated for their efficacy in teaching students self-determination and self-advocacy skills. Therefore, current research must be focused on determining the effectiveness of various instructional programs or strategies for teaching self-advocacy skills, delivered through the use of varying instructional formats, given the current strain on instructional time for teachers and students.
A single-subject experimental design was utilized for this study. Single-subject experiments allow for the researcher to study the behavior of one subject under changing conditions (Ary, D., Jacobs, L. C., & Razavieh, A., 1990; Horner & Baer, 1978). Single-subject designs can be utilized when there is a single subject under study or when individuals are considered a part of one group. In a single-subject design each subject serves as his or her own control. Specifically for this study a multiple baseline across participants and across settings design was applied to determine the effects of instruction on students’ use of a self-advocacy strategy before and after the instructional period and across settings. Use of this experimental design, "shows the functionality of the intervention by demonstrating that the intervention apparently produces the same kind of behavior change across a variety of settings for the same behavior of a single subject or across a variety of subjects displaying the same behavior in the same setting" (Horner & Baer, 1978, p. 189). A multiple baseline design made it possible to determine if the introduction of the intervention or independent variable (self-advocacy strategy) actually caused the change in behavior desired or dependent variable (use of self-advocacy skills across settings, as measured by score on a ten question probe). Measuring the use of self-advocacy skills across settings was supported by the addition of a teacher questionnaire containing both quantitatively and qualitatively designed questions.
The current study was designed to answer the following research questions:

1. Do secondary students, identified as having a cognitive disability, demonstrate knowledge of a self-advocacy strategy following instruction in the Self-Advocacy Strategy, as measured by their relevant (verbal) response score, on a ten question probe, during a conference with a special education teacher?

2. Do secondary students, identified as having a cognitive disability, generalize self-advocacy skills across the following educational settings; a conference with a general education teacher as measured by their relevant response (verbal) score on a ten question probe, the special education and the general education classroom settings as measured by the frequency of behaviors identified as behaviors related to self-advocacy that are observed in the classroom setting?

3. Do secondary students, identified as having a cognitive disability, maintain use of self-advocacy skills, as measured by the frequency of behaviors identified as behaviors related to self-advocacy that are observed in the classroom setting over time?

Pilot Study

Conducting a pilot study prior to the implementation of the current study was necessary to test, verify, and modify the instrumentation. One of the measures used in the current study, the Conference Question Guide (see Appendix A) was altered, from the original set of standard questions developed for a study conducted by Van Reusen (as cited in Lancaster, 1999), to increase its appropriateness for students with a cognitive disability and to reflect use of the instrument in an informal conference meeting with a teacher. Based on the results of the pilot study, that included two secondary students with an identified cognitive disability, the complexity of the wording of the question items was reduced and unfamiliar vocabulary was omitted.
from a number of question items. Specific alterations of the standard set of questions are described in detail in the Measures section of this chapter.

A Teacher Questionnaire measure, (see Appendix B) was developed for the current study to evaluate whether students generalize and maintain self-advocacy skills across the special and general education classroom setting. Based on the results of the pilot study, that included two secondary special education teachers familiar with working with students with a cognitive disability, two of the measure items were omitted from the current study measure because of the difficulty of observing the specific behavior. These alterations are described in detail in the Measures section of this chapter.

Participants

Convenience sampling was used to recruit one special education teacher and eight secondary level students for this study. The purpose of the study was to assess whether secondary students with a documented cognitive disability demonstrate knowledge of a self-advocacy strategy, and generalize and maintain use of self-advocacy skills across educational settings. Therefore, recruiting a secondary special education teacher whose caseload of students included students in grades nine through twelve, with a documented cognitive impairment, per rule R 340.1705 of the Michigan Administrative Rules for Special Education (2008) was necessary. The student participants recruited for the study were drawn from the participating special education teacher’s caseload and included students with a documented cognitive disability. Specific inclusion and exclusion criteria for both the special education
teacher and student participants are described in detail in the following section. The Human Subjects Institutional Review Board protocol was followed to obtain the teacher’s permission to cooperate with the study and included the following procedures (see Appendices C and D).

Student Participants

The number of students recruited for the study was eight. The student participants were drawn from the caseload of the special education teacher that chose to participate in the study and who met the inclusion and exclusion criteria for the study.

Inclusionary Criteria

The inclusionary criteria for student participants included; age: 14-19 years of age, gender: both, cognitive status: cognitive impairment, other: at least one course taken in the general education classroom setting and a mild cognitive impairment defined by the students eligibility designation on their most recent Individualized Education Program (IEP) Form of Cognitive Impairment (Rule: 340.1705) and eligible for participation in the Supported Independence MI-Access assessment, Functional Independence MI-Access assessment, or MEAP-Access assessment, as designated on the IEP Form from the grade in which the student last participated in the state-wide assessment program (8th or 11th grade). The cooperating special education teacher verified that student participants met the inclusion criteria through a review of potential students IEP Forms.
Exclusionary Criteria

The exclusionary criteria for student participants included; limited ability to communicate verbally, limited ability to understand and speak English, limited ability to see information on a standard computer screen or students with low vision, students with a physical disability that prohibits the use of a computer, and those students that participated in the Participation Levels of the MI-Access test, per their last testing cycle, as verified by an IEP Form. The cooperating special education teacher verified that student participants met the exclusion criteria through a review of potential students IEP Forms.

A total of eight students on the cooperating special education teacher’s caseload met both the inclusion and exclusion criteria for the study.

All of the students, meeting the inclusion and exclusion criteria, and their parents were invited, via a letter mailed to their homes by the student investigator, to attend a presentation to learn more about the study (see Appendix E). Those that indicated an interest in learning more about the study had the following opportunities to do so; (1) attend the presentation, (2) not attend and have the researcher or the participating special education teacher call the parent at a time that was convenient to learn more about the study, or (3) request the informed consent form be sent home for review. Three parents and one student attended the presentation. Three other parents requested via a phone call to the special education teacher that the informed consent documents be sent home, one student chose not to participate and one parent chose
not to have their child participate. There were a total of six student participants who chose to participate in the study.

The presentation (see Appendix F for transcript) included general information about the researcher, a definition of self-advocacy, a description of The Self-Advocacy Strategy, what their participation in the study would mean including the instructional procedures, the approximate amount of time for completion of the instruction, and that all data collected would be confidential. Parents and students were presented with a visual schedule of the study work plan, and told that their participation would be completely voluntary, and they could choose not to participate (and this wouldn’t affect their grades at all) or stop participating at any time. They were also told what the students may learn and had the opportunity to view the materials used for instruction. Students and their parents were given the investigators phone number and email address if they had any additional questions or concerns about the study. At the conclusion of the presentation meeting conducted by the researcher, students and parents had the opportunity to ask any questions they had and request informed consent through the consent and assent documents.

A teacher of students with mild cognitive disabilities as well as secondary students with mild cognitive disabilities were included in this study because the study’s focus was specifically related to determining the efficacy of using a self-advocacy strategy to increase the use of self-advocacy skills in the population of students considered to have a mild cognitive disability. The Self-Advocacy Strategy has been empirically validated as an effective instructional strategy for teaching
students within other disability categories (learning disabilities, emotional/behavior disorder, and other health impairment) self-advocacy skills, but only one of the previous studies included a single individual with a cognitive disability.

The special education teacher in the study was asked for his/her cooperation with the study, but no data were collected about the teacher therefore she was not considered to be a participant. The cooperating special education teacher's classroom program was designated as a program for students with a mild cognitive impairment per Michigan Administrative Rules for Special Education rule R 340.1740 (2008). The cooperating special education teacher was given a copy of the Self-Advocacy Strategy training manual (Van Reusen et al., 2002), a copy of the Self-Advocacy CD (Lancaster & Lancaster, 2005), and was provided with an overview of the Self-Advocacy Strategy (described in detail in the Self-Advocacy Strategy description section of Chapter 3), by the researcher. Student participants recruited for this study participated in at least one general education course during the time the study took place and one of their general education teachers was also invited to cooperate with the study. The cooperating general education teachers were asked to cooperate with the study by the special education teacher or the student. The cooperating general education teachers were given a description of the Self-Advocacy Strategy and a description of the study and what their cooperation with the study would entail.
Measures

Content validity and instrument reliability of the Conference Question Guide and Teacher Questionnaire were established through review by members of the researcher's dissertation team and by conducting a pilot study of the instrumentation.

Conference Question Guide

The Conference Question Guide contained 10 questions or probes that were asked verbally to participating students during at least three baseline and two different conference situations. During each conference the teacher asked the ten questions from the Conference Question Guide and students had an opportunity to respond verbally, making statements regarding their strengths, areas to improve, accommodations needed, and goals for the class, as well as ask for clarification about something related to the class. Each student response was recorded by the researcher during the conference meeting. The researcher then recorded the student's relevant responses on the Relevant Response Scoring Sheet (see Appendix G), to determine the number of relevant responses made by the student during the conference. A relevant response consisted of any comment, statement, shared information, or question that pertained to the students' participation and progress in the conferencing teacher's classroom. Students were awarded one point per relevant response to be recorded on the Relevant Response Scoring Sheet. For example, if a student was asked “What do you think are your study or academic strengths” and the student responded “I am good at math and following directions” the student would receive two relevant response points. A line graph was used to represent each individual
student’s relevant response scores on the Conference Question Guide for baseline and post-intervention. For this study, the researcher was concerned with whether or not students increased their use of self-advocacy skills, generalized these skills to multiple settings, and maintained these skills over time, and was not necessarily concerned with the magnitude of increase. Therefore, there was no predetermined minimum or maximum number of relevant responses used in the analysis of this instrument’s data. The researcher hypothesized that the slope of an individual student’s relevant response score graph would increase from baseline to post-intervention and the results will be reported as raw scores for each student participant for baseline and across two post-intervention settings.

In the original study conducted in 1985 by Van Reusen (as cited in Lancaster et al., 2002) a standard set of questions was developed and administered to students to ensure students had an equal opportunity to use the PLAN steps (Provide your inventory, Listen and respond, Ask questions, Name your goals) of the Self-Advocacy Strategy when participating in their educational planning meeting. According to Van Reusen, as cited in Lancaster (1999), the original set of questions were based on literature related to “behavioral descriptions of desired outcomes for student participation in IEP conferences and were validated by a panel of 20 professionals (p. 60)”. In a subsequent study, during each student’s actual educational planning meeting, student responses to the standard set of questions was recorded and analyzed (Van Reusen & Bos, 1994). The original questions have been used in subsequent studies as well (Hammer, 2004; Lancaster et al., 2002; Van Reusen et al., 1989).
The current study differed from previous studies involving the efficacy of the Self-Advocacy Strategy for promoting self-advocacy skills in that this study involved students with cognitive disabilities and all previous studies did not involve participants identified as having a cognitive disability and the study was designed to assess use of the strategy in an informal conference meeting with teachers rather than in formal educational or transition planning meetings. Therefore it was necessary to alter the original standard set of questions to use vocabulary that was easily understandable and consistent across instruction, role play sessions, and conference settings and was reflective of the kind of discussion and information seeking that would take place in a meeting between a student and their teacher, related to participation and progress in a course rather than a formal IEP team meeting.

These changes were made to the original Conference Question Guide: (a) academic strengths and academic areas to improve were substituted for study and learning skills because academic strengths and areas to improve are consistent with the vocabulary used in the instructional materials; (b) using the phrase in your classes, rather than in your school subjects was used to simplify vocabulary and use words likely to be familiar to students; (c) using the phrasing test accommodations rather than text items to maintain consistency between instructional material vocabulary and the Conference Question Guide probe; (d) including “What other types of accommodations will help you to participate and be successful in my class?” and “Can you tell me what learning or behavior goals you have this year for the class?” and omitting “Are there any after school activities in which you want to become
involved such as (i.e., sports, jobs, clubs, etc.)?” because the omitted question reflects content appropriate for an IEP meeting, rather than an informal conference meeting with a teacher.

