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NOW WHAT? IMPACT OF A SELF-ADVOCACY STRATEGY  
ON MIDDLE SCHOOL STUDENTS WITH DISABILITIES

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NOW WHAT? IMPACT OF A SELF-ADVOCACY STRATEGY  
ON MIDDLE SCHOOL STUDENTS WITH DISABILITIES

A DISSERTATION APPROVED FOR THE  
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Dedication

To Brendan, Carson, and my students, especially Cameron

## Acknowledgments

No one gets a doctorate alone. I owe my little village more gratitude than words can convey. To my parents, Bill and Emilee, thank you for instilling a love of learning in me and supporting me even when you think I've taken on too much at once. To my sons, Brendan and Carson, you are my best accomplishment, and I am grateful for your sacrifices of mom-time over the past six years. I love you to the moon and back! To David, thank you for pushing me when I didn't think I could go any farther; this would not have happened without your unwavering belief in me.

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## **Abstract**

Students with disabilities do not develop self-advocacy skills on their own; however, instruction in these skills is often lacking in special education programs. This lack of self-advocacy skills negatively impacts the ability of these students to participate in the general education setting. The purpose of this study was twofold; specifically, it sought to determine whether middle school students with disabilities could be taught to recognize the need for self-advocacy and to employ appropriate help-seeking behaviors using the *NOW WHAT? Strategy*. Additionally, the study served as a field test for the lesson package. Thirty-seven middle school students with disabilities participated in an author-created, 12-lesson package over a six-week period. Student-reported levels of self-advocacy were measured pre- and post-intervention using the *Self-Advocacy Measure for Middle School (SAMMS)*. Pre- and post-intervention interviews were used to collect data on student perceptions of their ability to use self-advocacy in the general education setting. Quantitative results indicated student knowledge of self-advocacy increased but did not generalize to the general education classroom. Qualitative data provided some insight into the lack of change observed.

## **Chapter 1**

### **Introduction**

Adolescence is a time of identity exploration, heightened self-awareness, and increased personal independence (Field et al., 1997). During this time, appropriate risk taking is necessary, so that youth learn to anticipate the consequences of their actions and make adjustments based on their assessment of expected outcomes. As students develop their ability to process and reflect on events, they sort information by (a) permanence (is this something that can be changed?), (b) pervasiveness (how many situations does this affect?), and (c) personalization (does the cause originate within the youth or is it external?). Viewed together, these components delineate self-determination as a naturally occurring developmental process, yet for many students with disabilities, opportunities to engage in this process are limited, especially in the classroom (Price et al., 2002).

### **Development of Self-Determination**

Over the past three decades, self-determination has been established as a set of skills that increases positive postsecondary outcomes for students with disabilities (Wehmeyer, 2015; Wehmeyer, Field, et al., 2004). Self-determination includes a set of skills that allows an individual to make choices, to determine goals, and to take actions through self-initiated behaviors. Students with higher self-determination are more likely to be employed, to earn higher wages, and to live outside the family home (Thoma et al., 2002; Wehmeyer, Agran, & Hughes, 2000). Self-determination has also been linked to goal attainment, higher levels of motivation, improved educational outcomes, and higher levels of community participation (Wehmeyer, Field, et al., 2004). To be self-determined, one must develop self-advocacy skills, or the ability to speak up for what one needs based on understanding of needs and preferences

through awareness of self and rights (Doll et al., 1996; Schreiner, 2007; Test, Fowler, Wood, et al., 2005)

Teaching self-advocacy skills at early ages is supported by extant literature (Webb et al., 2008). Test, Fowler, Wood, and colleagues (2005) have suggested that waiting until students with disabilities enter high school to begin teaching self-advocacy skills is too late. Support for this theory is provided by those who suggest that instruction should begin at least by middle school to facilitate meaningful transition experiences as students advance through the upper grades (Arnold & Czamanske, 1991; Barrie & McDonald, 2002; Battle et al., 1998; Pockock et al., 2002; Test, Fowler, Wood, et al., 2005). Still others believe that self-determination develops from infancy and schools should “develop programs that facilitate the early acquisition of necessary competencies so that, upon reaching early adulthood, students with disabilities are not learning new skills, but rather refining capacities that have already been integrated in their behavioral and cognitive repertoires” (Abery et al., 1995, p. 178). Simply put, self-advocacy instruction must begin as early as possible (Barrie & McDonald, 2002; Battle et al., 1998; Zickel & Arnold, 2001).

Even among teachers who feel self-advocacy is important, Wehmeyer, Agran, and Hughes (2000) found there is little emphasis on including this area in lesson planning and activities, a finding commensurate with Wehmeyer’s 2015 study, which showed promotion of self-advocacy as a “fringe activity, occurring only when a dedicated educator...decides to elevate such efforts to the forefront” (p. 21). Mason and colleagues (2004) propose that if teachers and administrators saw benefit to an increase in self-advocacy skills, a higher priority would be placed on using instructional time for those skills, while others believe that finding instructional practices that infuse teaching of self-advocacy skills into existing routines would

increase the likelihood of students with disabilities receiving such instruction (Copeland & Cosbey, 2008; Wehmeyer, Agran, & Hughes, 2000).

### **Development of Self-Advocacy**

As will be seen in subsequent discussion, definitions of self-determination vary, yet many agree that self-advocacy is a key component skill. Self-advocacy definitions, too, vary from author to author; however, overlap suggests that at its core, self-advocacy requires self-knowledge, decision-making skills, and the ability to communicate needs to others (Martin et al., 1993; Test et al, 2004).

Dependence on others is often fostered by well-meaning adults who overprotect by voicing needs for students with disabilities, thereby preventing development of autonomy (Ward, 1988; Wehmeyer, 1992a, 2002) and creating the need for students with disabilities to overcome the perception that they cannot make decisions for themselves (Wehmeyer, 2002). Self-advocacy is needed for students with disabilities who remain unskilled in asking for what they need in the general education setting (Stang et al., 2009; Weimer & Cappotelli, 1994). It increases access to general education curriculum (Lee et al., 2008) and has been identified as the “most important topic learned for future success” (Roberts et al., 2016, p. 216) in post-school employment and education.

Student needs for self-advocating behavior vary in relation to circumstances and stage of life (Test, Fowler, Wood, et al., 2005; Wehmeyer, Palmer, et al., 2000). Students who fail to learn self-advocacy skills (Aune, 1991) are currently “at risk for passivity that manifests as learned helplessness in the face of difficulty” (Firth et al., 2010, p. 78). The lack of self-advocacy skill use for students with disabilities has been well documented (Agran et al., 1999; Thoma et al., 2002). Compounding this problem is the tendency of students with disabilities to “not

attribute academic outcomes to factors within their control” (Canino, 1981, p. 472). These issues are worrisome given that, on average, 80% of instruction provided to students with disabilities occurs in a general education setting (Cook 2001; Wehmeyer, Field, et al., 2004). Self-advocacy is a critical component of school success, as research has demonstrated that students who can self-advocate are more likely to participate in general education and have greater access to curriculum (Lee et al., 2008; Weimer & Cappotelli, 1994). Such participation increases independent performance of basic classroom-related skills, which becomes increasingly important as students move into high school and postsecondary settings where teacher expectations for independence increase (Copeland et al., 2002).

A growing body of evidence suggests that self-advocacy skills must be taught using an effective sequence of instruction (Pearl, 2004; Pocock et al., 2002; Roberts et al., 2016; Roffman et al., 1994), and students must be given opportunities to practice these skills in non-trained environments (Durlak et al., 1994; Field et al., 1998a; Hammer, 2004). Yet even with this research, there continues to be a gap between known best practices and classroom experiences (Konrad et al., 2008). Test, Fowler, Brewer, and Wood (2005) examined self-advocacy intervention studies revealing that of the 25 included in the analysis, 10 measured student participation in the IEP/transition meeting, six measured self-awareness, seven measured communication, and four measured requesting help. Inclusion of more than one of these skills was found in five studies, with self-awareness and communication being the most common combination. Excluding the IEP studies, only seven measured performance of the target behavior in a non-trained setting. Four studies measured request for help/accommodations in a classroom setting, with two reporting quantitative data and two reporting anecdotal data. Only two of the studies were conducted with participants younger than high school age, and these focused on IEP



participation. This is surprising, as there is evidence that instruction in self-advocacy should begin at least by middle school to facilitate meaningful transition experiences as students advance through the upper grades (Arnold & Czamanske, 1991; Barrie & McDonald, 2002; Battle et al., 1998; Pocock et al., 2002; Test, Fowler, Wood, et al. 2005).

Other studies on self-advocacy have included teaching students to ask for classroom accommodations (Durlak et al., 1994; Prater et al., 2014), identification of system or teacher barriers to self-advocacy instruction with student opportunities to utilize learned skills (Conderman & Katsiannis, 2002; Mason et al., 2004; Wehmeyer, Field, et al., 2004), and the lack of appropriate tools for measuring self-advocacy (Eisenman & Chamberlin, 2001). Yet what remains elusive amid the extant literature are studies that examine middle school students' perceptions of and abilities to identify needs for and engage in self-advocating behaviors in the general education classroom. This study seeks to address current research shortcomings.

### **Learned Helplessness**

Learned helplessness, or the “lack of persistence at tasks which realistically could be mastered...as a consequence of having repeatedly experienced failure” (Luchow et al., 1985, p. 470), has been well documented as impacting students with disabilities (Field, 1996). Also documented is the high use of passive coping strategies, such as avoidance, by students with learning disabilities (Firth et al., 2010). Because coping patterns are established at a young age (Prior et al., 2001) and, because the older students get, the more likely they are to blame failure on internal factors (Luchow et al., 1985), it is important to teach students positive coping strategies at an early age.

Strategy instruction has been shown to have a positive impact on students with disabilities, with classroom-based, small-group intervention showing the greatest impact on

student perceptions of their competence (Meltzer et al., 2004). Additional support for use of instructional strategies is provided by Field and colleagues (1998b), who showed that promoting “active student involvement result(s) in more positive outcomes and help(s) students generalize skills to natural environments” (p. 116).

### **Significance of Study**

Students in middle school have an increased self-awareness, yet they remain unskilled in asking for what they need in the general education setting (Weimer & Cappotelli, 1994).

Developing these skills in middle school will give students ample time to refine and grow in their abilities to identify and communicate their needs (Test & Neale, 2004), which increases the likelihood that the skills will transfer to other aspects of life (Stang et al., 2009). When Algozzine and colleagues (2001) summarized the literature, very few studies on self-determination skills including self-advocacy had participants younger than high school age, a trend that is shifting slowly (Roberts et al., 2016), but not as well represented in the literature as desirable.