Based specifically on the results of the pilot study, question number four was edited to state “What have teachers done in the past that has helped you learn in your classes?” instead of "Can you tell me about any activities or materials that teachers have shared with you in the past that have helped you learn in your classes?" The wording was simplified and reworded so that there was a distinction between it and the very next question on the Conference Question Guide probe. Also, based on the results of the pilot study, upon graduation was changed to when you are done with high school and the word pursue was changed to have.

Teacher Questionnaire

The second instrument that was used in the study was called the Teacher Questionnaire and was completed by the cooperating special education teacher and general education teachers. The Teacher Questionnaire was developed by the researcher to evaluate whether or not teachers perceive an increase in student use of self-advocacy skills in various classroom settings as a result of instruction. The Teacher Questionnaire contained 13 5-point Likert-type scale questions and one open-ended question. The questions were structured in the following way; “Since receiving self-advocacy instruction, the student asks for assistance, when needed, with greater frequency” and the response choices were 1= strongly disagree to 5= strongly agree. Cooperating teachers completed the Teacher Questionnaire on two separate occasions
at two and four week post conference intervals. The Likert-type scale items were presented as raw data in individual participant tables by behavior, type of teacher (special, general), and two time intervals. Analysis of the Teacher Questionnaire results were based on the raw data collected. The open-ended question data were summarized and used to enhance the quantitative data findings, when appropriate. Based on the results of the pilot study, two of the original items were omitted from the questionnaire due to the possible difficulty of observing the behaviors in the classroom setting.

The teacher questionnaire was developed based on what the current literature, in the field of special education, defines as the component skills of self-advocacy. Since the late 1980's, self-determination has increasingly been referred to as an important area of skill and knowledge development for persons with disabilities (Algozzine, Browder, Karvonen, Test, & Wood, 2001; Skouge, Kelly, Roberts, Leake, & Stodden, 2007; Wehmeyer, & Schalock, 2001). As stated previously, self-advocacy is an important component of self-determination and the development of self-advocacy skills is necessary for an individual to become self-determined. “Self-advocacy skills are those skills an individual uses to effectively communicate, convey, negotiate, or assert his or her own interests, desires, needs, and rights” (Van Reusen, et al., 2002). More specifically, self-advocacy involves identifying and meeting personal needs, understanding personal rights and responsibilities, having the ability to effectively communicate needs and negotiate for help, have self-awareness skills and knowledge about their specific needs, as well as develop social skills for
effectively communicating with peers and teachers (Brinckerhoff, 1994; Pearl, 2004; Pocock et al., 2002; Skinner, 1998; Skinner & Lindstrom, 2003).

The researcher was primarily interested in assessing the extent to which students use self-advocacy skills in the classroom setting to make their interests and needs known, ask questions, actively participate in groups, set goals, and negotiate and problem-solve. Additionally, the researcher was interested in evaluating whether or not a student’s level of independence, initiative, decision-making skills, confidence, and overall performance increased as a result of instruction. The literature supports the notion that these behaviors demonstrate a student’s use of self-advocacy skills (Brinkerhoff, 1994; Pearl, 2004; Pocock et al., 2002; Sharma, Singh, & Kutty, 2006; Skinner, 1998; Skinner & Lindstrom, 2003; Van Reusen & Bos, 1994). The Likert-type scale Teacher Questionnaire items were presented as raw data in individual participant tables by behavior, type of teacher (special, general), and two time intervals. Analysis of the Teacher Questionnaire results were based on the raw data collected. The open-ended question data were summarized and used to enhance the raw data, when appropriate. The Teacher Questionnaire instrument was analyzed in an attempt to determine the potential impact self-advocacy skill instruction has on a student’s progress in the general curriculum. An impact was determined by the researcher as positive if teachers reported that student’s demonstrated an increase in the following behaviors post instruction; communicating interests and needs, responding to and asking questions, collaborating with peers, negotiating/problem solving, setting goals, completing work independently, decision-making skills as well
as teachers reported improvements in student assignment completion, quiz and tests scores, grades, and behavior. For each student participant one of their special education and one of their general education teachers completed the Teacher Questionnaire at two and four weeks after the student conference to assess student’s maintenance of self-advocacy skills several weeks after instruction had taken place.

**Observation Protocol**

An observation and knowledge measure protocol (see Appendix H) was developed by the researcher to record student progress throughout the computer-based instructional activities and as a means of measuring student knowledge of the following; (a) a definition of self-advocacy, (b) when it is appropriate to use self-advocacy, (c) recall of the SHARE behaviors (Sit up straight, Have a pleasant tone of voice, Activate your thinking, Relax, and Engage in eye communication), (d) when it is appropriate to use the SHARE behaviors, (e) recall of the PLAN steps (Provide your inventory, Listen and respond, Ask questions, and Name your goals), (f) when it is appropriate to use the PLAN steps and (g) student scores on quizzes embedded in the interactive CD. The Observation protocol was also utilized to help explain relevant response scores for participants and to record the length of time it took for each student to complete each computer-based instructional session.

**Description of the Self-Advocacy Strategy**

“The steps of the strategy provide students with a way of getting organized before a conference and with techniques that can be used to effectively communicate during a variety of conferences and meetings” (Van Reusen et al., 2002). Prior to
learning the steps of the strategy, students are taught “SHARE behaviors” (Van Reusen et al., 2002, p. 7). The SHARE behaviors enable students to communicate effectively in meetings with others. The SHARE behaviors are; (a) sit up straight; (b) have a pleasant tone of voice; (c) activate your thinking; (d) relax; and (e) engage in eye communication.

The five steps of the strategy are:

1. Inventory- this step gives students an opportunity to determine and list their perceived educational strengths, areas to improve or learn, educational goals, needed accommodations, and choices for learning. This information is recorded on an inventory sheet that students take to meetings and conferences. The remaining steps are utilized during a conference or meeting.

2. Provide your inventory information- this step focuses on providing input at the meeting or conference.

3. Listen and respond- this step relates to effectively listening to others’ statements or questions and responding to them appropriately.

4. Ask questions- this step involves asking appropriate questions to gather needed information.

5. Name your goals- the final step involves the student communicating personal goals and ideas on actions to be taken.

Materials

The Self-Advocacy Compact Disc was validated for use with students with mild disabilities in 2002, by Lancaster et al. The SACD incorporates the principles of
well designed computer-based instruction and features found to be aesthetically pleasing and design features found to be motivating to students. Prior to the start of the first instructional session, participants were given instruction on how to use the SACD, including how to navigate through the program sessions and how participants would demonstrate mastery at the completion of each session. In addition to the SACD, participants were provided with a folder that contained a paper copy of the dictionary of terms found on the SACD which included a picture and description of the programs navigation icons, a paper copy of each session’s notes, and several copies of the SHARE and PLAN checklists used during three of the SACD sessions. Copies of the materials (see Appendices I-Q) were provided to participants at the onset of instruction in an effort to minimize interruptions during instruction (stopping instruction to print notes and other needed materials). The SACD allowed participants the choice of reading the text on the screen independently or having the content read to them by clicking an icon on each screen.

Description of Instructional Sessions

Introduction Session (15-30 minutes)

The Introduction Session provided students with an introduction to the Self-Advocacy program including, how to navigate through the sessions, the component skills of self-advocacy, and an introduction to key vocabulary. This session included video clips of students discussing the Self-Advocacy Strategy, as well as a quiz over the key vocabulary. Students had the ability to review any of the content or video clips in the session as many times as needed. Notes for this session were provided to
participants at the beginning of the session and reviewed with the researcher prior to the next instructional session.

*SHARE Session (15-45 minutes)*

The SHARE Session provided students with a description of each of the SHARE behaviors and included video clip examples of students using SHARE behaviors. This session also included a memory activity to assist student’s memorization of the SHARE behaviors. Video clips of model conferences were presented and students had an opportunity to evaluate the model students’ use of the SHARE behaviors using the SHARE checklists, which were provided to participants in their folder, prior to the start of the session. Upon completion of the quiz embedded in this session, students were asked to verbally recite the SHARE behaviors and when and where it was appropriate to use the behaviors to the researcher who recorded their responses on the Observation Protocol. The notes for this session were provided to each participant prior to the start of instruction and were reviewed with the researcher prior to the next instructional session.

*Inventory Session (65-150 minutes)*

In this session students were first introduced to what an inventory was. There were three different inventories students could complete in the session (Academic Inventory, Accommodations Inventory, and Transition Inventory). For this study, students were asked to complete the Academic and Accommodations Inventories. The Academic Inventory was comprised of several sections including reading, writing, mathematics, study skills, classroom behavior, social skills, computer
technology, career and vocational skills, and learning preferences. For this study, participants were asked to complete the reading, writing, math, study skills, classroom behavior, and learning preferences inventories that were contained in the Academic Inventory and the Accommodations Inventory.

The reading, writing, math, study skills, and classroom behavior academic inventory subsections consisted of 25 prompts, presented to participants individually. Participants could choose to read the prompts independently or click an icon to have the prompts read to them. Participants were directed to decide whether the prompt was an area of strength, an area of improvement, or neither. After completion of a section, the SACD generated a personal inventory worksheet that listed the participants' strengths and areas to improve, along with a text box in which participants were encouraged to add goals to the sheet based on their self-identified areas of improvement. After participants completed the goal section of the personal inventory sheet, for the chosen inventory sections, participants printed the sheet and placed it in their folders.

The learning preferences subsection of the Academic Inventory included five prompts that instructed participants to choose from a list of items in the following areas; (a) The activities I learn best from are; (b) Materials or equipment that help me learn are; (c) I learn best when I work; (d) I learn best when I work in the following groups; and (e) when taking tests I do best on. At the conclusion of the learning preference inventory, participants were prompted to print their personal learning preferences sheet containing the choices the participant made during the session.
The Accommodations inventory consisted of 25 items, presented one at a time, that prompted the participant to select whether a particular accommodation would be helpful to them or not. Possible accommodations included items related to classroom activities and materials, testing activities and materials, communication, physical setting, daily living, and employment. At the conclusion of the Accommodations inventory, participants were prompted to print their personal accommodations sheet containing the choices the participant made during the session.

*PLAN Session (20-50 minutes)*

In the PLAN session participants learned how to use their inventory in a conference setting. Each step of the PLAN stage was described and modeled in video clips. A memory activity was provided to participants in this session as a means of assisting them with recall of the PLAN steps. Examples of students using the PLAN steps and SHARE behaviors were provided to participants in two model conferences. Participants were encouraged to use the SHARE and PLAN checklists to evaluate the model students in the video clips. Notes for this session were made available to participants prior to the start of the PLAN session. This session also contained a quiz and upon completion of the quiz participants were asked to verbally recite to the researcher the PLAN steps and when it was appropriate to use them.

*Model Conference Session (15 minutes)*

In this session participants were shown several video clip examples of various types of conferences and situations in which the Self-Advocacy Strategy could be used. Students were asked to evaluate the model students in the video clips using the
SHARE behavior and PLAN checklists that were made available to the participants prior to the start of the session.

Procedures

Prior to instruction, each participant was administered the Conference Question Guide, by the researcher, on three different occasions across two weeks to establish baseline. The researcher arranged to administer each baseline probe (approximately 10-15 minutes) at a time that was convenient for the participant and during non-instructional periods of time in the classroom. In this particular special education classroom setting, there were scheduled periods of time throughout the school day when students were not engaged in direct instruction and the researcher sought out those times to administer the baseline probes (i.e. when the teacher is giving one-on-one instruction to another student, after the student has completed independent seat work and waiting for peers to finish, during student “free choice”).

Participants were grouped in pairs to begin and complete instruction in order to facilitate the timely delivery of instruction to all participants. The overall purpose of the study was to provide students with a strategy that promoted self-advocacy skill use across multiple settings, including the general education setting, and given that the study took place at the onset of the winter semester when students were enrolled in new elective courses, it was beneficial for all students to complete instruction in a timely fashion.

Two participants, from the sample of six, with stable baselines were randomly selected to begin instruction. Instruction was then provided to each group of two
participants in a staggered fashion, specifically instruction did not begin for group two until the five SACD instructional sessions (Introduction, Share, Inventory, Plan, and Model Conference) had been completed with group one and group three did not begin instruction until the five SACD sessions had been completed with group two. In a multiple-baseline design staggering or varying the time of implementation of instruction across participants is necessary in order to gain experimental control (Ary et al., 1990).

Every effort was made to eliminate loss of instructional time for participating students. As stated previously, in this particular special education classroom setting there were times throughout the day students were not engaged in direct instruction. Additionally, in this classroom setting the last two hours of the school day were designated as a Community Skills block in which students engaged in instruction in the areas of daily living, functional, and employment skills. The researcher made every effort to schedule instructional sessions during the classes Community Skills block, and in doing so the researcher delivered instruction in a content area that could typically be taught during the Community Skills course, thus not interfering with instructional time related to other academic subject areas. Also, the researcher worked with the cooperating special education teacher to develop a schedule of strategy instruction time that did not interfere with the student’s participation in direct instruction, small, or large group instruction during the Community Skills course block.
Individual students did not begin the SACD program until the researcher and special education teacher were satisfied that the student was aware of how to access the SACD using the computer and navigate through the sessions accurately. Specific procedures used during the implementation of the SACD are listed in the description of each SACD instructional session in the previous section of this chapter.

Upon completion of the SACD instructional sessions and prior to the first role-play session participants met with the researcher on one occasion to complete an Inventory Highlight sheet (see Appendix N). The researcher created the Inventory Highlight sheet as a tool for organizing the information generated from the Inventory session of the SACD. The researcher determined that due to the vast amount of information presented in each individual participant’s cumulative inventory (reading, writing, math, classroom behaviors, study skills, learning preferences, and accommodations) participants needed an opportunity to review their inventories and choose a limited number of inventory items to share during their conference sessions. Participants were instructed to review each inventory sheet and choose which specific items they wished to share with their teachers and record these on the Inventory Highlight sheet. This activity required approximately 30 minutes to complete.

After participants completed the Inventory Highlight sheet each participant engaged in two individual role play sessions with the researcher, simulating a conference with a special or general education teacher. This component of instruction required an additional hour of instruction. During the role play sessions, the researcher administered the ten questions from the Conference Question Guide.
During controlled practice or the first role-play session, the researcher provided prompting and cues as needed to assist students in answering the questions. In advanced practice or the second role-play session, the researcher did not provide assistance with answering the questions. The researcher did provide feedback related to the participants use of the SHARE behaviors and PLAN steps at the conclusion of each role play session. The two role play sessions for each participant took place within a one week time span. After completion of the individual role play sessions, the participants participated in a conference with both a special and general education teacher, with whom they work. These conferences took place within a one to two week time span of the role play sessions.

The purpose of the conference meeting with the special and general education teacher was for the participant to share information with the teacher related to their strengths, areas of improvement, learning preferences, and their personal goals for the course. The participant also had the opportunity to ask for clarification for anything about the course, or its requirements that were unclear during the conference. Prior to each conference each participant had the opportunity to review their notes, the SHARE behaviors and PLAN steps, and ask any questions they may have about the conference. Each participant had a copy of their Inventory Highlight sheet to give to the teacher and also had their own copy to refer to throughout the meeting.
Data Collection Methods

*Conference Question Guide for Baseline*

Prior to instruction, each participant was administered the Conference Question Guide on at least three different occasions to establish baseline. During each baseline administration of the Conference Question Guide individual participants scored one point for each relevant response. For this study a prolonged period of baseline for participants not immediately engaging in instruction was not utilized due to the importance of delivering instruction to participants in a timely manner, which involved delivering the Self-Advocacy instructional sequence not more than two weeks apart for each of the remaining two groups of participants. Additionally, due to the researcher’s desire to not increase participant frustration levels prior to instruction or decrease the motivation of participants towards learning the Self-Advocacy Strategy additional baseline probes were not administered. Based on the three baseline probes administered to participants, and teacher reports, it was clear that the participants had not engaged in self-advocacy skill training of any kind prior to the onset of the study. Furthermore, the Self-Advocacy Strategy instructional sequence was delivered exclusively by the researcher to only two participants at a time in a separate location than the classroom with no additional instruction being provided within the classroom setting by the classroom teacher, therefore significantly decreasing the possibility that participants in baseline could gain knowledge of the strategy.
Observation Protocol

Instruction was then provided to each group of two participants in a staggered fashion. The implementation schedule for each group of two randomly selected participants was staggered by when the previous participant group had completed the five multimedia instructional sessions (Introduction, Share, Inventory, Plan, and Model Conference).

To ensure procedural reliability throughout the multimedia instructional phase the researcher completed an observation protocol for each instructional session for each participant. The observation protocol was used to record whether or not each participant completed each page of the computer-based instructional session, including any activities or quizzes contained in the session. The cooperating special education teacher also completed an observation protocol for 25% of the total instructional sessions. Inter-observer reliability was calculated using the following formula:

\[
\left( \frac{\text{# of times observers agreed}}{\text{# of agreements} + \text{# of disagreements}} \right) \times 100
\]

The observation protocol also served as the recording form for checking student understanding of the content of each computer-based instructional session, including reviewing what was presented in each computer-based instructional session and answering questions related to the content of various lessons.
Conference Question Guide

At the conclusion of the instructional phase, participants arranged with the assistance of the cooperating special education teacher when necessary, to conduct two separate meetings with a special education teacher and a general education teacher with whom they work. During each of these meetings the participants were administered the Conference Question Guide by the conferencing teacher and all participant responses were recorded on a blank Conference Question Guide by the researcher. At the conclusion of each meeting the researcher completed a Relevant Response Scoring Sheet. A relevant response consisted of any comment, statement, shared information, or question that pertained to the students’ participation and progress in the conferencing teacher’s classroom. Students were awarded one point per relevant response. For example, if a student was asked “What do you think are your study or academic strengths” and the student responded “I am good at math and following directions” the student would receive two relevant response points.

A line graph was used to represent each individual student’s relevant response scores on the Conference Question Guide for baseline and post-intervention (special education teacher conference, general education teacher conference). As stated previously, for this study the researcher was concerned with whether or not students increase their use of self-advocacy skills, generalize these skills to multiple settings, and maintain these skills over time, and was not necessarily concerned with the magnitude of increase. Therefore, there was no predetermined minimum or maximum number of relevant responses used in the analysis of this instrument’s data.
The researcher hypothesized that the slope of an individual student’s relevant response score graph would increase from baseline to post-intervention and the results were reported as raw scores for each student participant for baseline and across two post-intervention settings (conference with a special education teacher, conference with a general education teacher).

For 25% of the student conferences, a special education teacher, and a member of the researcher’s dissertation team familiar with the Self-Advocacy Strategy reviewed the participants’ responses and recorded the participant’s relevant responses on the Relevant Response Scoring sheet. Inter-scorer reliability was calculated using the following formula;

\[
\frac{\text{# of times scorer’s agreed}}{\text{of agreements} + \text{# of disagreements}} \times 100
\]

**Teacher Questionnaire**

In an attempt to evaluate if participants generalize strategy use to not only two different conference settings but also to a classroom setting and maintain self-advocacy skills over time, all cooperating teachers were asked to complete a Teacher Questionnaire related to student use of self-advocacy skills in the classroom setting, two and four weeks after each participant had completed the conference meetings with the general or special education teacher. The Likert-type scale items were presented as raw data in individual participant tables by behavior, type of teacher (special, general), and two time intervals. Analysis of the Teacher Questionnaire results were based on the raw data collected. The open-ended question data were
summarized and used to enhance the quantitative data findings, when appropriate. The Teacher Questionnaire instrument was analyzed in an attempt to determine the potential impact self-advocacy skill instruction has on a student’s progress in the general curriculum. An impact was determined by the researcher as positive if cooperating teachers reported that student’s demonstrated an increase in the following behaviors post instruction; communicating interests and needs, responding to and asking questions, collaborating with peers, negotiating/problem solving, setting goals, completing work independently, decision-making skills as well as teachers report improvements in student assignment completion, quiz and tests scores, grades, and behavior.

**Conclusion**

The study, including the collection of baseline data, the Self-Advocacy Strategy instructional phase, post-instructional teacher conferences, and the collection of generalization and maintenance of self-advocacy skills data was conducted over the course of 12 weeks. Six students agreed to participate in the study and all six students completed both the instructional and conference phases of the study, including all participant activities associated with the study. One special education and four general education teachers cooperated with the study. The next chapter contains the results of the data collection and analysis.
CHAPTER IV
RESULTS

Introduction

The purpose of this study was to assess whether secondary students in grades nine through twelve, with a documented cognitive disability, (1) demonstrate knowledge of a self-advocacy strategy, (2) generalize use of self-advocacy skills across educational settings, and (3) maintain use of self-advocacy skills over time. This chapter presents the results of the study relative to participants’ knowledge of a self-advocacy strategy, specifically the Self-Advocacy Strategy (Van Reusen et al., 2002), and generalization and maintenance of self-advocacy skills.

Research Question One

1. Do secondary students, identified as having a cognitive disability, demonstrate knowledge of a self-advocacy strategy following instruction in the Self-Advocacy Strategy, as measured by their relevant (verbal) response score, on a ten question probe, during a conference with a special education teacher?

Knowledge of a self-advocacy strategy was evaluated by recording the number of relevant responses participants gave verbally to a standard set of questions (10 question probe called the Conference Question Guide) that were developed to provide each participant with the opportunity to demonstrate knowledge of the Self-Advocacy Strategy prior to instruction (baseline) and post-instruction. Prior to instruction in the Self-Advocacy Strategy participants were administered the 10 question probe on at least three different occasions and the researcher recorded their responses word for word.
word. For each participant one point was awarded for any answer that contained relevant, useful, positive, or affirmative information related to the question being asked by the researcher. The same 10 question probe (called the Conference Question Guide) was also administered by both the special and general education teacher during each conference meeting and the researcher (rater 1) recorded all participant responses word for word. Again, for each participant one point was awarded for any answer that contained relevant, useful, positive, or affirmative information related to the question being asked by the conferencing teacher. Relevant responses for each baseline and conference setting meeting were tallied on a Relevant Response Scoring sheet for each participant and reported as raw scores.

For 25% of the conference meetings with the special or general education teacher a member of the researcher’s dissertation team (rater 3) and the cooperating special education teacher (rater 2) reviewed the transcripts of the participants’ responses and recorded the participant’s relevant responses on the Relevant Response Scoring sheet. Using the following formula, inter-scorer reliability was 92%.

\[
\left( \frac{\text{# of times scorer's agreed (1 & 2) + (1 & 3) + (2 & 3)}}{\text{# of agreements + # of disagreements}} \right) \times 100
\]

Each participant’s Relevant Response Score data for baseline, post instruction, and generalization are presented in Figure 1. For Figure 1, baseline measures were taken on three different occasions over the course of a two week period for each
participant. The instructional phase of the study for each pair of participants took place over a three week period of time. At the conclusion of the instructional phase participants engaged in two separate conference meetings. The first conference meeting was conducted with the participant’s special education teacher no more than one week post instruction. The second conference meeting was conducted with one of the participant’s general education teacher no more than two weeks post instruction.

As stated previously, the researcher was concerned with finding out whether students increased their use of self-advocacy skills and generalized these skills to multiple settings, and was not necessarily concerned with the magnitude of increase. Therefore, there was no predetermined minimum or maximum number of relevant responses used in the analysis of the data, but the researcher hypothesized that the slope of an individual student’s relevant response score graph would increase from baseline to post-intervention and an increase in the slope of each participants graph is evident in Figure 1. Each participant increased the quantity of relevant responses from baseline to post-instruction demonstrating an increase in knowledge of a self-advocacy strategy.
Figure 1. Number of relevant responses. SETC refers to the post-instructional
conference meeting with their special education teacher (demonstration of knowledge of a self-advocacy strategy). GETC refers to the post-instructional conference meeting with one of their general education teachers (demonstration of generalization of a self-advocacy strategy to another setting).