“Adolescence is a critical time for the development of and expression of self-determination, because it is a time when it is expected that individuals will begin to more actively engage in self-directed behavior” (Field, 1996, p. 50); therefore, middle school is a natural environment for teaching self-determination in preparation for high school, where teachers expect students with disabilities to perform basic classroom-related skills independently (Copeland et al., 2002). Sixty-six percent of students with learning disabilities do not talk to teachers about their learning problems (Kotzer & Margalit, 2007); therefore, skills necessary for access and participation in the general education setting are critical for students with disabilities (Agran et al., 2010; Palmer et al., 2004; Snyder & Bambara, 1997). When considering general

educators who, unlike special educators, have received no special training in self-advocacy instruction (Wehmeyer, 2015; Zhang, 2001), combined with the common perception that students with disabilities are incapable of making their own decisions (Test, Fowler, Wood, et al., 2005), it is not surprising that data collected through teacher observations show that when students with disabilities are faced with a situation they feel unequipped to handle, many either avoid the situation or wait for someone else to take action on their behalf (Agran et al., 1999).

The current literature establishes a strong case for teaching self-advocacy skills to middle school students with disabilities (Eisenman & Chamberlin, 2001; Price et al., 2002; Test, Fowler, Brewer, & Wood, 2005), yet in a review of the empirically based interventions used to promote self-determination, Algozzine et al. (2001) discovered that only 11 of 51 studies involved children of middle school age. Curricula used for teaching self-advocacy skills generally focus on student participation in the IEP meeting, and while increases have been noted in the number of verbal contributions made during the meeting, students with disabilities have shown only limited ability to generalize those skills (Cross et al., 1999; Karvonen et al., 2004). This increased ability to speak up is encouraging; however, “focusing on only one environment limits the potential that change will occur” (Wehmeyer & Lawrence, 1995, p. 80). Students must have (a) awareness of academic and social strengths and weaknesses, (b) ability to express awareness to teachers, (c) awareness of needs and accommodations, and (d) ability to request information/assistance/accommodation when appropriate and necessary (Test, Fowler, Wood, et al., 2005). To this end, Wehmeyer (1999) suggests that students with disabilities be provided “not only a purposeful instructional program, but also one that coordinates learning experiences across the span of a student’s educational experience” (p. 59). Such programs should “begin in the early years of adolescence in order to ensure students with disabilities have established the

necessary skills to make their own decisions about their lives and their futures” (Test & Neale, 2004, p. 136).

The need for self-advocacy instruction is well documented with support for development of these skills at earlier ages (Arnold & Czamanske, 1991; Barrie & McDonald, 2002; Battle et al., 1998). Because student needs for self-advocating behavior vary in relation to circumstances and stage of life (Test, Fowler, Wood, et al., 2005; Wehmeyer, Palmer, et al., 2000), I propose the established effective strategies for teaching self-advocacy skills in isolation (Balcazar et al., 1991; Lock & Layton, 2001) or within IEP meetings (Martin et al, 1993; Thoma et al., 2001) are too narrow, as they limit students’ abilities to adapt to a broad range of circumstances and choose the appropriate skills needed to exert influence over the environment to fulfill their needs and interests (Wehmeyer, Palmer, et al., 2000). Daily opportunities to practice self-advocacy in settings where school cultures have been created to support and promote their use are vital for students with disabilities who must have the self-awareness to understand their unique needs, recognize these opportunities when they arise, and take action (Algozzine et al., 2001; Field 1996; Hammer, 2004; Pockock et al., 2002; Schreiner, 2007; Test, Fowler, Wood, et al, 2005; Wehmeyer et al., 2004). Students face self-advocacy needs within the classroom when they are unsure of an assignment, when they cannot focus in the seat they are assigned, when they need materials, or a myriad of other situations that occur within classrooms that are not specifically related to having a disability. Students need a strategy to help them initiate self-advocacy actions, and they need to follow instruction with skill practice to increase the impact of the strategy (Roberts et al., 2016).

### **Research Purpose**

In response to this research-to-practice gap, the purpose of this study was to determine

whether middle school students with disabilities could be taught to recognize the need for self-advocacy in the general education classroom and subsequently employ a strategy for using self-advocacy behaviors. The study also serves as a field test for the *Self-Advocacy Measure for Middle School (SAMMS)* and the *NOW WHAT? Strategy* lesson package. This mixed-methods study sought to answer the following research questions:

1. Does learning the *NOW WHAT? Strategy* increase self-advocacy levels of middle school students with disabilities?
2. Does learning the *NOW WHAT? Strategy* increase student ability to identify situations in which self-advocacy is necessary?
3. To what extent do middle school students with disabilities use the *NOW WHAT? Strategy* to self-advocate in the general education setting during a contrived situation?
4. Does using the *NOW WHAT? Strategy* impact student perceptions of their ability to use self-advocacy in the general education setting and, if so, how?

## Chapter 2

### Review of Literature

What we currently understand as special education has its roots in the civil rights movement. *Brown v. Board of Education* (1954) provided the springboard for the argument that equal educational opportunities should also exist for students with disabilities (Zettle & Ballard, 1979); however, sixteen years passed before *Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania* (1972) secured the ban against applying any law that would deny students with disabilities from accessing publicly supported education. It should also be noted that this law applied only in Pennsylvania, leaving a large population of students with disabilities without protections for their right to participate in school. While the civil rights movement encompassed all persons of marginalized groups, the disability rights movement specifically attempted “to reverse society’s perception that [persons with disabilities] needed care and protection” (Ward, 1996 p. 3). *Mills v. Board of Education* (1972) established that the District of Columbia must provide a public education to any student regardless of the severity of their disability and that before the child was excluded from a regular school program, alternative educational services designed to meet the student’s needs must be provided. Amid these social movements, *PARC* lay the foundations for what would later become the self-determination movement, establishing that “education cannot be defined solely as the provision of academic experiences, rather it must be seen as a continual process...[in which] individuals learn to cope with and function in their environment” (Zettle & Ballard, 1979, p. 8). Over the next two and a half years, 28 states heard 46 similar right-to-education cases (Zettle & Ballard, 1979).

In 1973, Section 504 of the Vocational Rehabilitation amendment proclaimed that no otherwise qualified person “shall solely by reason of his [disability] be excluded from the

participation in, be denied the benefit, or be subjected to discrimination under any program or activity receiving federal financial assistance” (P.L. 93-112, 1973). While case law supported rights of students with disabilities, this mandate did nothing to further educational opportunities, as no federal funding existed to provide public education for this specific group. This was remedied in 1975 when the Education for All Handicapped Children Act (P.L. 94-142) combined a bill of rights for students with disabilities with federal funding for such measures.

Over the next 30 years, special education emphasis would shift from access to education to providing meaningful instruction for positive adult outcomes so that when students entered the adult environment, they were prepared to be functional members of society, able to navigate a path of their choosing. From these foundations emerged the concept of self-determination as a life skill to increase access to academics, social interactions, and employment (Wehmeyer, 1992a); however, access alone is not enough. Students with disabilities must be explicitly taught the skills necessary to produce positive post-school outcomes if, after all, the primary goal of special education is to produce self-determined adults (Halloran, 1993).

### **Self-Determination Perspectives**

Self-determination has its roots in the civil rights and normalization movements and is based on the theories of cognitive evaluation, self-efficacy, and social learning (see Wehmeyer, 1992a for further explanation). Congress, in the 1992 Rehabilitation Act Amendments, stated:

Disability is a natural part of human experience and in no way diminishes the right of an individual to (a) live independently, (b) enjoy self-determination, (c) make choices (d) contribute to society, (e) pursue meaningful careers, (f) enjoy full inclusion and integration in the economic, political, social, cultural, and educational mainstream of American society. (P.L.102-569, p. 24)

In this declaration are echoes of the words spoken by Nirje (1972) twenty years earlier, who stated that all people have “an inherent human right to respect, to human dignity, and to choice” (p. 177).

The various approaches to self-determination have at their core the same concepts mandated by IDEA for transition: student participation in the planning of activities and experiences based on student strengths, interests, and desires (IDEA, 1991). The “self” component is easy enough to define; yet, as seen with transition models, there is a lack of consensus over what constitutes “determination,” though definitions have been proposed (Field, 1996; Field et al., 1998a). To better examine the extant self-determination literature, the definitions have been organized into three major perspectives: (a) those that define self-determination as an outcome or end result, (b) those that define self-determination as an individual’s beliefs or knowledge, and (c) those that define self-determination as a set of skills and exhibited behaviors. From these definitions, models have been constructed to make sense of theories so that they may be applied to educational practices. Models are important because they guide curriculum development, which in turn guides the *what* and *how* of teaching self-determination skills to students (Shogren et al., 2017).

### **Self-Determination as an Outcome**

Wehmeyer was not the first to propose a definition for self-determination, but he may be the most prolific voice in the past 35 years, penning his first definition in 1992(b). He defined self-determination as “the attitudes and abilities required to act as the primary causal agent in one’s life and to make choices regarding one’s actions free from undue external influences or interference” (p. 305). Subsequent revisions to this definition led to a definitional framework of self-determination as an educational outcome defined by actions taken related to autonomy, self-



actualization, and self-regulation” (Wehmeyer, 1996). Further refinement of the definition highlighted the emphasis on action and lifelong outcomes as Wehmeyer’s view of self-determination became that of “acting as the primary causal agent in one’s life and making choices and decisions regarding one’s *quality of life* [emphasis added] free from undue external influence or interference” (Wehmeyer, 1999, p.56).

As he began to define self-determination in the early 1990s, Wehmeyer was also cognizant of what it was not. According to his 1992(a) and 1998 publications, self-determination is not just student involvement, independent performance or self-reliance, absolute control, successful behavior, or the sole domain of secondary education. In 2006, in response to ongoing misunderstandings that self-determination meant having control over one’s life and did not, therefore, apply to those with more significant disabilities, Wehmeyer reinforced what it was not, with an updated definition to include self-determined behavior as “volitional action; where volition refers to the act of making a conscious choice” (Shogren et al., 2015, p. 253). The final, and most recent iteration of Wehmeyer’s self-determination definition comes from collaboration with Shogren (Shogren et al., 2015) and includes elements of positive psychology to explain how all people become self-determined through acting as the causal agent in one’s life by freely choosing goals and behaviors that allow one to be the initiator of actions to reach those goals.

Abery (1994) also focused on outcomes in ascribing meaning to self-determination as the “power to make choices that reflect personal preferences, interests, and values, the prerogative to take that degree of control over one’s life that is desired, and the liberty to develop and have significant others respect one’s vision for the future” (p. 346).