Participants S1 and S5 received strategy instruction simultaneously and were the first pair of randomly selected participants to begin instruction. Figure 1 shows stable baselines for both participants. Figure 1 also shows that both participants increased their relevant response scores after receiving self-advocacy strategy instruction across both conference settings. The data presented in Figure 1 demonstrates that as a result of instruction participants S1 and S5 gained knowledge of a self-advocacy strategy and increased the frequency with which they communicated their strengths, areas of need, learning preferences, needed accommodations, and learning goals across settings. Participant S5 increased his or her quantity of relevant responses from the first conference to the second conference, however participant S1 did not. It is important to note that the general education teacher engaged in a conference with participant S1 failed to administer two of the questions on the Conference Question Guide measure (What other types of accommodations will help you to participate and be successful in my class? and Many students your age have begun to think about careers or jobs they might like after they finish high school. When you are done with high school, what kind of job or career would you like to have?) and this oversight may have impacted the participants relevant response score.
Participants S4 and S6 received strategy instruction simultaneously and were the second pair of randomly selected participants to begin instruction. Figure 1 shows stable baselines for both participants. Figure 1 also shows that both participants substantially increased their relevant response scores after receiving self-advocacy strategy instruction for the conference meeting setting with the special education teacher. Both participants also increased their relevant response scores from baseline for the conference meeting setting with the general education teacher; however, Figure 1 shows that the quantity of increase was somewhat lower than the conference setting meeting with the special education teacher. The general education teacher who engaged in a conference with participant S4 failed to administer two of the questions on the Conference Question Guide measure (What have teachers done in the past that has helped you learn in your classes? and Is there anything about the class that you do not understand or something you’d like to say about this class, school, or any other area you are concerned about?), and this oversight may have impacted the participant’s relevant response score. The data presented in Figure 1 demonstrates that as a result of instruction participants S4 and S6 gained knowledge of a self-advocacy strategy and increased the frequency with which they communicated their strengths, areas of need, learning preferences, needed accommodations, and learning goals across settings.

Participants S2 and S3 received strategy instruction simultaneously and were the third or final pair of randomly selected participants to begin instruction. Figure 1 shows stable baselines for both participants. Figure 1 also shows that both
participants increased their relevant response scores after receiving self-advocacy strategy instruction across both conference settings. The data presented in Figure 1 demonstrates that as a result of instruction participants S2 and S3 gained knowledge of a self-advocacy strategy and increased the frequency with which they communicated their strengths, areas of need, learning preferences, needed accommodations, and learning goals across settings. Participant S2 maintained his or her quantity of relevant responses from the first conference to the second conference, however participant S3 did not. Participant S3’s relevant response score declined in the conference meeting setting with the general education teacher however the score did remain above baseline. Based on results represented in Figure 1, participant S3 displayed the least amount of gain in relevant response scores from baseline to both post instruction conference settings.

Research Question Two

2. Do secondary students, identified as having a cognitive disability, generalize self-advocacy skills across the following educational settings; a conference with a general education teacher as measured by their relevant response (verbal) score on a ten question probe, the special education and the general education classroom settings as measured by the frequency of behaviors identified as behaviors related to self-advocacy that are observed in the classroom setting?

Figure 1 demonstrates that each participant was able to generalize the use of a self-advocacy strategy to a different setting, specifically a conference meeting with one of their general education teachers. Four of the six participants’ relevant response
scores decreased slightly in a conference setting with a general education teacher, however the relevant response scores still substantially exceeded baseline scores.

In addition to generalizing a self-advocacy strategy to a different conference meeting setting the researcher was also interested in finding out whether participant’s knowledge of a self-advocacy strategy facilitated generalization of self-advocacy skills to the classroom setting and the potential impact self-advocacy skill instruction had on a student’s progress in the general curriculum. The Teacher Questionnaire instrument was developed and analyzed to measure the following behaviors related to self-advocacy skills; (a) expressing interests, (b) expressing needs, (c) asking and responding to questions, (d) collaborating with peers, (e) negotiating and problem solving, (f) initiative, (g) setting more goals, (h) asking for assistance, (i) asking for clarifications, (j) self-directed work completion, (k) level of knowledge of strengths and needs, (l) more confidence, and (m) improved performance. Teachers that engaged in conferences with the participants were asked to rate the extent to which they had observed an increase in these behaviors since participants had received instruction and participated in a conference with the cooperating teacher. The data are presented as raw data by individual participant in Tables 1-6 by behavior, type of teacher (special, general), and two time intervals.
Table 1

*Participant SI Teacher Questionnaire Data*

<table>
<thead>
<tr>
<th>Self-Advocacy Skills</th>
<th>SE 2 Weeks</th>
<th>SE 4 Weeks</th>
<th>GE 2 Weeks</th>
<th>GE 4 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses interests</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Expresses needs</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks and responds to questions</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Collaboration with peers</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Negotiate and problem solve</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Initiative</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Setting more goals</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks for assistance</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asks for clarifications</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Self-directed work completion</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Level of knowledge of strengths and needs</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>More confident</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Improved performance</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note. SE refers to the special education teacher and GE refers to the general education teacher. Teachers were asked to indicate on a 5 point Likert-type scale (1=strongly disagree, 5=strongly agree) whether they had observed an increase in the skills listed at two and four weeks post-instruction.*

At the time of the study participant S1 was a 10th grade student and attended one general education course (Theater). S1 completed the SACD instructional sessions in 260 minutes. S1 demonstrated the ability to verbally define self-advocacy and when to use it, identify the SHARE behaviors and when to use them, and identify the L, A, and N steps of the PLAN steps and situations when it is appropriate to use the steps. Participant S1 scored 100% on the three quizzes embedded in the SACD (see Table 7). S1 was observed by the researcher as a reader, but chose to use the "read it to me” feature of the SACD a majority of the time. Based on the data presented in Table 1, both the special and general education teacher indicated
observing an increase of some behaviors, with the general education teacher observing an increase in a greater number of behaviors than the special education teacher at two weeks post instruction.

Table 2

*Participant S2 Teacher Questionnaire Data*

<table>
<thead>
<tr>
<th>Self-advocacy Skills</th>
<th>SE 2 Weeks</th>
<th>SE 4 Weeks</th>
<th>GE 2 Weeks</th>
<th>GE 4 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses interests</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Expresses needs</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks and responds to questions</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Collaboration with peers</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Negotiate and problem solve</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Initiative</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Setting more goals</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks for assistance</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks for clarifications</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Self-directed work completion</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Level of knowledge of strengths and needs</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>More confident</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Improved performance</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note.* SE refers to the special education teacher and GE refers to the general education teacher. Teachers were asked to indicate on a 5 point Likert-type scale (1=strongly disagree, 5=strongly agree) whether they had observed an increase in the skills listed at two and four weeks post-instruction.

At the time of the study participant S2 was a 12th grade student and attended one general education course (Art). S2 completed the SACD instructional sessions in 140 minutes. S2 demonstrated the ability to verbally define self-advocacy and when to use it, identify the S, A, R, and E behaviors of the SHARE behaviors and when to use them, and identify the L and A steps of the PLAN steps and situations when it is appropriate to use the steps. Participant S2 scored 96% on the three quizzes.
embedded in the SACD (see Table 7). S2 was observed by the researcher as a reader, and chose to use the “read it to me” feature of the SACD only when faced with an unknown word in the text. Based on the data presented in Table 2, neither the special or general education teacher indicated observing an increase of behaviors related to self-advocacy skills in the classroom setting at two weeks post instruction.

Table 3

*Participant S3 Teacher Questionnaire Data*

<table>
<thead>
<tr>
<th>Self-advocacy Skills</th>
<th>SE 2 Weeks</th>
<th>SE 4 Weeks</th>
<th>GE 2 Weeks</th>
<th>GE 4 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses interests</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Expresses needs</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks and responds to questions</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Collaboration with peers</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Negotiate and problem solve</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Initiative</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Setting more goals</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asks for assistance</td>
<td>2</td>
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</tr>
<tr>
<td>Asks for clarifications</td>
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<tr>
<td>Self-directed work completion</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Level of knowledge of strengths and needs</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>More confident</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Improved performance</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note.* SE refers to the special education teacher and GE refers to the general education teacher. Teachers were asked to indicate on a 5 point Likert-type scale (1=strongly disagree, 5=strongly agree) whether they had observed an increase in the skills listed at two and four weeks post-instruction.

At the time of the study participant S3 was a 10th grade student and attended one general education course (Art). S3 completed the SACD instructional sessions in 220 minutes. S3 demonstrated the ability to verbally define self-advocacy and when to use it, identify the S, R, and E behaviors of the SHARE behaviors (with prompts)
and when to use them, and identify the L and A steps of the PLAN steps (with prompts) and situations when it is appropriate to use the steps. Participant S3 scored 76% on the three quizzes embedded in the SACD (see Table 7). S3 was observed by the researcher as a reader, and chose to use the “read it to me” feature of the SACD approximately half of the time. Based on the data presented in Table 3, neither the special or general education teacher indicated observing an increase of behaviors related to self-advocacy skills in the classroom setting at two weeks post instruction.

Table 4

Participant S4 Teacher Questionnaire Data

<table>
<thead>
<tr>
<th>Self-advocacy Skills</th>
<th>SE 2 Weeks</th>
<th>SE 4 Weeks</th>
<th>GE 2 Weeks</th>
<th>GE 4 Weeks</th>
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</thead>
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<td>Expresses interests</td>
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<td>5</td>
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<tr>
<td>Expresses needs</td>
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<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Asks and responds to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>questions</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Collaboration with peers</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Negotiate and problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>solve</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
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<td>Initiative</td>
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<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Setting more goals</td>
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<td>4</td>
</tr>
<tr>
<td>Asks for assistance</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asks for clarifications</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Self-directed work completion</td>
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<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level of knowledge of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strengths and needs</td>
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<td>3</td>
<td>2</td>
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<tr>
<td>More confident</td>
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<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Improved performance</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. SE refers to the special education teacher and GE refers to the general education teacher. Teachers were asked to indicate on a 5 point Likert-type scale (1=strongly disagree, 5=strongly agree) whether they had observed an increase in the skills listed at two and four weeks post-instruction. - = missing data (teacher indicated n/a).

At the time of the study participant S4 was a 10th grade student and attended one general education course (Choir). S4 completed the SACD instructional sessions
in 215 minutes. S4 demonstrated the ability to verbally define self-advocacy and when to use it, identify the SHARE behaviors and when to use them, and identify the PLAN steps and situations when it is appropriate to use the steps. Participant S4 scored 96% on the three quizzes embedded in the SACD (see Table 7). S4 was observed by the researcher as a reader, and chose to use the “read it to me” feature of the SACD a majority of the time. Based on the data presented in Table 4, both the special and general education teacher indicated observing an increase of some behaviors, with the special education teacher observing an increase in a greater number of behaviors than the general education teacher at two weeks post instruction.

Table 5

*Participant S5 Teacher Questionnaire Data*

<table>
<thead>
<tr>
<th>Self-advocacy Skills</th>
<th>SE 2 Weeks</th>
<th>SE 4 Weeks</th>
<th>GE 2 Weeks</th>
<th>GE 4 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses interests</td>
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<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Expresses needs</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks and responds to questions</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Collaboration with peers</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Negotiate and problem solve</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Initiative</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Setting more goals</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks for assistance</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asks for clarifications</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Self-directed work completion</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Level of knowledge of strengths and needs</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>More confident</td>
<td>5</td>
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<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Improved performance</td>
<td>4</td>
<td>2</td>
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</tr>
</tbody>
</table>

Note. SE refers to the special education teacher and GE refers to the general education teacher. Teachers were asked to indicate on a 5 point Likert-type scale (1=strongly disagree, 5=strongly agree) whether they had observed an increase in the skills listed at two and four weeks post-instruction.
At the time of the study participant S5 was a 9th grade student and attended one general education course (Theater). S5 completed the SACD instructional sessions in 225 minutes. S5 demonstrated the ability to verbally define self-advocacy and when to use it, identify the SHARE behaviors and when to use them, and identify the PLAN steps (with prompts) and situations when it is appropriate to use the steps. Participant S5 scored 100% on the three quizzes embedded in the SACD (see Table 7). S5 was observed by the researcher as a reader, and chose to use the “read it to me” feature of the SACD approximately half of the time. Based on the data presented in Table 5, both the special and general education teacher indicated observing an increase of some behaviors, with the special education teacher observing an increase in a greater number of behaviors than the general education teacher at two weeks post instruction. The general education teacher indicated that participant S5 worked very closely with a special education assistant during the general education class period and that it was possible the student displayed an increase of additional behaviors in the presence of the assistant, but these were not observable by the general education teacher himself.