### ***Models***

Transition models have historically focused on employment, even after the early 1990s

saw the beginning of “an increasingly visible movement within special education to promote self-determination” (Wehmeyer, 1999, p. 53). Sparked by a Request for Proposals (*Federal Register*, 1989) for the development of demonstration projects to support the identification of necessary personal skills, characteristics, and experiences (within and without school) that support development of self-determination, this emerging concept caught the attention of researchers, if not practitioners, resulting in a surge of published definitions, models, and instructional approaches. What began as an attempt to promote “the attitudes and abilities that lead individuals to define goals for themselves and to take the initiative in achieving goals” (*Federal Register*, 1989, p. 38166) has become a prominent movement in the field of special education.

Two models aligning with the outcomes perspective were located and are presented in chronological order of publication.

**Ecosystems perspective.** Abery and Stancliffe (1996) developed this model around the impact that environment has on self-determination using nominal group process procedures in four stages. Focus groups with students with disabilities, their parents, and their teachers were conducted. Resulting data were synthesized using qualitative data-analysis procedures. The themes were then used to construct a framework for self-determination, which was in turn used to create instructional strategies with a traditional design model. Ecosystems explain the relationship between person and environment or the context within which self-determination occurs. Personal factors that affect self-determination are categorized in three bases: (a) the skills base (goal setting, choice making, self-regulation, problem solving, and personal advocacy); (b) the knowledge base, comprised of both declarative, or factual knowledge, and procedural, or how-to, knowledge about the environment (resources/service systems,

laws/rights/responsibilities, and work/society awareness), and declarative knowledge of self (personal values and self-awareness); and (c) the motivational base (self-esteem, sense of self-efficacy, attributions for success or failure, and locus of control). Self-determination is the result of the interaction between individual and environmental elements (participation/inclusion, respect and acceptance, individualized programs and support, meeting basic needs, role models, positive reinforcement, opportunity for choice and control) on four levels: microsystems (immediate setting), mesosystems (phenomena of one setting impact events in another setting), exosystems (disability advocacy groups), and macrosystems (ideology and cultural characteristics).

**Functional Model of Self-Determination.** Wehmeyer's (1999) functional model was named such because he believed that self-determined behavior was not in response to a stimulus but served a purpose, or had function, for the individual. The model was developed using an empirical validation process that analyzed data collected from adults with cognitive disabilities (Field, 1996). Not only is self-determination developed over time, but it can be learned, both of which increase an individual's capacity for specific behaviors. In much the same manner, opportunities to perform the behavior are increased (or decreased) by the environment and through past experiences. Both capacity and opportunity are affected by the individual's perceptions of their ability (self-awareness, self-esteem, and self-confidence) or their perceptions of control over the environment (self-efficacy, outcome expectancy, and locus of control) and can be increased by providing needed supports (Field, 1996; Wehmeyer, 1995). In combination, these three components create the dispositional characteristics, or consistent beliefs across time and context (Shogren et al., 2008), necessary for self-determination; that is, the behavior is autonomous, self-regulated, psychologically empowering, and based on self-realization

(Wehmeyer, 1999).

Using this model, the components of self-determined behavior include (a) choice-making skills; (b) decision-making skills; (c) problem solving skills; (d) goal setting and attainment; (e) self-observation, self-evaluation, and self-reinforcement skills; (f) self-instruction skills; (g) self-advocacy and leadership skills; (h) internal locus of control; (i) positive attributions of efficacy and outcome expectancy; (j) self-awareness; and (k) self-knowledge (Wehmeyer, 1999). In other words, people are not self-determined by *what* they do but by *why* they do it.

### **Self-Determination As an Individual's Beliefs or Knowledge**

Deci and Ryan (1985) firmly grounded their definition of self-determination within the individual as “the capacity to choose and to have those choices the determinants of one’s actions...rather than obligations or coercions” (p. 38). Similarly, Ward (1988) defined self-determination as “the attitudes, abilities, and skills which lead people to define goals for themselves and the ability to take the initiative to achieve those goals” (p. 2) and “the extent to which a person assumes responsibility for his or her own goals, accomplishments, and setbacks” (Durlak et al., 1994, p. 51). Field and Hoffman joined the self-determination movement in 1994 with their definition positing that self-determination was “the ability to identify and achieve goals based on the foundation of knowing and valuing oneself” (p. 164). Two years later, Powers and colleagues (1996) contributed their definition of “personal attitudes and abilities that facilitate an individual’s identification and pursuit of goals...reflected in personal attitude of empowerment, active participation in decision making, and self-directed action to achieve personally valued goals” (p. 292). Like the outcome models, empowerment, choice making, goal setting, and action have prominent roles in these definitions; however, unlike the previous models, self-determination is seen not as the result of these actions but the cause. It is not

through actions that one becomes self-determined; one must believe that one has the capacity for self-determination before one can engage in a self-determined behavior.

### ***Models***

Two models aligning with the individual's belief and knowledge perspective were located and are presented here in chronological order of publication.

**Deci and Ryan Self-Determination Theory.** Developed using inductive, empirical methods, the Self-Determination Theory identified three needs related to motivation: competence, relatedness, and autonomy (Deci & Ryan, 1985). This model is presented as a continuum with six levels, ranging from non-determined to self-determined across two categories: perceived locus of causality (internal or external) and regulatory processes that govern behavior. Within the model is a sub-theory titled "Organismic Integration Theory" (Ryan & Deci, 2000), which describes three motivational types and the regulatory styles assigned to each. At the far left is a motivation that is impersonal, non-regulatory, and is characterized by a lack of control; in other words, self-determination does not exist. Within the extrinsic motivation band, four regulatory styles exist: (a) external, which produces compliance and is governed by rewards and punishments; (b) introjected, or somewhat external, which produces self-control and is governed by internal rewards and punishments; (c) identified, which begins to become a somewhat internal locus of control and is governed by personal importance and conscious valuing; and (d) integrated, which is completely internal and is governed by awareness and synthesis with self. At the far right is full self-determination, which the authors characterized as having intrinsic motivation and regulation governed by interest, enjoyment, and inherent satisfaction.

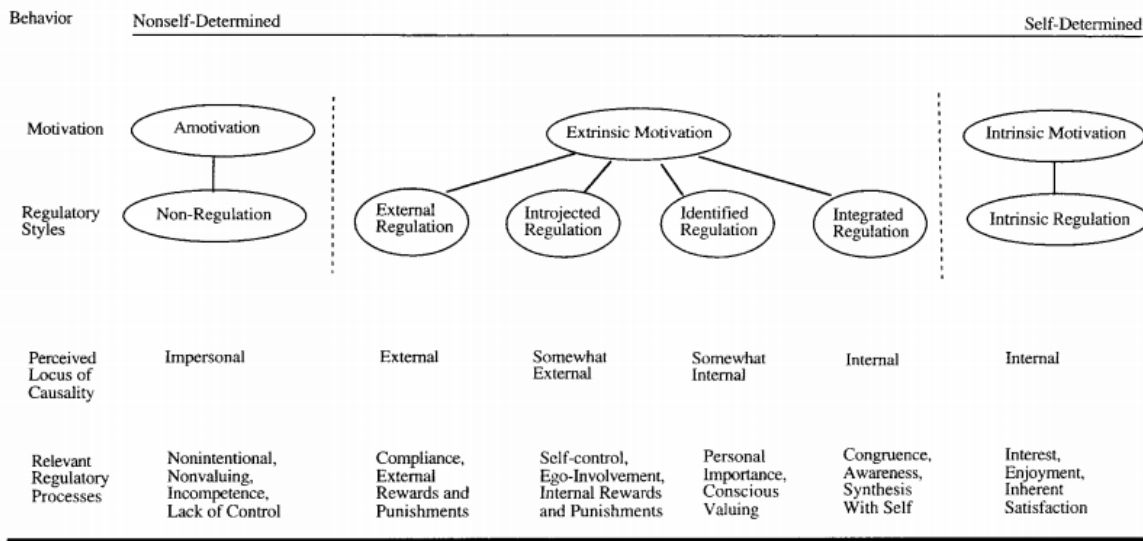


Figure 1. The Self-Determination Continuum Showing Types of Motivation with Their Regulatory Styles, Loci of Causality, and Corresponding Processes. Reprinted from Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

**Field and Hoffman Self-Determination Model.** This model was developed in five stages across three years, beginning with a comprehensive literature review, followed by interviews of individuals with disabilities, student observations, and consideration of input provided by panels of external experts (Field, 1996). The model addresses both internal affect and skill components, as well as environmental factors. Self-determination is either enhanced or hindered by factors that can be controlled by the individual and is divided into internal processes (Know Yourself, Value Yourself, and Experience Outcomes and Learn) and skills (Plan and Act). While environmental factors are considered, the model itself focuses on the cyclical pattern of planning and acting on dreams, strengths, and rights as a unique individual and taking experiences back to the beginning step to create new dreams and plans.

### Self-Determination as Skills and Exhibited Behaviors

According to Mithaug et al. (1992), self-determination is demonstrated through behaviors such as “choosing and enacting choice in persistent pursuit of self-interest” (p. 19). Wolman and

colleagues (1994) expanded this definition of self-determined people as those who express their own needs, interests, and abilities. They set appropriate goals and expectations for themselves. They make choices and plans in pursuit of these goals. They follow through with actions, and if necessary, they change course or adjust to achieve their desired goals effectively. Self-determined people also act more independently and more freely in pursuit of their goals than others do. They are less influenced by other people and by their environments in choosing what goals to pursue and how to pursue them. (p. 5)

Mithaug et al. (1987) built upon their Adaptability Model for developing their definition of self-determination. They believed that self-determined people

know how to choose—they know what they want and how to get it. From an awareness of personal needs, self-determined individuals choose goals, then doggedly pursue them. This involves asserting an individual's presence, making his or her needs known, evaluating progress toward meeting goals, adjusting performance, and creating unique approaches to solve problems. (p. 147)

### ***Models***

Unlike the previous models, environment is not a factor in developing or exhibiting self-determination skills. Interaction with the environment only occurs when the individual identifies goal (what must be done) and choice (how it will be accomplished) contingencies.

**Self-Regulation Theory.** Mithaug et al. (1994) used a process similar to Field for their model of self-determination by extant literature review, qualitative focus group data analysis, and expert panel review. In this model, self-determination is a subset of self-regulation that is “less influenced by others and [the] environment” (Field, 1996, p. 44). The six major steps to self-

determination according to this model include (a) identification and expression of needs or desires; (b) establishing goals and expectations; (c) making choices and plans to attain the goal; (d) taking action; (e) evaluating results of the action; and (f) adjusting plans and actions until the goal is reached.

### **Self-Determination As a Process**

Teasing out the essence of self-determination has been a consistent theme in special education research for the past 35 years. Of the five models discussed in the previous sections, four identify a locus of control as a major component of self-determination (although it is not explicitly stated as such in Mithaug's 1993 model, and all but the Deci and Ryan (1985) contain self-knowledge, goal setting, and action. This suggests that the definitions are more alike than not, as are the most recently developed models that shifted away from crystalizing differences between definitions toward a synthesis of these competing camps of thought. The current conceptualization of self-determination rejects it as either skills, behavior, beliefs, or outcomes. It is no longer a means or an end, and it no longer resides in special education alone.

### ***Models***

**Self-Determined Learning Theory.** Proposed by Mithaug and colleagues (2003), this theory suggests that self-determination is the process of learning through the interaction between capacities and opportunities. When capacities and opportunities align, creating a "just right" challenge, the individual is most likely to act to take advantage of a way to gain what is desired or needed. Self-determination, then, is the process of adjusting either the goal or the skills needed to increase the likelihood that the goal is reached (Mithaug et al., 2003).

**Causal Agency Theory.** Wehmeyer (Wehmeyer, 2004; Wehmeyer & Mithaug, 2006) reconceptualized his earlier self-determination model to include the philosophical and



psychological constructs of determinism and free will, autonomy, motivation, and social context to explain *how* people become self-determined (Shogren et al., 2015). Seen through this lens, self-determination is then, the interaction of capability, challenges, and causal affect. Causal capability, or the ability to make something happen, is a product of causal capacity (the knowledge and skills needed) and causal perceptions (beliefs about self and environment). Agentic capability, or the capacity to direct causal actions, is likewise built on agentic capacity (knowledge and skills needed) and agentic perceptions (beliefs about self and environment) that enable an individual to act. Challenges are either threats to these capabilities (within the person or from the environment) or opportunities (found or created) to engage in causal action to maintain preferred situations or to change non-preferred situations. Causal affect, or emotions, interact with all components of the model and can hinder or enhance the desired outcome (Wehmeyer, 2004).

Using this model, the skills needed for self-determination include goal identification, self-analysis, and discrepancy analysis to determine how far the goal is from the current situation. Problem-solving skills are then utilized to adjust either capacity or challenge to reduce the discrepancy. Central to this process are three action-control beliefs: (a) the link between self and goal (control expectancy), (b) the link between self and means for achievement (capacity beliefs), and (c) the usefulness of a means of achievement (causality beliefs) (Shogren et al., 2015). Self-monitoring is used to analyze whether a discrepancy still exists or if the desired situation has been achieved. If not, the individual returns to either the causal or agentic capabilities to make further adjustments (Wehmeyer & Mithaug, 2006). In this manner, self-determination becomes a dispositional characteristic, or enduring tendency, of individuals to act in self-centered actions as causal agents to make things happen. This does not, however, imply

that self-determined persons have control over events or outcomes; rather it refers to the degree to which an action is caused by oneself (Shogren et al., 2015).

**Self-Determined Learning Model of Instruction (SDLMI).** This model (often considered a curriculum) combines the Wehmeyer and Mithaug theories as a means to aid students in taking control of their own learning (Wehmeyer, Palmer, et al., 2000) through teaching them “the skills that are necessary to act on the environment in order to achieve goals that satisfy [their] self-defined needs and interests” (Field, 1996, p. 441). Instruction occurs in three learning phases: (a) Set a Goal, (b) Take Action, and (c) Adjust Goal or Plan. By answering a series of questions written in first-person point of view, students are given control of the learning process as they solve problems by assessing what they currently know or have at their disposal, determining where they want to be, and identifying obstacles that need to be addressed to get there.

*SDLMI* may be used across age levels and disability categories, including with students who do not have disabilities (Lee et al., 2008). Agran et al. (2000) posit that improvement on target behaviors occurring as a result of obtaining personally established goals provides evidence that students are more motivated to learn when they play an active role in the process. Using *SDLMI* has also been shown to (a) increase access to general education curriculum (Lee et al., 2008), (b) increase goal attainment, (c) increase both levels of self-determination and perceptions of control, and (d) show higher increases in those measures with longer exposure to the intervention (Wehmeyer, Palmer, et al., 2000; Wehmeyer et al., 2012).

### **Self-Determination Components**

Self-determination is not an isolated event, and as such, the degree to which any of the component skills is exhibited by an individual is affected by “age, opportunity, capacity, and

environmental circumstances” (Price et al., 2002, p. 110). It is a complex phenomenon “incorporating multiple skills and dispositions developed in supportive environments over one’s lifetime” (Eisenman & Chamberlin, 2001, p. 138). Self-determination is “directly relevant to day-to-day activities and experiences for students with disabilities in a variety of settings” (Price et al., 2002, p. 110). An examination of disability research literature from the past 30 years provides significant evidence that development of self-determination is critical for increased positive postsecondary outcomes in both employment and education (Aune, 1991; Thoma et al., 2002; Wehmeyer, 2015; Wehmeyer, Palmer, et al., 2000; Wehmeyer et al., 2004). “Self-determination emerges across the lifespan as children and adolescents learn skills and develop attitudes that enable them to be causal agents in their lives and to act volitionally” (Shogren et al., 2008, p. 95). Recent research (McConnell et al., 2012) has identified self-determination skills, along with other nonacademic skills, to be related to postsecondary success. With limited time available for instruction (Lubbers et al., 2008), teachers must be strategic when selecting transition skills to emphasize. As can be seen in the multiple models for self-determination, component skills vary by viewpoint, yet there are common threads throughout that enable creation of a consensus on the core components of self-determination. These common threads include (a) choice making, (b) decision making, (c) problem solving, (d) goal setting and attainment, and (e) self-advocacy. In the following descriptions, the significance and contribution to postsecondary success of each skill listed is considered equal, as each plays a role in the development of self-determined students and may be drawn upon to a greater or lesser extent given environmental and personal context. Additionally, the subskills necessary for employment of each of these self-determination components are listed as appropriate. It should be noted that there is overlap between many of these subskills; therefore, the presentation of each under a

specific self-determination skill is a function of organization only.

### **Choice Making**

Choice making can be as simple as (a) selecting a preferred item from among familiar options (Kearney & McKnight, 1997), (b) using either/or presentation of two options, or (c) task ordering based on preferences (Shogren et al., 2004). Occasionally, this term is used interchangeably with decision making.

### **Decision Making**

Decision making is the ability to use self-awareness to (a) identify needs, interests, and essential elements of a problem; (b) list and consider alternatives and possible solutions; (c) select an option or goal; and (d) take action (Mithaug et al., 1987). Wehmeyer (1992a) adds recognizing consequences of choosing an alternative and locating resources needed to make a choice to the process.

### ***Internal Locus of Control***

Persons with an internal locus of control feel that they are in control of circumstances and outcomes that are important to them (Wehmeyer, 1995). They believe that there is a relationship between their actions and experienced outcomes (Rotter, 1966).

### ***Self-Efficacy***

Often linked with locus of control, self-efficacy describes personal judgment of capability to perform a task and may fluctuate based on circumstances present in different situations (Schunk, 1985).

### **Problem Solving**

Problem solving requires the persistent ability to define pieces of the problem and discuss options to reach a conclusion on how to proceed (Wehmeyer, 1992a). The process sequence

involves four steps: (a) identify need, (b) identify barriers (c) identify actions, (d) determine when to act or if problem has been solved (Shogren et al., 2017). This process can be used across life experiences and stages (Copeland & Cosby, 2008).

### ***Self-Evaluation***

Self-evaluation is used to (a) monitor and record outcomes of action plan; (b) examine and compare results to goals (Mithaug et al., 1987); and (c) provide information on a student's perceptions of changes in behavior (Ardoin & Martens, 2004).

### ***Adjusting***

Adjusting requires using self-evaluation to compare goals to progress. When there is a discrepancy, a change is made either to the goals, action steps, self-management strategies, or expected outcomes (Mithaug et al., 1987) to create a more favorable outcome.

### **Goal Setting and Attainment**

Goal setting requires self-awareness and problem-solving skills to choose, plan, and initiate activities (Wehmeyer, 1992b). Goal attainment requires defining explicit, long- and short-term goals that define what can be accomplished, breaking them down into actionable steps, and monitoring progress. Goals should be meaningful, realistic, and flexible (McConnell et al., 2012).

### ***Actions Related to Strengths and Weaknesses***

Persons who are self-aware can (a) identify their strengths and weaknesses, (b) seek situations to maximize their strengths and minimize their limitations, (c) consider limitations when choosing goals, and (d) develop new strategies to compensate for limitations (McConnell et al., 2012).

### ***Independent Performance***

Independent performance requires the ability to follow through with an action plan. It also encompasses learning new tasks on one's own, gathering and assembling needed materials, beginning work on time, working with accuracy and productivity, cleaning up, and moving to the next task without prompting (Mithaug et al., 1987).

### ***Persistence***

Persistence is defined as the ability to keep working toward goal attainment when barriers are encountered. This can mean repeating action steps or shifting goals to maintain progress (McConnell et al., 2012). Persistence is tied closely to problem solving and adjusting.

### ***Self-Management***

Often used as a catchall category, self-management has been defined as understanding needs/wants in order to set goals and action plans (Martin et al., 1993). Still others define it as evaluating behavior against performance criteria without feedback from teacher or administration of one's own consequences (Shapiro et al., 1998). Use of time management and organizational tools are also associated with this skill set (Wehmeyer, 1992b).

### ***Self-Advocacy***

Based on the framework of Test, Fowler, Wood, et al., (2005) self-advocacy requires knowledge of self, communication, knowledge of rights, and leadership. Knowing strengths/weaknesses, setting goals, and making decisions have also been attributed to self-advocacy skills (Martin et al., 1993).

### ***Self-Awareness***

Also described as disability awareness, knowledge of strengths and limitations, self-knowledge, and self-understanding, students who possess self-awareness know their

strengths/preferences, goals, dreams, interests, support or accommodation needs, and disability characteristics (Test, Fowler, Wood, et al., 2005). Self-aware students communicate this understanding to others and make better choices by identifying tasks or situations where they will be successful (McConnell et al., 2012).

### ***Disability Awareness***

Disability awareness includes (a) understanding the word “disability” and how it affects learning, (b) identifying challenges that exist because of the disability, and (c) how to explain the disability and its impact to others (McConnell et al., 2012). Disability awareness also includes asking for accommodations (Aune, 1991; Gerber et al., 1992; Thoma & Getzel, 2005).