At the time of the study participant S6 was a 10th grade student and attended two general education courses (Math, Theater). S6 completed the SACD instructional sessions in 175 minutes. S6 demonstrated the ability to verbally define self-advocacy and when to use it, identify the SHARE behaviors and when to use them, and identify the P, L, and A steps of the PLAN steps and situations when it is appropriate to use
the steps. Participant S6 scored 100% on the three quizzes embedded in the SACD (see Table 7).

Table 6

**Participant S6 Teacher Questionnaire Data**

<table>
<thead>
<tr>
<th>Self-advocacy Skills</th>
<th>SE 2 Weeks</th>
<th>SE 4 Weeks</th>
<th>GE 2 Weeks</th>
<th>GE 4 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses interests</td>
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<td>3</td>
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<tr>
<td>Expresses needs</td>
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<td>2</td>
</tr>
<tr>
<td>Asks and responds to questions</td>
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<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Collaboration with peers</td>
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<td>1</td>
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<td>3</td>
</tr>
<tr>
<td>Negotiate and problem solve</td>
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<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Initiative</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Setting more goals</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asks for assistance</td>
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<td>1</td>
<td>3</td>
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</tr>
<tr>
<td>Asks for clarifications</td>
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<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Self-directed work completion</td>
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<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Level of knowledge of strengths and needs</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>More confident</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Improved performance</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note.* SE refers to the special education teacher and GE refers to the general education teacher. Teachers were asked to indicate on a 5 point Likert-type scale (1=strongly disagree, 5=strongly agree) whether they had observed an increase in the skills listed at two and four weeks post-instruction.

Participant S6 was observed by the researcher as a reader, and chose not to use the “read it to me” feature of the SACD at all. Based on the data presented in Table 6, both the special and general education teacher indicated observing an increase very few behaviors, with the general education teacher observing an increase in a greater number of behaviors than the special education teacher at two weeks post instruction.

The researcher hypothesized that as a result of instruction, participants would generalize use of self-advocacy skills to the classroom setting. The results of the
Teacher Questionnaire (Tables 1-6) show that both the special education teacher and general education teachers indicated observing an increase in a number of behaviors measured for four of the six participants at two weeks post instruction. However, the results are somewhat mixed and make it difficult to conclude that overall knowledge of a self-advocacy strategy significantly increased the generalization or use of behaviors related to self-advocacy skills within the classroom setting on a daily basis. This is due to the fact that no positive changes in behavior were noted for two participants and for two of the participants the special and general education teacher indicated observing a positive change of behavior for fewer than half of the behaviors measured. It is important to note however that for two of the participant’s instruction in the Self-Advocacy Strategy did appear to have a positive effect on use of self-advocacy skills in the classroom.

Research Question Three

3. Do secondary students, identified as having a cognitive disability, maintain use of self-advocacy skills, as measured by the frequency of behaviors identified as behaviors related to self-advocacy that are observed in the classroom setting over time?

Cooperating teachers were asked to again complete the Teacher Questionnaire at four weeks post-instruction to determine whether or not participants maintained use of self-advocacy skills over time (see Tables 1-6). The results presented indicate that participants either demonstrated no change or decreased use of behaviors related to self-advocacy skills at four weeks after instruction had occurred. Across all of the
participants the special education teacher indicated she did not observe an increased use of behaviors related to self-advocacy skills at four weeks. In almost every instance the behaviors the special education teacher indicating observing an increase in at two weeks, was not observed at four weeks. Likewise, one general education teacher indicated a decrease in observed behaviors while the other general education teachers indicated no change in behavior from week two to week four. Tables 1-6 demonstrate that there was only one behavior, for one participant that an increased rate was found at four weeks post instruction. The results support the conclusion that participants did not maintain self-advocacy skill use over time.

Instructional Time

The instructional sequence, including the SACD sessions, completion of the Inventory Highlight sheet, and role play sessions took place over the course of two to three weeks for each pair of participants. The average amount of time participants spent engaged in SACD sessions was 3.5 hours. An additional 10-15 minutes of review took place with each pair of participants and the researcher prior to the SHARE, Inventory, and Model Conference instructional sessions. An Observation Protocol was used by the researcher to record each participants rate of completion of the activities included in each of the SACD instructional sessions. The researcher noted that all participants completed each activity related to each instructional session. For 25% of the SACD instructional sessions the cooperating special education teacher also completed an Observation Protocol and inter-observer agreement was 100%, using the following formula.
Notes taken by the researcher during the SACD sessions reflected that all participants were able to navigate through the SACD with few cues or assistance from the researcher. Participants demonstrated an understanding of how to use the icons to advance through each session, begin and stop video clips contained in the sessions, and locate the correct session when restarting the program at the beginning of each instructional session. Two participants made use of the “read it to me” feature in the SACD for a majority of their instructional sessions. One participant used the “read it to me” feature only when presented with an unknown word. One participant didn’t use the “read it to me” feature at all. The remaining two participants utilized the “read it to me” feature approximately half of the time.

Three of the five instructional sessions of the SACD included a knowledge quiz over content related to the definition of self-advocacy, the SHARE behaviors, and the PLAN steps. Results of each participant’s quizzes were recorded by the researcher on the Observation Protocol and are presented in the Table 7. Results of this study showed that individuals with an identified mild cognitive disability at a secondary grade level can learn a complex set of skills, such as the Self-Advocacy Strategy via the combination of computer-based and live instruction based on the results of the SACD knowledge quizzes, and the participants’ quantity of relevant response scores.
Table 7

SACD Knowledge Quiz Scores

<table>
<thead>
<tr>
<th>Participant</th>
<th>Introduction Session</th>
<th>SHARE Session</th>
<th>PLAN Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>S2</td>
<td>100</td>
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<td>100</td>
</tr>
<tr>
<td>S3</td>
<td>80</td>
<td>60</td>
<td>90</td>
</tr>
<tr>
<td>S4</td>
<td>100</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>S5</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>S6</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note. A quiz was embedded in three of the computer-based instructional sessions. The researcher recorded each participant's score on their first quiz attempt as percentage of correct answers.

Conferences with Teachers

At the conclusion of each participant's role play sessions with the researcher conferences with the cooperating special and general education teachers were conducted. Each conference ranged between 15 and 25 minutes in length. The cooperating special education teacher commented to the researcher that the participants seemed to have an accurate picture of what their strengths and needs were as well as articulating appropriate goals for themselves. Several student participants commented to the researcher that they hadn't ever talked to their teacher, especially a general education teacher about their strengths, needs, goals, or how the teacher might assist them in being successful in class. Many of the student participants commented
that although being nervous about meeting with their teachers, they were glad they
did, and sharing information about themselves with their teachers felt good.

Conclusion

The results presented in this chapter show that individuals with mild cognitive
disability at a secondary grade level did learn a self-advocacy strategy and generalize
use of the strategy across conference meeting settings. The findings of this study also
demonstrate that individuals with a mild cognitive disability were able to learn a
complex set of skills (Self-Advocacy Strategy) via computer-based instruction that
included situated cognition or learning experiences, anchored instruction, and
modeling of behaviors. The results presented in the study, related to generalization of
skills to the classroom setting, were mixed. Two participants demonstrated that
knowledge of a self-advocacy strategy and its use in a conference meeting setting did
positively impact participants' use of a small number of self-advocacy skills in the
classroom on a daily basis, two participants demonstrated a positive impact for use of
several self-advocacy skills, and two participants demonstrated no positive impact for
use of any self-advocacy skills. The results of the study did not provide evidence that
participants necessarily maintained use of skills over time.

Chapter Five includes a discussion of the findings highlighting the studies
educational implications, limitations, and directions for future research.
CHAPTER V
DISCUSSION

Summary of Findings

The overall purpose of this study was to evaluate the use of a self-advocacy strategy as a means of promoting progress in the general curriculum for individuals with a mild cognitive disability. Specifically, this study sought to determine (1) if secondary students with a mild cognitive disability increased their knowledge and use of self-advocacy skills after being provided with self-advocacy strategy instruction, (2) if these same students demonstrated the ability to generalize their knowledge and use of self-advocacy skills across more than one setting, and (3) whether or not knowledge of a self-advocacy strategy increased behaviors related to self-advocacy in the special and general education classroom setting, thus promoting progress in the general curriculum.

Previous research on the topic of self-advocacy stresses the importance of developing self-advocacy skills in individuals with disabilities as it relates to their education and quality of life. Phillips (2001) points out that in the past the responsibility of advocating for a child with a disability was assumed by the child’s special education teacher or parent, which may be appropriate for young children but does not sufficiently prepare older students for the challenges of the adult world. Validated methods for teaching self-advocacy skills exist, but aren’t often explicitly taught to individuals with disabilities, and particularly to individuals with cognitive disabilities. The results of this study demonstrated that secondary grade level students
with a mild cognitive disability acquired knowledge of a self-advocacy strategy and were able to use the strategy effectively in two different conference meeting settings with teachers. Previous studies showed that individuals with high incidence disabilities including learning disabilities and emotional or behavior disorders learned self-advocacy skills through instruction in the Self-Advocacy Strategy (Lancaster et al., 2002; Test & Neale, 2004; Van Reusen, & Bos, 1994; Van Reusen, Bos, Schumaker, & Deshler, 2002; Van Reusen, Deshler, & Schumaker, 1989). The current study found that individuals with a mild cognitive disability also learned self-advocacy skills through instruction in the Self-Advocacy Strategy, which had not been empirically validated in previous studies.

Many of the previous studies involving evaluating the efficacy of the Self-Advocacy Strategy included evaluating the strategy when instruction was delivered by a teacher in a live format. Lancaster et al. (2002) developed and evaluated the efficacy of delivering the Self-Advocacy Strategy via a combination of live instruction and interactive hypermedia instruction. The Lancaster et al. (2002) study validated the use of an interactive hypermedia program as an effective means of teaching individuals with high incidence disabilities, such as learning disabilities and emotional or behavioral disorders, a self-advocacy strategy. One other study found in the literature conducted by Hammer (2004) also found the use of the interactive hypermedia program a viable means of teaching individuals with learning disabilities a self-advocacy strategy. Neither of the studies included individuals with a cognitive disability. The current study found that the use of an interactive hypermedia program
was also a viable means of teaching individuals with a mild cognitive disability a self-advocacy strategy.

The current study also sought to determine if use of a self-advocacy strategy generalized across settings, specifically two conference settings and two classroom settings. Throughout the literature self-advocacy skill instruction or strategies are often evaluated based on the effectiveness with which they increase students with disabilities participation in their individualized educational planning or transition planning meetings (Test et. al, 2005). The current study differed from previous studies in that the use of a self-advocacy strategy was evaluated in two informal conference meeting settings, rather than in more formal IEP or Transition planning meetings. The current study found that individuals with a mild cognitive disability demonstrated knowledge and use of a self-advocacy strategy across the two informal conference setting meetings with both a special and general education teacher. However, the study also found that knowledge and use of a self-advocacy strategy in a meeting setting did not necessarily generalize to use of behaviors related to self-advocacy in the classroom setting on a daily basis for all participants. The behaviors observed most frequently by the cooperating teachers as being greater post-instruction included expressing interests and needs, initiative, asking questions, asking for assistance, level of knowledge of strengths and areas to improve, and level of confidence. The behaviors cited less frequently included, collaborating with peers, negotiation and problem-solving, self-directed work completion, asking for clarifications, setting more goals, and improved performance.
In general, the cooperating general education teachers tended to indicate a greater increase of skill use in the classroom setting than did the cooperating special education teacher. One possible reason for this could be that the participants experienced a greater sense of confidence and felt more comfortable with their general education teacher after engaging in a conference meeting. Another possible reason for this could be that after engaging in a meeting with the participant, the cooperating general education teachers interacted more frequently with the participant in the classroom setting and were more aware of the participant’s behaviors.