### ***Supports***

Based on self-awareness of limitations, supports are identified as those things necessary for a student to complete a task (McConnell et al., 2012). In addition to knowing what supports are needed, students must be able to (a) identify when support is needed, (b) identify who in their social network (friends, family, school) can provide support, (c) accept and use support when provided, and (d) only seek support when necessary (McConnell et al., 2012).

### ***Communication***

Once needs or preferences have been identified, communicating these needs and preferences to gain a favorable outcome requires presenting information at the proper time, listening and responding skillfully (Wehmeyer, 1992a), and negotiating. The manner of message delivery should also be considered; thus, assertiveness, articulation, and body language should be taught (Test, Fowler, Wood, et al., 2005).

### ***Knowledge of Rights***

Knowledge of rights refers to knowing personal rights, educational rights, steps to

advocate for change, steps to redress violations, and resources available under the law (Test, Fowler, Wood, et al., 2005). Knowledge of rights becomes more important as students develop their self-advocacy skill but needs not be present for a behavior to be considered self-advocacy.

### ***Leadership***

Leadership requires knowledge of group rights, knowledge of resources, and organizational participation to be used in advocating for others (Test, Fowler, Wood, et al., 2005). As with knowledge of rights, this skill need not be present for a behavior to be considered self-advocacy.

### **Self-Advocacy Definitions**

The seminal definition of self-advocacy by Hallgren et al. (1977) considered self-advocacy as part of a movement focused on knowledge and understanding of basic human rights that allowed for meaningful citizenship. Others have also considered self-advocacy as a social movement in which persons with disabilities pursue the interests of the group to address infringement on rights (Cone, 1999; Niels, 1994; Wehmeyer, 1992b; Williams, & Shoultz, 1982) or to defend a cause (Wehmeyer et al., 1998). Still others view self-advocacy as addressing rights on the individual level (Sievert et al., 1988).

Self-advocacy is most often defined as a component of self-determination (Algozine et al., 2001; Field et al., 1998a; Furney et al., 1993; Wehmeyer, & Berkobien, 1991) and, as such, moves self-advocacy away from a group-rights perspective to one of the individual with disabilities to make choices and speak up for himself/herself (Hayden & Shoultz, 1991; Phillips, 1990). This focus on communicating one's needs or wants spurred yet another wave of definitions for self-advocacy, including communicating to acquire information or recruit help (Balcazar et al., 1991; Stodden, 2000). Others defined self-advocacy as the ability to negotiate



and assert interests, needs, desires, and rights (Martin, & Huber Marshall, 1995; Van Reusen et al., 1994). Still others focused on the need to be assertive but not aggressive when negotiating, compromising, or persuading (Wehmeyer & Schwartz, 1997). The final defining component of self-advocacy is that of self-understanding. This can take the form of disability awareness (Hartman, 1993) as knowledge of strengths and weaknesses (Martin et al., 1993), or as the ability to recognize needs specific to one's disability (Merchant and Gajar, 1997).

Based on their review of the extant literature, Test, Fowler, Wood, et al. (2005) developed a conceptual framework for self-advocacy that includes (a) knowledge of self, (b) knowledge of rights, (c) communication, and (d) leadership. Of these, knowledge of self and knowledge of rights are considered foundational components. The framework demonstrates a flow between and among each of the first three components, with only communication leading to self-advocacy. The final component of leadership need not be present but acts as an extension of self-voice to communicating on behalf of others. Roberts et al. (2016) used the framework to define self-advocacy as “an act that a person with a disability engages in to demand supports” (p. 2009). Miller et al. (1990) identified tools necessary for self-advocacy to include realization of strengths and weakness, the ability to formulate personal goals, assertiveness, and decision-making.

### **Self-Advocacy Instructional Methods**

The following discussion presents both instructional methods and curricula that have been used to teach self-advocacy skills successfully. They are presented in no particular order, as each can be used alone or in combination with others to address specific student needs and instructional styles.

## **Explicit Instruction**

Another prominent teaching method utilized in both general and special education classrooms is explicit instruction (Archer & Hughes, 2011). Explicit instruction uses corrective feedback, multiple opportunities to practice, modeling, and specific instruction for generalization using the model (I do)-lead (we do)-test (you do). This method has been utilized to teach students how to use the IPLAN strategy to participate in their IEP meeting (Test and Neale, 2004) and to write paragraphs (Rowe et al., 2017).

## **Direct Instruction**

Direct instruction is often used in special education classes and is similar to explicit instruction. It involves (a) teacher-delivered information, (b) modeling and role-playing, (c) generalization to a new setting, (d) strategy instruction, (e) corrective feedback, (f) multiple opportunities to practice, and (g) non-instructional practices to increase choice- and decision-making skills (Durlak et al., 1994; Karvonen et al., 2004)

## **Strategy Instruction**

Based on the early work of Deshler and Alley (1979), strategies are techniques or rules that are used to perform specific tasks, allowing students to learn, solve problems, or to complete tasks independently. The goal of strategy instruction is internalization so that the strategy can automatically be applied to new learning situations (Deshler & Schumaker, 1986). Instructional strategies are composed of teaching one or more goal-oriented tactics, procedures for monitoring processing demands, and activities that enhance procedural knowledge (Swanson & Sachse-Lee, 2000). The steps for strategy instruction include (a) advanced organizers, (b) cues to stop and reflect on learning and assess understanding, (c) elaboration, (d) generative learning, (e) metacognition, and (f) attributions. As part of the strategy, students moved through the process

of connecting information to what is already known, summarizing, and evaluating the effectiveness of the strategy (Swanson & Sachse-Lee, 2000). Additional components utilized include plans to direct task performance, modeling, reminders to use specific strategy, step-by-step prompts to use the strategy, dialogue, questions posed by the teacher, and assistance only when necessary (Swanson & Sachse-Lee, 2000).

To ensure students become fluent in strategy steps, Deshler and Schumaker (1986) suggest that teachers assess to obtain current levels of performance to determine strengths and weaknesses. Next, the teacher should describe the strategy components, explain the rationale, and have students write their own goals for learning. Third, the teacher models for students by showing the steps of the strategy while thinking out loud. Fourth, the students use verbal rehearsal to practice the strategy. And last, students use independent practice with the strategy to criterion. To generalize strategies, students and the teacher discuss other contexts in which the strategy can be used, as well as natural cues that indicate the need for using it. Students then practice in the identified settings, and probes are used to determine if maintenance has occurred or if more practice is needed. It is important to remember that the success of any strategy training is affected by student willingness to learn and use it; therefore, gaining student commitment is crucial (Hammer, 2004).

Strategies have been used to (a) teach acquisition and generalization of social skills (Blackbourn, 1989), (b) teach behavior management to secondary students, (c) increase participation in IEP meetings (Van Reusen et al., 2007), and (d) teach students how to write a paragraph using mnemonics for the strategy steps (Rowe et al., 2015).

## **Self-Monitoring**

Self-monitoring strategies have been shown to be effective for behavioral or academic interventions when used alone or in conjunction with other instruction (Sheffield & Waller, 2010). While most studies using self-monitoring have been done with elementary students, there are indications that it is effective in middle (Freeman & Dexter-Mazza, 2004) and high schools (Graham-Day et al., 2010). This strategy has been used to teach a wide variety of behaviors (Bruhn et al., 2015), including non-academic skills, such as teaching elementary students how to ask for accommodations in the general education setting when combined with role-play and independent practice (Hart & Brehm, 2013), teaching high school students to self-advocate for accommodations in the general education classroom (Prater et al., 2014), and teaching high school students to self-manage their preparation for class by having materials ready and homework turned in (Snyder & Bambara, 1997).

Training students to use a self-monitoring strategy requires defining the behavior used for monitoring and its importance. Clearly stating the target behavior to be monitored and modeling it for the student prior to role-play allow the student to engage in guided practice while the teacher provides corrective feedback as needed. Training the student to use a collection form and monitoring for accuracy may be done in the same manner (Sheffield & Waller, 2010). Combining self-monitoring with reinforcement has been shown to increase accuracy in self-monitoring (Ardoin & Martens, 2004); however, Field (1996) has cautioned against using contingency reinforcement with practices meant to increase student self-determination, as internal motivation may be negatively impacted when the ability to get the reinforcer comes from someone other than the student.

A study by Carter and colleagues (2011) suggests that self-management can “enable students to assume greater involvement in assessing, directing, and evaluating their own performance in academic, behavioral, and social domains” (p. 107), which is precisely the rationale for teaching self-advocacy skills in the general education setting. Using this strategy has the added benefit of permanent product data while being less obtrusive than an observer, especially in the general education classroom. If students are adequately trained in accuracy, the lowered fidelity of using self-report may be countered (Bruhn et al., 2015).

### **Teaching Self-Advocacy**

#### **Curricula**

Instruction using developed curricula such as the *Self-Directed IEP* (Martin et al., 1996) and *Self-Advocacy Strategy (SAS)* (Van Reusen et al., 1994) teach students either individually or in small groups to participate in their IEP or transition meetings through direct instruction in the special education classroom. A third curriculum used to teach more generalized self-advocacy behaviors is the *Self-Determined Learning Model of Instruction (SDLMI)* (Wehmeyer et al., 2000).

#### ***Self-Directed IEP***

A component of the *Choice Maker Self-Determination Transition Curriculum* (Martin & Marshall, 1995), the *Self-Directed IEP (SD IEP)* leads students through 11 lessons in which they learn leadership and communication skills after completing activities on how to choose appropriate goals. Following the *SD IEP* module, students are led through activities that focus on taking action structured to take long-range goals and break them into smaller tasks that can be accomplished in a week. At the conclusion of the curriculum exercises, students are better equipped to self-advocate during their IEP meetings.

### ***Self-Advocacy Strategy***

Based on the Strategies Intervention Model (Deshler & Shumaker, 1986), which was shown to increase student input such as identifying strengths, weakness, and goals, during IEP meetings, Van Reusen et al. (1994, 2007) developed the *Self-Advocacy Strategy* (SAS) around the *I PLAN* strategy for teaching students how to participate in their IEP meetings (Van Reusen & Bos, 1990, 1994). The steps include I- inventory your strengths, weaknesses, interests, and goals; P- provide your information; L- listen and respond; A- ask questions; and N- name your goals. An additional component, the SHARE strategy, gives students a formula for effective communication: S- sit up straight; H- have a pleasant tone of voice; A- activate your thinking; R- relax; and E- engage in eye contact. Empirical studies have validated SAS as an effective intervention to increase self-advocacy through IEP participation in students as young as middle school (Hammer, 2004; Test & Neale, 2004; Van Reusen, Deshler, & Shumaker, 1989). As part of SAS instruction, teachers emphasize the decision-making power and control students gain from using the strategy as well as helping them identify when and how they can apply it, making this a strategy that may be useful to students in their daily interactions at school (Van Reusen & Bos, 1990).

### ***Self-Determined Learning Model of Instruction (SDLMI)***

This model (often considered a curriculum) combines the Wehmeyer and Mithaug theories as a means to aid students in taking control of their own learning (Wehmeyer, Palmer et al., 2000) through teaching them “the skills that are necessary to act on the environment in order to achieve goals that satisfy [their] self-defined needs and interests” (Field, 1996, p. 441). Instruction occurs in three learning phases: (a) Set a Goal, (b) Take Action, and (c) Adjust Goal or Plan. By answering a series of questions written in a first-person point of view, students are

given control of the learning process as they solve problems by assessing what they currently know or have at their disposal, where they want to be, and what obstacles need to be addressed to get there.

*SDLMI* may be used across age levels and disability categories, including with students who do not have disabilities (Lee et al., 2008). Agran et al. (2000) posit that improvement on target behaviors occurring as a result of obtaining personally established goals provides evidence that students are more motivated to learn when they play an active role in the process. Using *SDLMI* has also been shown to (a) increase access to general education curriculum (Lee et al., 2008); (b) increase goal attainment; (c) increase both levels of self-determination and perceptions of control; and (d) show higher increases in those measures with longer exposure to the intervention (Wehmeyer, Agran et al., 2000; Wehmeyer et al., 2012).

### **Self-Advocacy Component Instruction**

#### ***Self-Awareness***

Although Aune (1991) asserts that self-awareness, specifically as it relates to disability, provides the foundation for all transition skills, there is a paucity of literature on strategies to teach this skill. A qualitative study by Eisenman and Tascione (2002) used a Likert-scaled survey for students to respond to opportunities to (a) talk about educational strengths and weaknesses, (b) learn something new about strengths or weaknesses, (c) learn a strategy or how to ask for accommodations, and (d) use the strategy or ask for accommodations through reflective writing. Disability awareness skills were taught to students in grades five through nine using the *TARGET* strategy: T- target lesson goals, A- assess student knowledge and improvement objectives, R- role-play, G- generalize to other school settings, E- evaluate attainment, and T- test transfer of skills (Campbell-Whatley, 2008). Using a multi-site, multi-

subject, pre-experimental mixed-methods design incorporating a pre- and post-test measure of self-concept and open-ended probing-question interviews, students completed seven units to explore with discussion and reflective writing the following concepts: (a) what it means to have a disability, (b) successful people with disabilities, (c) disability characteristics related to learning, (d) getting into a special education program, (e) knowing strengths and weaknesses, (f) problems and self-advocacy, and (g) managing anger. Results indicated that there was a significant positive change in student self-concept prior to and after intervention.

Self-awareness was most often included in studies that measured student participation in the IEP meeting; however, these did not include direct measure of self-knowledge as a dependent variable (Martin et al., 2006; Martin & Williams-Diehm, 2013; Test & Neale, 2004; Van Reusen et al., 1989). Emerging literature on the *ME! Self-Advocacy* lesson package (Cantley et al., 2010), which uses direct instruction to explore information contained in the student's IEP, has shown that it is effective for increasing student disability awareness (Cantley, 2011; Lynch & Martin, n.d.). These lessons have been rewritten as short lessons used to begin class, or bell ringers (Lingo, 2012), which allow students to reflect in writing and small-group discussion on their self-awareness using prompts such as, "In your own words, what do you think self-awareness is?" and "List 10 words or phrases that others may say about you" (Lingo et al., 2018, p. 3).

### **Self-Advocacy Studies**

The abilities of high school students with disabilities to self-advocate by identifying their disability and the effects it had on their learning, as well as requesting help or accommodations, was examined using a multiple-baseline-across-behaviors design (Durlak et al., 1994). The intervention was presented in the special education classroom using direct instruction. Formal



assessments were used to gather pre- and post-measures of student assertiveness and self-concept, with teacher-created rating scales used to measure self-awareness and self-advocacy behaviors taught as part of the intervention. Task analysis was used to create checklists for scoring each of the seven targeted behaviors: (a) ask teacher for clarification, (b) disclose disability to teacher, (c) make an appointment with a teacher, (d) ask permission to tape record lecture, (e) obtain approval for another student to take notes, (f) ask librarian for assistance, and (g) make an appointment with an adult outside of the classroom. Students were also scored on appropriate communication skills, such as eye contact, posture, and tone or level of voice while performing these tasks. Generalization probes were conducted in various settings within the school for all seven of the skills. Direct observation by the teacher or adult from whom the student sought help was used to identify whether the correct behavior was performed for each skill listed. Percent of steps performed across all seven tasks on average was at 42% during baseline, improving to 82% after intervention. Pre- and post-test scores for the eight participants were analyzed using related-measures t-tests with no statistical significance indicated.

Middle school students were taught to participate in their IEP meetings via individual instruction using *Self-Advocacy Strategy (SAS)* (Van Reusen et al., 1994). A multiple-probe-across-participants design was used to determine the effect of the intervention on quality of student contributions in the IEP meeting. To control for confounding variables, participants were students who had never attended their meetings. Pre- and post-tests scores on the *ARC Self-Determination Scale* and 10 probe questions modified from the *SAS* concerning transition skills of self-awareness and future planning were used as dependent measures. During intervention phase and the IEP meeting, student answers to the probe questions became more specific, and mean scores for each interview session increased. Video recording of the actual IEP meeting

were used for analysis with no interobserver agreement presented.

Additional studies using the SAS to teach IEP participation employed multiple-probes-across-participants (Lancaster et al., 2002) and multiple-baselines-across-participant designs with similar results as the Van Reusen et al. study.

### **Measuring Self-Advocacy**

In the studies included in the Test, Fowler, Brewer, and Wood (2005) meta-analysis, 100% included communication in the components of self-advocacy taught, yet only 85% measured communication as part of the dependent variable. Knowledge of self was taught in 75% of the studies but only measured in 60%. Knowledge of rights and leadership were taught in 40% and 20% respectively, with inclusion in the dependent variable measure at 25% and 20%. No data were presented on type of intervention or measurement instrument for the self-advocacy components, underscoring the lack of available instructional materials or reliable methods of determining self-advocacy levels.

Continuing the work of Test and colleagues (2004), Roberts et al. (2016) examined literature between 2005 and 2013, finding similar patterns to the prior analysis; namely that knowledge of self and communication were the most frequently taught self-advocacy components. Of the studies presented below, only one used pre-existing scales as a measurement tool, with the others using student interviews, researcher-made self-report surveys, or participation in the IEP meeting as the dependent measure.

### **Existing Scales**

Durlak et al. (1994) utilized the *Assertiveness Scale for Adolescents* (Lee et al., 1985) and the *Piers-Harris Children's Self-Concept Scale* (Piers, 1984), along with author-created self-awareness and self-advocacy scales to measure student self-advocacy in a multiple-baseline-

across-participant design. The study examined the impact of direct instruction on high school students with learning disabilities to state the nature of their disability, to state their strengths and weaknesses, and to express this awareness when requesting information, assistance or accommodations. Videotapes and checklists were also used to determine completed steps in a task sequence for each self-advocacy behavior measured, along with appropriate communication skills such as body language and tone of voice. Although the study reported results as self-determination skills performed, no specific measure of self-advocacy was provided. The study further identified the need for participants to be more specific in their requests and their expression of the nature and impact of their disability, suggesting the need for additional studies and continued practice for students with disabilities in a general education setting.

### ***Student Interviews***

Phillips (1990) had more promising results for increased self-knowledge as it relates to disability awareness. In his comparative case study, high school students with learning disabilities participated in the *Self-Advocacy Plan* (Phillips, 1990), an intervention which utilized self-report logs to record strengths, weaknesses, and learning supports that had been effective to communicate in their IEP meetings (9th grade). Students were also asked to state their strengths and weaknesses to teachers (10th grade) and to ask for adjustments or modifications (11th grade).

The *Self-Advocacy Interview for Students (SAI)* is a 30-minute structured interview used to evaluate students' knowledge of their learning disability; knowledge of resources, services, support, and accommodations; and knowledge of their ability to succeed. Mishna and colleagues (2011) conducted a partial-crossover design study using immediate and withheld intervention groups and pre-/post-tests to determine the effectiveness of a school-based group treatment

involving workshops for parents and students without learning disabilities and consultation for teachers of students with disabilities. Significant gains were found across time in *SAI* scores, as well as an increase in student self-reports of ability for self-advocacy, which was defined as knowledge of learning strengths and disability, awareness of rights and responsibilities, awareness of accommodations needed, and the ability to communicate these needs. The authors noted the need for an objective measure of self-advocating behaviors, such as identifying and asking for learning needs.

### **Participation in the IEP Meeting**

A qualitative multiple-case design was employed to determine the impact of an author-created lesson package for elementary students on their perceptions and actions as related to identifying appropriate accommodations (Danneker & Bottge, 2009). Students were observed in their IEP meetings and anecdotal notes used to determine how students communicated their goals and needed accommodations. Semi-structured interviews revealed increased self-confidence in the participants' ability to self-advocate during the meeting and their increased comfort in asking for help from teachers.

Students in a private middle school for students with learning disabilities were trained using the *Self-Advocacy Strategy* (Hammer, 2004). A 10-question probe was used in a multiple baseline across participants study as the baseline and repeated measure to determine student ability to respond to IEP-related questions. The final probe consisted of measuring student relevant contributions in their IEP meeting. An immediate increase in relevant responses in both probes and IEP meetings was observed after intervention.

Neale and Test (2010) used a modified version of the *Self-Advocacy Strategy (SAS)* (Van Reusen et al., 1994) to teach elementary students with high incidence disabilities to use the *I*

CAN strategy to identify their strengths and weaknesses. Using a 10-question probe at the end of each lesson for the multiple-probe across participant measure, improvement across time was noted and students were able to generalize the behavior to a mock IEP meeting, with an increase in the quality of student verbal contributions.

Arndt et al. (2006) used the *Self-Directed IEP* curriculum (Martin et al., 1996) to teach high school students with moderate disabilities to develop goals based on their strengths and weaknesses and then share this information in a mock IEP meeting. Using a checklist of skills taught to record skills demonstrated, level of student support was reported as a percentage. An increase of self-advocating behaviors was seen in the mock IEP, and results indicated that students were able to generalize these behaviors to their actual IEP meeting.