Educational Implications

As stated previously, much of the research related to teaching self-determination skills to individuals with a cognitive impairment includes the component self-determination skill of choice making (Algozzine et al., 2001). Fewer studies have focused specifically on teaching students with cognitive disabilities self-advocacy skills and those that have focused primarily on developing skills for use in formal educational planning meetings or to generate appropriate educational goals (Hammer, 2004; Lancaster et al., 2002; Test & Neale, 2004; Van Reusen et al., 2002). Furthermore a great deal of research has surfaced in the literature related to the efficacy of a variety of self-advocacy strategies, but few of these contained individuals with a cognitive disability as a part of the study population (Algozzine, et al., 2001). The results of this study suggest that secondary students with an identified mild cognitive disability can develop knowledge and use of a self-advocacy strategy. Specifically individuals with an identified mild cognitive disability can learn self-
advocacy skills through instruction in the Self-Advocacy Strategy delivered via a combination of live and interactive hypermedia instruction.

As stated previously, educational programming for students with a cognitive disability has altered as a result of the No Child Left Behind Act (2002) and the Individuals with Disabilities Education Act (2004) making access to and progress in the general curriculum a focal point of educational programming. This has resulted in programmatic and curricular changes for students with cognitive disabilities including a greater amount of instructional time being devoted to academic instruction related to the general curriculum and less instructional time being devoted to instruction related to functional or adaptive behavior skills, including self-advocacy skills. Development of self-advocacy skills for students with disabilities is necessary in order for students to participate and progress in the general curriculum as well as achieve their educational goals and post-school outcomes. It is imperative that empirically-based strategies for teaching self-advocacy skills to individuals with disabilities, including those with cognitive disabilities be not only available but have the ability of being delivered given the current educational context and time constraints. Findings from the current study suggest that the Self-Advocacy Strategy can be an appropriate and effective instructional approach for teaching students with mild cognitive disabilities self-advocacy skills and implemented within the current educational context of increased focus on the general education curriculum and setting.

In the last several years much research focused on computer-based instruction has surfaced in the literature related to the efficacy of using computer-based
instruction to teach individuals with a disability various skills (Ayres & Langone, 2002; Langone et al., 2003; Mechling, 2005). As stated previously, much of the literature involving students with cognitive disabilities has included studies related to teaching functional skills and basic functional academic skills (Ayres & Langone, 2002; Hutcherson et al., 2004; Mechling, 2004). The results of this study indicate that students with a mild cognitive disability can learn complex skills, such as self-advocacy skills through the use of computer-based instruction that includes situated cognition, anchored instruction, and video modeling. Individuals included in this study were able to navigate through and complete the instructional sessions either independently or with very few prompts or cues. Participants appeared motivated to work through the computer-based instructional sessions and appeared to gain a great deal of knowledge from the video clips modeling student use of the strategy behaviors and steps. Through the use of the Self-Advocacy compact disk participants were also able to view several students actively engaged in using the self-advocacy strategy in a variety of meeting settings. The use of an interactive hypermedia version of the Self-Advocacy Strategy appears to have been a motivating and effective means of delivering self-advocacy skill instruction to secondary students with a mild cognitive disability.

Furthermore, participants also had the opportunity to learn a great deal about their strengths, areas of need, learning preferences, and needed accommodations in order to be successful and were able to articulate these in meetings with a special and general education teacher. Prior to self-advocacy skill instruction the participants in
this study had little knowledge of their academic strengths, areas of need, learning preferences, and needed accommodations. The participants were also unable to generate appropriate goals for the classroom, in most cases. Participants learned a great deal about their strengths, areas of need, learning preferences, and needed accommodations in order to be successful and were able to articulate these in meetings with a special and general education teacher, as observation and Conference Question Guide data do show. Individuals that have an understanding of their strengths, areas of need, learning preferences, and needed accommodations in order to be successful and who are able to articulate these have the necessary skills to advocate for themselves in a variety of situations, including the general education classroom setting. The participants in this study had not engaged in a discussion with their general education teachers about their learning prior to participating in the study. As a result of instruction, participants were able to engage in an in-depth discussion with a general education teacher regarding their learning. The data show that four students provided fewer relevant responses in their meeting with the general education teacher than with their special education teacher but this could partially be due to the fact that they were less familiar with and therefore less comfortable with the general education teacher throughout the conference meeting. However, on average the general education teachers tended to rate student use of self-advocacy skills in the classroom higher than the special education teacher. Therefore, as a result of self-advocacy strategy instruction and a conference with a general education teacher students’ progress in the general curriculum and class can be positively impacted. The
researcher hypothesized that significant increases in behaviors related to self-advocacy skills would be evident as a result of instruction for all participants. This was not the case for all participants and all behaviors related to self-advocacy skills that were measured, and the possible reasons are discussed in the Directions for Future Research section of this chapter.

Limitations of the Study

The current study has several limitations despite the fact that there were findings of the study that were positive. A first limitation of the study is that the number of subjects participating in the study was small. The purpose of the study was to evaluate the use of a self-advocacy strategy as a means of promoting self-advocacy skill use in students identified as having a mild cognitive disability. Individuals with a cognitive disability (including mild, moderate, and severe) made-up approximately 11% of students with disabilities in grades K-12 during the 2006-2007 school year according to a report of the Michigan Department of Education, Office of Special Education and Early Intervention Services (Easterling, 2007) and given this percentage of students with a documented cognitive disability, recruiting six participants from one suburban high school with a mild cognitive disability was reasonable. In order to include a greater number of participants, recruitment would need to extend to more than one secondary setting.

A second limitation of the current study resulted from the fact that the researcher delivered instruction to participants rather than their special education teacher and outside of the special education classroom setting therefore diminishing
the opportunity for the participants to engage in reinforcement and practice of learned skills and generalization of learned skills to other authentic settings such as the classroom setting. All participants in this study demonstrated knowledge and use of a self-advocacy strategy in conference meeting settings but not all participants demonstrated this same level of use in the classroom setting. Given that the researcher provided instruction outside of the classroom setting, the researcher is unable to draw a conclusion as to whether or not instruction provided by the special education teacher and infused within the daily instructional routine would have increased use of the behaviors associated with self-advocacy in the classroom setting on a daily basis for those participants that appeared to have not generalized self-advocacy skill use to the classroom setting. A possible way of overcoming this limitation would be to train the special education teacher to provide self-advocacy strategy instruction to the participants as a part of their instructional routine.

A third limitation of the current study is that the study design did not control for teacher effects during the conference meetings. Although cooperating teachers were instructed to ask the questions on the Conference Question Guide, two of the teachers did not ask all of the questions during the conference. This may have had an impact on the relevant response scores of two of the study participants. The researcher should insure that each cooperating teacher understands how to administer the Conference Question Guide measure and the importance of consistent administration across participants as a possible solution to this limitation.
A fourth limitation of the current study is the relatively short amount of time between instruction and measures of maintenance of behaviors related to self-advocacy skills by the cooperating teachers. In order to strongly determine whether or not the student participants displayed behaviors related to self-advocacy in the classroom on a daily basis, additional time and additional administrations of the Teacher Questionnaire post-instruction would have been desirable. Additionally, cooperating teachers interest in the study appeared to have waned after the conference with the participant and the completion of the Teacher Questionnaire at week two which may have impacted the thoughtfulness with which they completed the Teacher Questionnaire measure at four weeks post-instruction.

A final limitation of the study is that although “in special education the numbers of students in self-contained or resource rooms are generally small making single-case designs useful” (Anderson, Domaracki, Kearney-Vakulick, & Kubina, 2004, p. 218) the specific multiple baseline design used for the study did not include additional baseline probes for participants remaining in baseline. The researcher deemed it appropriate to limit the number of baseline probes, once each participants baseline was found to be stable (1) to decrease the possibility that participants would become frustrated with or unmotivated toward instruction, (2) because little possibility existed that participants in baseline would gain knowledge of the self-advocacy strategy due to instruction being delivered solely by the researcher, and (3) there was a need to deliver instruction to all participants in a timely manner. However, in typical multiple baseline designs additional baselines probes are given to
participants not receiving instruction or intervention as a means of showing that the instruction or intervention is the probable cause of the observed changes. Given the context within which the current study was conducted, the researcher is confident that self-advocacy instruction caused the change in participant’s knowledge and use of a self-advocacy strategy, however not conducting additional baseline probes is a limitation of the study.

Directions for Future Research

Results of the current study suggest there are four areas in which additional research is warranted. The first area of additional research that is needed is replication of the current study with a larger sample size of individuals with a mild cognitive disability. Although the findings of the study were positive for each of the six participants in the current study, generalizing the results to the greater population of high school grade levels individuals with a documented mild cognitive disability is problematic given the small sample size. Likewise, expanding the sample to include individuals at the middle school grade levels and individuals with other documented developmental disabilities, such as autism spectrum disorder would be beneficial.

A second recommendation for future studies would be to let the participants’ teacher implement self-advocacy instruction rather than an outside researcher. Research is needed to determine if conducting self-advocacy strategy instruction in the classroom setting as a part of the instructional program would increase participant’s generalization of skills to the classroom setting on a daily basis and increase maintenance of learned skills.
The third area of additional research that is warranted, based on the findings of the current study would be to supplement the Self-Advocacy Strategy instructional materials with instruction and materials that explicitly teach and demonstrate to students how to use self-advocacy skills on a daily basis within the classroom setting. In the current study, the instructional content and materials focused primarily on use of the strategy in a variety of meeting settings. Although the researcher spoke with participants about how to incorporate and use these skills in the classroom, there were no instructional materials, video models, or role play situations specifically related to classroom use.

The fourth area where additional research could be carried out would be to replicate the study with additional measures to determine more accurately participants use of behaviors related to self-advocacy skills in the classroom. One measure, the Teacher Questionnaire was developed for the current study to measure skill use in the classroom. Developing additional or more sensitive measures such as a measure for systematic observation of classroom behavior pre and post instruction and an interview protocol to use with participants and cooperating teachers would be beneficial.

Lastly, the fifth additional area of research that is warranted would be to conduct a longitudinal study of the effects of instruction in a self-advocacy strategy on participant’s ability to advocate for themselves over a longer period of time and across multiple settings such as job sites and the home environment. Previous studies of the Self-Advocacy Strategy have not included longitudinal data collection methods.
GLOSSARY OF TERMS

Child with a disability - The term 'child with a disability' means a child with mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this title as 'emotional disturbance'), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and who, by reason thereof, needs special education and related services.

Special education - The term 'special education' means specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability, including instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and instruction in physical education.

Individualized Education Programs - The term 'individualized education program' or 'IEP' means a written statement for each child with a disability that is developed, reviewed, and revised in accordance with this section and that includes a statement of the child’s present levels of academic achievement and functional performance, a statement of measurable annual goals, including academic and functional goals, a description of how the child’s annual goals will be measured and when periodic reports on the progress the child is making toward meeting the annual goals will be provided, a statement of the special education and related services and supplementary aids and services, to be provided to the child, or on behalf of the child, and a statement of the program modifications or supports for school personnel that will be provided for the child, an explanation of the extent, if any, to which the child will not
participate with nondisabled children in the regular class, a statement of any individual appropriate accommodations that are necessary to measure the academic achievement and functional performance of the child on State and district assessments, and the projected date for the beginning of the services and modifications and the anticipated frequency, location, and duration of the services and modifications.

**Cognitive disability**- (also referred to as mental retardation, cognitive impairment, and intellectual disability) means significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period that adversely affects a child's educational performance.

**Specific learning disability**- means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

**Emotional or behavior disorder**- Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance; an inability to learn that cannot be explained by intellectual, sensory, or health factors, an inability to build or maintain satisfactory interpersonal relationships with peers and
teachers, inappropriate types of behavior or feelings under normal circumstances, a
general pervasive mood of unhappiness or depression, a tendency to develop physical
symptoms or fears associated with personal or school problems.

**Other health impairment**- means having limited strength, vitality, or alertness,
including a heightened alertness to environmental stimuli, that results in limited
alertness with respect to the educational environment, that is due to chronic or acute
health problems such as asthma, attention deficit disorder or attention deficit
hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead
poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette
syndrome; and adversely affects a child's educational performance.