### **The Need for Self-Advocacy in Daily Life**

Based on the literature to date, there is a dearth of information on teaching middle school students to self-advocate. Currently, teaching students to self-advocate centers around the IEP meeting; however, there are multiple opportunities to self-advocate throughout the day as students navigate school and inclusion in the general education setting. Existing self-determination instruments have items that address self-advocacy as part of the overall self-determination level, but no formal means exist to determine the level of self-advocacy exhibited by students with disabilities. Based on these criteria, there is a need for developing and testing a lesson package specifically designed to teach self-advocacy in naturally occurring environments with opportunities for real-world practice. Building upon the *Self-Advocacy Strategy* approach where students employ strategy steps to self-advocate in IEP meetings, one can surmise that providing a strategy to address daily self-advocacy needs in the classroom would increase self-advocacy levels of middle school students with disabilities.

## **Chapter 3**

### **Methodology**

In order to self-advocate, students must have the self-awareness to recognize that they have a need (Raskind et al., 2002). They also must be able to request help appropriately and then act on the help given to resolve the need (Prater et al., 2014). Problem-solving skills increase competence and independence (Agran et al., 2002) in students with disabilities and are, therefore, important components of teaching self-advocacy. A review of extant literature shows (a) many of the efforts to teach self-advocacy center around the Individualized Education Program (IEP) meeting, and (b) there is a lack of an instrument to measure self-advocacy as a standalone skill set. To address this gap, a strategy lesson package was written for this study to teach students to identify the need for self-advocacy in the general education classroom. Additionally, a self-advocacy measurement tool was created to determine levels of the component skills, self-knowledge, and communication, which can then be combined to produce an overall self-advocacy score.

When examining the components of self-advocacy as proposed in the framework by Test, Fowler, Wood et al. (2005), self-knowledge and communication appear to be the most developmentally appropriate for middle school students (Campbell-Whatley, 2008), as these foundational skills must both be mastered before students can describe how legal rights apply to needs within the classroom or advocate on behalf of another. The current study focused on self-knowledge and communication, as developing these skills in middle school will give students ample time to refine the skills, grow in their ability to identify needs, and communicate their needs to those who can provide support (Test & Neale, 2004).

The research questions guiding this study were as follows:

1. Does learning the *NOW WHAT? Strategy* increase self-advocacy levels of middle school students with disabilities?
2. Does learning the *NOW WHAT? Strategy* increase student ability to identify situations in which self-advocacy is necessary?
3. To what extent do middle school students with disabilities use the *NOW WHAT? Strategy* to self-advocate in the general education setting during a contrived situation?
4. Does using the *NOW WHAT? Strategy* impact student perceptions of their ability to use self-advocacy in the general education setting, and if so, how?

## **Setting**

### ***Middle School***

The study took place in a middle school (grades 6 through 8) from a suburban, public school district in a midwestern state. The school has approximately 1,200 students. Thirty-two percent of the students receive free or reduced lunch, 15.5% receive special education services, and 2% receive instruction in the English Language Learner (ELL) program. The ethnic composition of the school is 60% Caucasian, 13.9% Hispanic, 13.9% two or more races, 4.5% Asian, 4.5% Native American, and 3.4% Black. Demographic data for the state (OEQA, 2018) show that the average school size is 1,291, with 62.9% of students qualifying for free or reduced lunch, 16.1% receiving special education, and 8% receiving instruction in the ELL program. The ethnic composition students enrolled across the state is 48.9% Caucasian, 17.2% Hispanic, 13.6% Native American, 9.3% two or more races, 8.4% Black, and 2.4% Asian. The study site draws from a more affluent and less ethnically diverse population than the average state school but is comparable based on number of students served in special education.

Teacher demographics for the study site show a lower level of experience than the state mean (9.5 years versus 12.3 years). There are eight special educators at the school. Six serve in either an English Language Arts (ELA) or a mathematics “lab” class, which provides direct instruction to small groups (no more than 15) of students. Students in these lab classes have mild/moderate disabilities [Specific Learning Disabilities (SLD), Other Health Impairment (OHI), and Emotional Disabilities (ED)] and have significant needs for academic supports as stated on their Individualized Education Program (IEP). All other instruction for this student group is provided in a general education classroom. The school also has one teacher who serves in a self-contained classroom for students with moderate/severe disabilities and one teacher who serves in a self-contained classroom for students with autism. All students have one-to-one technology access, as the district provides Apple MacBooks for student use.

### ***Special Education Classroom***

Three special education teachers each taught two sections of “lab” classes comprised of students who were eligible for special education under one of the IDEA disability categories. Sixth-grade sections contained eight students each, seventh-grade sections had eight and 16 students, and the eighth-grade sections had 12 and 13 students respectively. Lab classes met for 50 minutes daily, providing students with either math or ELA content instruction and remediation. No self-advocacy instruction was provided prior to the study. Small-group (ideally 8-10 students) instruction for each participant occurred within these lab classes during intervention for 25-minute sessions twice a week. Sixth- and seventh-grade students received intervention in their mathematics class, while eighth-grade students received intervention in their ELA class. The time of day for instruction varied according to student schedules. All classrooms were equipped with document cameras and projectors for group instruction. Student desks were



arranged in rows in the seventh- and eighth-grade classrooms, while tables seating four students each were used in the sixth-grade classroom.

Intervention was provided by the special education teachers. The sixth-grade teacher holds a master's degree in education and has 32 years of teaching experience, with only the last seven years under a special education certificate. The seventh-grade teacher holds a bachelor's degree in mathematics and has one year of teaching experience. He is emergency certified and has no higher-education training in education. The eighth-grade teacher holds a bachelor's degree in special education, plus some graduate courses, and has 22 years of teaching experience. She is certified in both special education and ELA. Using self-reported demographics, none of the teachers had formal training in self-determination or self-advocacy from either their degree program or through professional development.

### ***General Education Classrooms***

Classrooms used for the generalization-probe observations were either science or social studies. The classes were selected based on student schedules, so that no more than one contrived situation target was in any given class. Additional consideration was given to ensuring that no more than one observation would be conducted during any one class period during the day. On average, these classes contained 33 students (range = 28-36). Seating arrangements generally had students sitting in groups of four, either at tables or in desk groupings. One classroom had traditional rows of desks, and the last classroom was arranged in a double horseshoe configuration. Demographic data were not collected on the general education teachers, as intervention was not provided in these classrooms.

## **Participant Sampling Strategy**

### ***Site/Interventionists***

Prior to approaching the study site principal, I obtained approval from my university's Internal Review Board to conduct the study. I was a former teacher at the selected school and gained verbal agreement from the principal to conduct the study. Once site agreement was granted, I applied to the school district's Internal Review Board for permission to conduct the study. Approval was granted in the summer before the 2019-2020 school year, and I approached former colleagues I believed would be willing to help with this project. This resulted in positive responses from the sixth- and eighth-grade teachers. The requested seventh-grade teacher would be on maternity leave for the beginning of the study; therefore, the remaining seventh-grade teacher was approached and agreed to participate.

### ***Quantitative***

Once teacher interventionists were established, convenience sampling (Creswell & Poth, 2018) was utilized to send study information and consent forms to each student ( $n = 65$ ) enrolled in a class taught by one of the identified special education teachers. Each grade-level teacher had two lab classes per day, but for this study, all students served by the same special education teacher were considered as a sample group ( $n = 3$ ). To establish appropriate sample sizes for statistical tests, a priori power analyses (Cohen, 1988) were conducted with  $\alpha = .10$ ,  $d > .5$ , and power = .8, using G\*Power 3 Software (Faul et al., 2007). For the paired sample t-test, the minimum sample size was determined to be 19; for the repeated measures ANOVA, a sample size of 22 was required.