**Autism**- means a developmental disability significantly affecting verbal and
nonverbal communication and social interaction, generally evident before age three
that adversely affects a child's educational performance.

(http://idea.ed.gov/download/statute.html)

**General curriculum**- The body of knowledge and range of skills that all students in
the state are expected to master.

to know and do. Minneapolis, MN: National Center on Education Outcomes.

**Michigan Administrative Rules for Special Education**-
R 340.1705 Cognitive impairment; determination. Rule 5. (1) Cognitive impairment
shall be manifested during the developmental period and be determined through the
demonstration of all of the following behavioral characteristics: (a) Development at a rate at or below approximately 2 standard deviations below the mean as determined through intellectual assessment. (b) Scores approximately within the lowest 6 percentiles on a standardized test in reading and arithmetic. This requirement will not apply if the student is not of an age, grade, or mental age appropriate for formal or standardized achievement tests. (c) Lack of development primarily in the cognitive domain. (d) Impairment of adaptive behavior. (e) Adversely affects a student's educational performance. (2) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a psychologist.

R 340.1740 Programs for students with mild cognitive impairment. Rule 40.

Programs for students with mild cognitive impairment shall be operated as follows: (a) Elementary programs for students with mild cognitive impairment shall serve not more than 15 different students. When an elementary program for students with mild cognitive impairment has 12 or more students in the room at one time, an aide shall be assigned to the program. (b) Secondary programs for students with mild cognitive impairment shall have not more than 15 different students in the classroom at any one time and the teacher shall be responsible for the educational programming for not more than 15 different students.

REFERENCES


persons with cognitive disabilities. *Asia Pacific Disability Rehabilitation Journal, 17*(1), 50-60.


Today’s Students are Revolutionizing Expectations (National Education Technology Plan 2004). Washington, D.C.


Appendix A

Conference Question Guide
1. What do you think are your study or academic strengths?

2. What do you think are your study or academic areas to improve?

3. What skills do you want to improve or learn this year that will help you to do better in your classes or get along better with other people?

4. What have teachers done in the past that has helped you learn in your classes?

5. What types of study or learning activities work best for you?

6. I'm sure you have taken a lot of tests during your years in school. Can you name or describe the type of test accommodations that would help you best when taking tests over material you have learned for this class?

7. What other types of accommodations will help you to participate and be successful in my class?
8. Can you tell me what learning or behavior goals you have this year for this class?

9. Many students your age have begun to think about careers or jobs they might like after they finish high school. When you are done with high school, what kind of job or career would you like to have?

10. Is there anything about the class that you do not understand or something you’d like to say about this class, school, or any other area you are concerned about?
Appendix B

Self-Advocacy Skill Use Teacher Questionnaire
Dear Teachers,
Thank you for taking the time to complete this questionnaire. Please evaluate
__________ based on their behavior in class since your individual conference with this student. Your answers will be kept confidential and questionnaires should be placed in the envelope provided and will be collected by the researcher, Amy Schelling.

Student Code: _______________ Date: _______________

Please circle the number of weeks it has been since your conference with the student:

2 weeks 4 weeks 6 weeks
## Questionnaire

### 1. **STUDENT APPLICATION OF SELF-ADVOCACY SKILLS**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Since receiving self-advocacy skill instruction, the student has</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>communicated his or her needs to you or peers.</td>
<td>3</td>
<td>4</td>
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<tr>
<td>b</td>
<td>Since receiving self-advocacy skill instruction, the student has</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>communicated his or her needs to you or peers.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c</td>
<td>Since receiving self-advocacy skill instruction, the student participates in</td>
<td>1</td>
<td>3</td>
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<tr>
<td></td>
<td>daily instructional activities *by responding to questions and asking</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>questions with greater frequency*.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d</td>
<td>Since receiving self-advocacy skill instruction, the student demonstrates</td>
<td>1</td>
<td>3</td>
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<tr>
<td></td>
<td>an increased ability to <em>collaborate with peers</em> when participating in group</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>activities.</td>
<td>3</td>
<td>4</td>
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<tr>
<td>e</td>
<td>The student has demonstrated an increase in their *negotiation or problem-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>solving skills* since receiving instruction in Self-Advocacy.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f</td>
<td>The student has demonstrated an increase in their level of <em>initiative</em></td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>since receiving self-advocacy skill instruction.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>g</td>
<td>Since receiving self-advocacy skill instruction, I have noticed the student</td>
<td>1</td>
<td>3</td>
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<td></td>
<td>setting more goals for his or her self.</td>
<td>3</td>
<td>4</td>
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<tr>
<td>h</td>
<td>Since receiving self-advocacy skill instruction, the student asks for</td>
<td>1</td>
<td>3</td>
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<td></td>
<td>assistance, when needed, with greater frequency.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>i</td>
<td>Since receiving self-advocacy skill instruction, the student asks for</td>
<td>1</td>
<td>3</td>
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<tr>
<td></td>
<td>clarification, when needed, with greater frequency.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>j</td>
<td>Since receiving self-advocacy skill instruction, I have noticed an increase</td>
<td>1</td>
<td>3</td>
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<tr>
<td></td>
<td>in the student's <em>self-directed work completion</em>.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>k</td>
<td>The student has demonstrated an increase in their level of <em>knowledge</em></td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>about their specific academic strengths and needs, since receiving self-</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>advocacy skill instruction.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>l</td>
<td>The student appears <em>more confident</em> in my classroom, since receiving self-</td>
<td>1</td>
<td>3</td>
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<tr>
<td></td>
<td>advocacy skill instruction.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>m</td>
<td>Since receiving self-advocacy skill instruction, the students' <em>performance</em></td>
<td>1</td>
<td>3</td>
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<tr>
<td></td>
<td>(assignment completion, quiz test scores, grades, behavior) in my classroom</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td><em>has improved.</em></td>
<td>3</td>
<td>4</td>
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</tbody>
</table>

2. Are there any other comments you would like to share about the student's progress in your class?
Appendix C

Human Subjects Institutional Review Board
Approval Letter
Date: November 23, 2009

To: Shaila Rao, Principal Investigator
    Amy Schelling, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number: 09-09-26

This letter will serve as confirmation that your research project titled "Evaluating the Use of a Self-Advocacy Strategy as a Means of Improving Progress in the General Curriculum for Individuals with Cognitive Impairments" has been approved under the full category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: November 18, 2010
Appendix D

Human Subjects Institutional Review Board
Post Approval Changes Approval
Date: January 8, 2010
To: Shaila Rao, Principal Investigator
    Amy Schelling, Student Investigator for dissertation
From: Amy Naugle, Ph.D., Chair
Re: HSIRB Project Number: 09-09-26

This letter will serve as confirmation that the change to your research project titled “Evaluating the Use of a Self-Advocacy Strategy as a Means of Improving Progress in the General Curriculum for Individuals with Cognitive Impairments” requested in your memo dated 1/6/2010 (modify teacher questionnaire and conference question guide) has been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: November 18, 2010
Appendix E

Parent and Student Invitation to Attend Presentation
Dear Parents,

Our class has been invited to participate in a research study. The study is being conducted by a doctoral student at Western Michigan University named Amy Schelling. Amy now works at Grand Valley State University. Over the past two years she has also visited our classroom to observe our student teachers from GVSU. Amy is not supervising any student teachers at our school this year. Before Amy worked at GVSU she was a special education teacher for 18 years.

The study would include Amy teaching a self-advocacy strategy to students in our classroom, who may choose to participate. Developing self-advocacy skills is an important step in student’s being able to achieve their post-school goals. Amy and I would like to invite you to a presentation about the study. You can view the instructional materials and will have an opportunity to ask her any questions you may have about the study or your child’s potential participation in the study. Your child’s potential participation in this study would be voluntary. If your child chooses not to participate, this will in NO way affect the services your child receives at school.

The presentation is scheduled for ____________ at ____________ p.m.

Please return the bottom portion of this invitation by ________________.

Please check one of the boxes below:

I plan to attend the presentation □

I am unable to attend the presentation but would like for Mrs. ____________ or Amy to call me about the study □

I am unable to attend the presentation but I would like the Informed Consent Form sent home so I may view it □

I am unable to attend the presentation and I am not interested in having my child participate in the study at this time □

__________________________  __________________________  __________
Student Name                  Parent Signature            Date
Appendix F

Transcript of Student and Parent Study Presentation
and Invitation to Participate
Hello Everyone,

Thank you for taking the time to be here tonight. I am a professor at Grand Valley State University and a doctoral student at Western Michigan University. Before I worked for GVSU, I was a special education classroom teacher for 18 years. Your child’s special education teacher has graciously agreed to cooperate with a study that I am conducting. The study involves teaching students the Self-Advocacy Strategy. This strategy helps students learn about their strengths and needs in the classroom, helps them to set goals for their learning and behavior, and teaches them how to communicate their strengths and learning needs to the adults in their lives. Developing self-advocacy skills is critical for students to achieve their post-school goals.

I have a copy of the strategy manual and the instructional materials here tonight for you to look at, if you like.

If you, as a student, choose to participate in the study and your parents agree to your participation, you will be working with me for three weeks to learn the strategy. I would work with groups of two students at a time in the computer lab or library to provide instruction. Most of the instruction is delivered using a computer program. The computer program contains video clips that show students using the self-advocacy strategy. After you work your way through the each computer session, you will have an opportunity to ask me questions and share with me what you have learned. After you have completed the computer lessons, you will have the opportunity to practice using the strategy in two role-play sessions with me, where we will pretend that you are having a conference with one of your teachers. Then, when you feel ready, we will schedule a conference meeting with two of your teachers, where you will have the opportunity to use the skills you have learned to tell your teachers what your strengths are, what accommodations you need to be successful in your classes, what your goals for the class are, and ask any questions you may have about your class.

Because this is a research study for me, I will be recording information during instruction and during the two conferences with your teachers. This information will be confidential, meaning I won’t share your name or any information about you with anyone. In fact, you will have a secret student code and I won’t even put your name on any of your papers.

I know that I can understand something best when I see it visually so I have brought with me a visual schedule of what your participation in the study would look like and what you would do as a participant. Here it is… do you have any questions about it? As a student participant, your involvement would last three weeks. The first week we would work together to learn the strategy. The second week we would practice the strategy together, and the third week you would have a conference with two of your
teachers. One of the conferences would be with Mrs.___________ and the other would be with one of your general education teachers.

If you choose to participate in the study you may learn a strategy that can help you advocate for yourself, meaning you may learn how to share your interests, strengths, needs, and goals for the future with the adults in your life. It is also ok if you choose not to participate in the study, you don’t have to, and your grades in your classes will not be affected by whether you choose to participate or not. You are being asked to participate as a volunteer, which means it up to you and your parents whether you choose to participate or not.

If you are interested in learning more about the study I will be happy to answer any questions you may have about the study or the instructional materials. I have copies of the Informed Consent Form here tonight if you think you may be interested in participating in the study and I will be happy to answer any questions you may have about the consent form. There is a student version and parent version of the consent form.

Thank you very much for taking the time to be here tonight. If at any time you decide you would like to learn more about the study, you may contact me via email at amy.l.schelling@wmich.edu or by phone at XXX-XXX-XXXX.
Appendix G

Relevant Response Scoring Guide
Score 1 point for any answer containing relevant, useful, positive, or affirmative information.

Score 0 point for any answer containing irrelevant, non-useful, negative, or non-response.

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
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<tbody>
<tr>
<td>1. What do you think are your study or academic strengths?</td>
<td></td>
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<tr>
<td>2. What do you think are your study or academic areas to improve?</td>
<td></td>
</tr>
<tr>
<td>3. What skills do you want to improve or learn this year that will help you to do better in your classes or get along better with other people?</td>
<td></td>
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<tr>
<td>4. What have teachers done in the past that has helped you learn in your classes?</td>
<td></td>
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<tr>
<td>5. What types of study or learning activities work best for you?</td>
<td></td>
</tr>
<tr>
<td>6. I'm sure you have taken a lot of tests during your years in school. Can you name or describe the type of test accommodations that would help you best when taking tests over material you have learned for this class?</td>
<td></td>
</tr>
<tr>
<td>7. What other types of accommodations will help you to participate and be successful in my class?</td>
<td></td>
</tr>
<tr>
<td>8. Can you tell me what learning or behavior goals you have this year for this class?</td>
<td></td>
</tr>
<tr>
<td>9. Many students your age have begun to think about careers or jobs they might like after they finish high school. When you are done with high school, what kind of job or career would you like to have?</td>
<td></td>
</tr>
<tr>
<td>10. Is there anything about the class that you do not understand or something you'd like to say about this class, school, or any other area you are concerned about?</td>
<td></td>
</tr>
</tbody>
</table>
Appendix H

CBI Sessions Observation and Knowledge Protocol
Session One: Introduction
Date: ______

Completed each page  □
Printed Notes  □
Quiz Score ___ / 5
Verbal Check for Understanding: “What is Self-advocacy?”

“When might you use self-advocacy skills?”

Session Two: SHARE
Date: ______

Completed each page  □
Completed Memory Activity  □
Completed 2 Model conference videos with SHARE checklists  □
Printed Notes  □
Quiz Score ___ / 10
Verbal Check for Understanding: “Name the SHARE behaviors.”

“When might you use the SHARE behaviors?”

Session Three: Inventory
Date: ______

Completed each page  □
Completed and printed Academic Inventory for;
Reading  □  Writing  □  Math  □  Classroom Behaviors  □  Study Skills  □
Learning Preferences  □
Completed and printed Accommodations Inventory  □
Session Four: PLAN
Date: ________

Completed each page □
Completed Memory Activity □
Completed 2 Model Conference videos with PLAN checklists □
Printed Notes □
Quiz Score ___ / 10
Verbal Check for Understanding: “Name the PLAN steps.”

“When might you use the PLAN steps?”

Session Five: Model Conferences
Date: ________

Completed 2 Model Conference videos with SHARE and PLAN checklists □
Appendix I

The Self-Advocacy Strategy Dictionary
SA Dictionary

Navigation: To move to the next screen, click on the “next” button in the lower right side of the screen.

To move back a page, click on the “back” button in the upper left side of the screen.

Jump to a Section: If you are returning to this program, click on the words at the bottom of the screen to jump to the section you want to work on.

Exit: To stop working and close the program, click on the X in the upper left corner of the screen.

Activate- Be active, alert, and attentive; pay attention; be ready.

Areas to Improve- Skills or behaviors that you do not do well right now; weaknesses; areas of need.
Conference- A meeting where two or more people discuss something that concerns them both.

Educational Planning Meeting- A meeting held in order to plan for the future. During this meeting, plans are made for the next school year.

Goals- Something that someone wants to achieve or reach.

Goal Statement- A written or spoken statement of something that someone wants to achieve or reach.

Inventory- A personalized list of strengths that you have, skills that you need to work on, and goals you have set.

I-PLAN- A remembering device that reminds you of the steps you need to take to be a self-advocate. The steps are...
- I- Inventory your strengths, needs, and interests
- P- Provide you inventory information at the right time
- L- Listen actively
- A- Ask questions
- N- Name your goals

Learning Preferences- Ways in which you like to learn; activities or methods used by the teacher or by you that help you learn.

Negotiated Agreement- A form of communication that requires two people to listen and respond to each other’s needs in order to come to an agreement.

Paraphrase- To put something that has been said into your own words. For example, if a teacher says “self-advocacy includes knowledge of self”, you might paraphrase by saying “self-advocacy is knowing what I am good at and what I need to work on”.

Positive Statements- Saying something in a positive way. For example, when someone suggests that you work on a skill that you feel you already know, instead of saying “I don’t want to do that”, you could say “I think that skill is important, but I would really like to focus on my writing skills”.

SHARE- Nonverbal behaviors that will help you communicate with other people. The SHARE behaviors are...
- S- Sit up straight
- H- Have a pleasant tone of voice
- A- Activate your thinking
- R- Relax
- E- Engage in eye contact
Self-Advocacy - to take charge of your life and be more independent; to set your own goals; to tell people what you want to do and how you want to do it; to be responsible for yourself. A self-advocate does not rely on other people to make decisions for him or her.

Strategy - A plan, routine, or set of steps a person uses to solve a problem or complete a task.

Strengths - Skills or behaviors that you do well.

Taking Control - Being responsible for yourself and making your own decisions instead of letting other people make all of your decisions.

Transition - a change or passing from one stage to another, often meaning from school to the adult world.

Appendix J

Self-Advocacy Strategy Review
Self-advocacy is... taking responsibility for yourself, making some of your own decisions, and communicating your strengths, needs, interests, and goals to others.

You can use the self-advocacy strategy... in IEP conferences, meetings with teachers, parents, principals, job interviews and with other community professionals.

S- Sit up straight

H- Have a pleasant tone of voice

A- Activate your thinking

R- Relax

E- Engage in eye contact
P- Provide your inventory

L- Listen and respond

A- Ask questions

N- Name your goals

Using the Self-advocacy Strategy will allow you to use your OWN voice to communicate your OWN ideas, interests, and goals. It helps you take RESPONSIBILITY for yourself, your work, and your actions.
Appendix K

Introduction Session Notes
By learning and using the Self-Advocacy Strategy, you will be able to run your own conference.

You can also use the Self-Advocacy Strategy when you are meeting with teachers and counselors, having a job interview, or running a transition planning conference.

This strategy will help you communicate better with teachers, parents, and peers.

Being a self-advocate means taking responsibility for yourself. It also means that you start to make some of your own decisions.

You can use the Self-Advocacy Strategy in conferences, meeting with teachers, job interviews, and any situation where you have important conversations.

The Self-Advocacy Strategy has helped many students to organize their lives, talk to teachers, make their own decisions, get jobs, be more responsible, and be more successful.

Appendix L

SHARE Session Notes
SHARE Session Notes

Learning and using the SHARE Steps will help you communicate better with other people.

You can use the SHARE Steps in conference situations, meetings with teachers and counselors, job interviews, or any other important situation.

SHARE stands for: Sit up straight, Have a pleasant tone of voice, Activate your thinking, Relax, and Engage in eye communication.

Sit up straight- When you sit up straight, you show people that you are serious, paying attention, and interested in the conversation.

Have a pleasant tone of voice- People will be more likely to listen to you and agree with you if you have a pleasant tone of voice rather than if you are rude.

Activate your thinking- Pay attention so that you know what other people are talking about, and so that they see that you are listening.

Relax- When you stay relaxed, people feel more at ease around you and are more likely to listen to you than if you are fidgeting or acting nervous.

Engage in eye communication- Make eye contact with people when you are talking to them and when they are talking to you. When you do this, people know that you want them to listen to you and that you are listening to them.

Review the SHARE Steps:
S- Sit up straight
H- Have a pleasant tone of voice
A- Activate your thinking
R- Relax
E- Engage in eye communication

Appendix M

PLAN Session Notes
PLAN Session Notes

By learning and using the PLAN Steps, you will be able to run your own conference. You can also use the PLAN Steps when you are meeting with teachers and counselors, having a job interview, or running a transition planning conference.

PLAN stands for Provide your inventory information, Listen and respond, Ask questions, and Name your goals.

Providing your inventory information is important because it shows that you know about yourself and have important things to say.
When you provide your inventory information, remember:
- Make sure the timing is right
- Use the SHARE behaviors
- Use your inventory
- Speak clearly and completely

Listening and responding are important behaviors because they show people that you are paying attention and are interested in what is going on.
When you listen and respond, remember:
- Don’t interrupt
- Be an active listener
- Use the SHARE behaviors
- Use positive statements
- Negotiate agreement

Asking questions is important because the conference is about you. So you should understand everything that is being said.
When you ask questions, remember:
- Use the SHARE behaviors
- Ask one question at a time
- Ask complete questions

Naming your goals also is important because it shows people that you know what you want and are able to make decisions for yourself.
When you name your goals, remember:
- Use your inventory
- Use the SHARE behaviors
- Tell other members of the conference what you want to do and when you want to complete it

Appendix N

Inventory Highlight Sheet
My Inventory Highlights

BY: ____________________________

A few of my ACADEMIC strengths are...

A few of my ACADEMIC areas to improve are...

Some things I would like to learn this year are...

My learning preferences are...
Some of the accommodations that will help me are…

My goals for this class are…
Appendix O

SHARE Checklist - SHARE Session
NOTE: These checklists should be used during the SHARE Session.

As you are watching the video clips, place a check mark next to the SHARE steps you see the student complete. Add a brief description of exactly what you see the student do. For example, if you think the student has a pleasant voice, place a check mark next ‘Have a pleasant tone of voice’ and write an example of what the student said. When you are finished, turn this in to your teacher.

**Video One**

- Sit up straight
- Have a pleasant tone of voice
- Activate your thinking
- Relax
- Engage in eye communication

**Video Two**

- Sit up straight
- Have a pleasant tone of voice
- Activate your thinking
Relax

Engage in eye communication

Appendix P

PLAN Checklist – PLAN Session
NOTE: These checklists should be used during the PLAN Session.

As you are watching the video clips, place a check mark next to the PLAN steps you see the student complete. Add a brief description of exactly what you see the student do. For example, if you think the student has provided her inventory, place a check mark next ‘Provide inventory information and write an example of what the student said or did. When you are finished, turn this in to your teacher.

**Video One**

- ______ Provide Inventory Information
- ______ Listen and Respond
- ______ Ask Questions
- ______ Name Your Goals

**Video Two**

- ______ Provide Inventory Information
- ______ Listen and Respond
- ______ Ask Questions
Name Your Goals

Appendix Q

SHARE/PLAN Checklist – Model Conference Session
SHARE/PLAN Checklist – Model Conference Session

As you are watching the video clips, place a check mark next to the SHARE and PLAN steps you see the student complete. Add a brief description of exactly what you see the student do. For example, if you think the student is listening and responding, place a check mark next ‘Listen and Respond’ and write an example of either how you know the student was listening or the student’s response to a question or comment. When you are finished, turn this in to your teacher.

**Video One**

- [ ] Sit up straight

- [ ] Have a pleasant tone of voice

- [ ] Activate your thinking

- [ ] Relax

- [ ] Engage in eye communication

- [ ] Provide your inventory

- [ ] Listen and Respond

- [ ] Ask questions

- [ ] Name your goals
Video Two – SHARE/PLAN

- Sit up straight
- Have a pleasant tone of voice
- Activate your thinking
- Relax
- Engage in eye communication
- Provide your inventory
- Listen and Respond
- Ask Questions
- Name your goals

Appendix R

Site Approval Letter
January 29, 2010

To Whom It May Concern:

Amy Schelling has permission to conduct the study titled "Evaluating the Use of A Self-Advocacy Strategy as a Means of Improving Progress in the General Curriculum for Individuals with Cognitive Disabilities" at [Redacted], this winter.

I understand that the results of the study will be confidential and that no information that would identify the students, teachers, school, or district will be released by the researcher, Amy Schelling. I also understand that although as an administrator I am aware the study is taking place, I will be unaware of the particular students that choose to participate in the study.

In addition, Amy has done a wonderful job communicating with administration regarding her study. The staff at [Redacted] look forward the opportunity of having her work within their program.

Please feel free to contact me with any questions.

Sincerely,

[Redacted]
Appendix S

Permission Letter to Reproduce Copyrighted Material
May 21, 2010

Dear Dr. Lancaster:

I would like to request your permission to include the following items, from the Self-Advocacy CD-Rom in my dissertation:


I would like to include items from the SACD Student Dictionary, the Session Notes, and the SHARE, PLAN, and SHARE/PLAN checklists. I would like to include these items in the appendices of my dissertation for readers to refer to regarding the description of student materials. The source will receive full credit in the manuscript.

For your convenience, I am including a space for your signature on the page to indicate your permission for my use of the above-mentioned material. By signing below, you give ProQuest Information and Learning (formerly University Microfilms) the right to supply copies of this material on demand as part of my doctoral dissertation. Please attach any other terms and conditions for the proposed use of this item below.

__________________________  ______________________
Name                      Date

Thank you for your time and attention to this matter.

Sincerely,

Amy L. Schelling