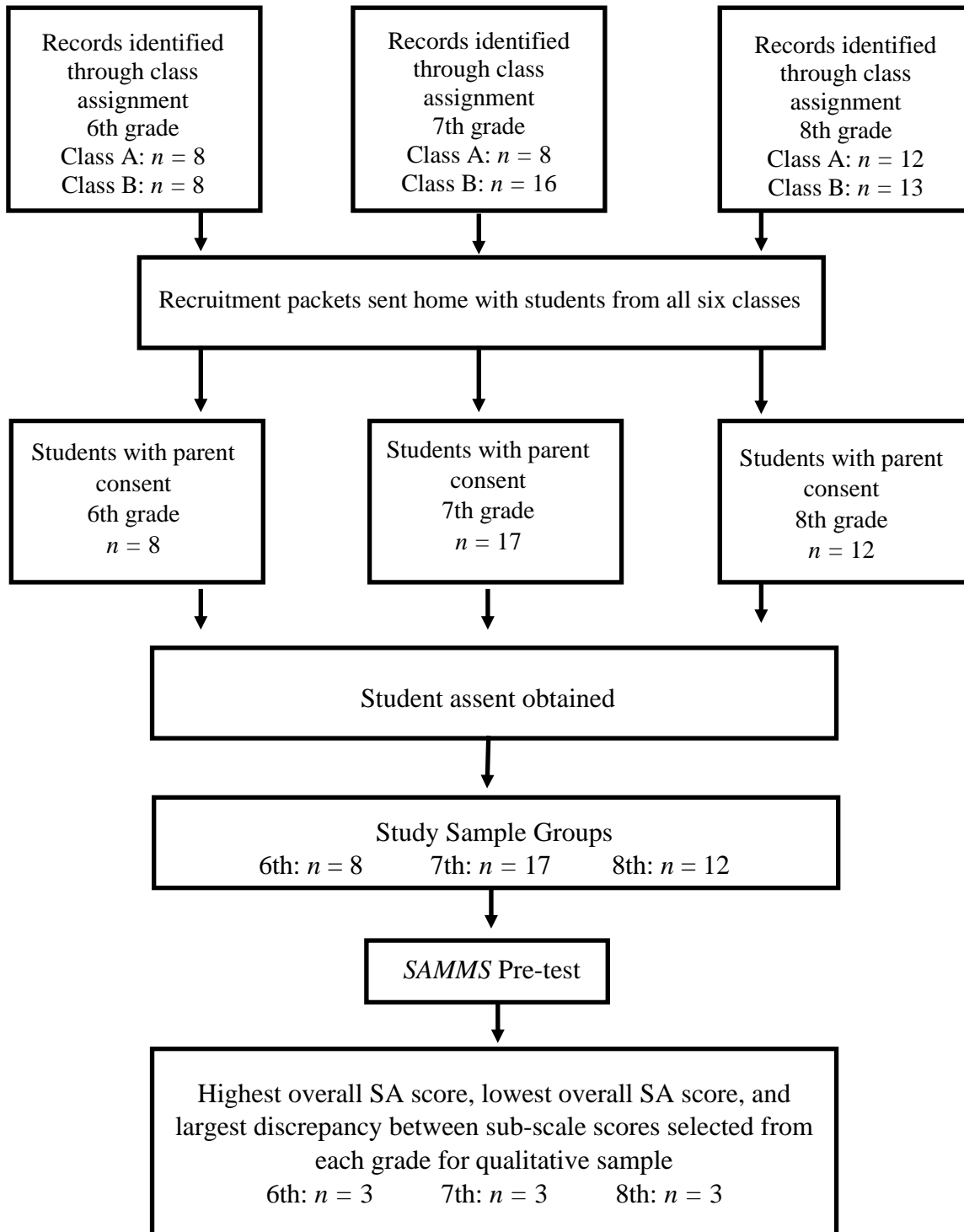


Figure 2. Recruitment Flowchart

Recruitment yielded 37 total participants with parental consent across all three grades. The sixth-grade sample ( $n = 8$ ) was composed of four male and four female participants with disability categories of Specific Learning Disability (SLD) ( $n = 5$ ) and Other Health Impairment (OHI) ( $n = 3$ ). The seventh-grade sample ( $n = 17$ ) was composed of five males and 12 females with disability categories of SLD ( $n = 8$ ), OHI ( $n = 5$ ), Emotional Disturbance (ED) ( $n = 1$ ), Orthopedic Impairment (OI) ( $n = 1$ ), and Autism ( $n = 2$ ). The eighth-grade sample ( $n = 12$ ) was composed of three females and nine males with disability categories of SLD ( $n = 6$ ), OHI ( $n = 2$ ), ED ( $n = 2$ ), Intellectual Disability ( $n = 1$ ), and Autism ( $n = 1$ ).

### ***Qualitative***

Purposeful sampling (Creswell & Poth, 2018) was used to identify one student from each grade level from the overall quantitative sample who had the following score combinations on the *SAMMS* pre-test: (a) highest overall self-advocacy score ( $n = 3$ ); (b) lowest overall self-advocacy score ( $n = 3$ ); and (c) the greatest discrepancy between the self-knowledge and communication sub-scale scores ( $n = 3$ ). Prior to selection, those students who did not have parental consent for audio recording were removed from the potential pool. This factor removed the lowest overall score for both grades six and eight, which resulted in the next lowest score being selected for the interviews and subsequent generalization probe.

The sixth-grade participants included two males and one female, all with SLD. The seventh-grade participants were all female, two with SLD and one with OHI. The eighth-grade participants were two female and one male with disability categories of ED, SLD, and OHI.

### **Embedded Experimental Design**

As described by Creswell and Plano Clark (2011), this mixed-methods approach embeds qualitative data into a quantitative experimental design based on the research questions (See

Appendix A). This design is appropriate when “a single data source is not sufficient, [when] different questions need to be answered, and [when] each type of question requires different types of data” (p. 91). Embedded experimental design is particularly beneficial when time and research staffing are limited (Creswell & Plano Clark, 2011) and when the goal of the study is to expand or enhance the quantitative data into a more complete picture by explaining the why or how an intervention is working (Greene et al., 1989).

### ***Pre-Test/Post-Test***

A pre-test/post-test design is considered appropriate in pilot studies for new interventions and is often used in educational settings to determine effectiveness of curricula (Campbell-Whatley, 2008). The threat of maturation often associated with this design (Gast & Ledford, 2014) was mitigated to some degree due to the six-week time frame for intervention and the use of multiple classrooms for intervention application. Additionally, the internal threat of history (Campbell & Stanley, 1963) was controlled for in this design, as no students had received self-advocacy instruction prior to intervention.

Students were assessed both prior to intervention and again the week following the completion of the intervention on their overall self-advocacy scores. The ability to identify self-advocacy behaviors was measured prior to beginning intervention, at the end of the third week of intervention, and immediately following intervention. General education teachers were also given the self-advocacy measurement tool on the day that students completed it, with a request to return the *SAMMS* by the end of the week in an effort to be mindful of teacher workloads and schedules.

### ***General Qualitative Design***

The need to explore students' experiences and perspectives as they encounter opportunities in the classroom for using self-advocacy behaviors warrants the use of qualitative inquiry (Creswell & Poth, 2018). Interviews were analyzed to illuminate student perceptions of the usefulness and importance of putting self-advocacy to an "authentic test in the natural environment" (Cooper et al., 2007, p. 243).

### ***Mixing Rationale***

To unpack the personal and contextual factors that influenced middle school students' use of self-advocacy skills, qualitative data were analyzed with quantitative data to provide a richer description of the impact of the intervention (Creswell & Plano-Clark, 2011). Interpretation of qualitative data through the lens of qualitative exploration addressed the need for research to include more social validity data (Algozzine et al., 2001). Additionally, it allowed for exploration of students' use or failure to use the *NOW WHAT? Strategy* during observation of contrived situations. Such information provided insight into how students perceived the usefulness of having a strategy to help them self-advocate.

### ***Social Validity***

Social validity is defined as "the extent to which target behaviors are appropriate, intervention procedures are acceptable, and important and significant changes in target and collateral behaviors are produced" (Cooper et al., 2007, p. 704). These authors further state that validating the outcomes of an intervention may be conducted by asking those receiving the intervention if they believe the behavior change occurred during the intervention and, if so, how important or valuable they believe the changes to be. Social validation occurs on three levels: goals, procedures, and effects (Gast & Ledford, 2014); therefore, using interviews to collect

participant perceptions extends the breadth and range of the quantitative data (Schultz et al., 2009) to answer questions that cannot be explained by numbers alone and strengthens the internal validity of the study.

## **Independent Variable**

### ***NOW WHAT? Strategy Lesson Package***

The *NOW WHAT? Strategy* lessons were written as the intervention package for this study. When students have a need, they often feel stuck. Asking, “Now What?” seemed to be a natural question when faced with this situation. Combining this question with self-knowledge and communication skills that were to be emphasized in these lessons led to the idea to use the question as the mnemonic device for the strategy. Mnemonic devices have been shown to increase student ability to learn and recall novel information (Levin, 1993; Mastropieri et al., 2000). There are several types of devices that may be used, but for this lesson package, the letter strategy, which uses an acronym to represent the first letter of each word to be remembered (Scruggs et al., 2010), was created. Before students can ask for what they need, they must identify what the need is (self-knowledge); from there, problem-solving skills must be used to generate appropriate options for removing the need and potential obstacles for choosing each. Once an option has been selected, students must communicate their need to the correct person at an appropriate time using good social skills, and finally, to truly self-advocate, students must take further action to address the need so that they may participate in the learning environment.

The lessons were modeled after the *Self Advocacy Strategy (SAS)* (VanRuesen et al., 2007) instructional sequence, as it was developed for use within small-group settings. This format was chosen based on feasibility of incorporating lessons into existing classroom practices in the special education lab setting. Originally, six lessons were created to be presented during

one class period per week; however, it was decided that this did not provide enough exposure to the strategy for students to master skills taught. This decision was based on current research practices for increasing student achievement. First, Response to Intervention (RTI) guidelines suggest that providing additional instruction increases students' mastery of content (Hughes & Dexter, 2011). Second, increasing opportunities to respond through additional dosage of the intervention promotes maximum engagement (Emmer & Gerwells, 2002) and can make whole-group instruction more effective (Menzies et al., 2017). Based on these data, weekly 50-minute lessons were rewritten to provide twice-weekly learning opportunities for a total of 12 lessons.

As described in the previous chapter, strategies are often used when the goal of intervention is to teach students to be independent in their application of skills, further supporting the use of explicit instruction methods to teach the *NOW WHAT?* lessons. Additional components utilized for these lessons included plans to direct task performance, modeling, reminders to use a specific strategy, step-by-step prompts to use the strategy, dialogue, questions posed by the teacher, role-play, and assistance only when necessary.

Lessons were designed around the *NOW WHAT?* acronym:

N- Name the Need

O- Options and Obstacles

W- Who can I tell?

W- When should I ask?

H- How do I ask?

A- Ask!

T- Take action!



Each scripted lesson was formatted with lesson purpose, teacher modeling, and student activities, including checks for strategy step mastery in written and rapid-response verbal formats. The lessons were presented sequentially in twice-weekly 25-minute sessions in a small-group (8 to 10 students) setting during the six-week intervention period. Beginning with Lesson 2, each instructional period began with a written check for naming the strategy steps and concluded with five rounds of rapid-response verbal rehearsal of the strategy steps. As the lessons progressed, visual support for verbal rehearsal was slowly decreased until students were asked to complete the activity without strategy steps on display.

**Week 1: Use Your Voice.** Lesson 1 began by gaining student commitment to learning the strategy, then introducing students to the concept of self-advocacy and its component skills of self-knowledge and communication. Students were led through a collaborative activity in which they created a definition of self-advocacy from their own experiences and current knowledge. For this lesson package, self-advocacy was defined as “knowing what I need and speaking up.” Students were introduced to the acronym *NOW WHAT?* as a strategy to be used to self-advocate.

During Lesson 2, students began to explore why self-advocacy is important and how it can impact their lives. The acronym was introduced during this lesson along with rapid-response verbal rehearsal to aid students in mastering naming the steps of the strategy. Prior to beginning the day’s activities, students were asked to create a personal learning goal for the *NOW WHAT? Strategy* lessons.

**Week 2: Me, Myself, and I.** Many students with disabilities do not know that they have a disability (Campbell-Whatley, 2008); therefore, the goal of Lesson 3 was for students to identify and describe their disability, list their strengths, and list their weaknesses. Students

completed a chart highlighting areas of (a) things I like, (b) things that are easy for me, (c) things that help me at school, (d) my disability I, (e) my disability affects how I, (f) things that are hard for me, (g) I need help with, and (h) things I don't like.

During Lesson 4, students focused on the first two steps of the *NOW WHAT? Strategy* with teacher modeling identification of a specific need in an everyday situation and problem-solving possible solution options and potential obstacles faced. The teacher also began modeling the completion of the *NOW WHAT?* checklist that students used for activities at the end of the lessons. The checklist was also used for the intervention probes for self-advocacy behaviors knowledge.

**Week 3: Timing Is Everything (But Only If You Ask the Right Person).** Lesson 5 introduced the concept of who to ask for help. After teacher modeling of the process, students completed an activity in which they were presented with a need and asked to decide who could be of assistance. Responses were forced choice and included (a) me, (b) a classmate, (c) the teacher in this class, (d) a different teacher, (e) any teacher, (f) my IEP teacher, or (g) other. Students were able to select more than one choice if multiple people could be of assistance in the specific situation.

Lesson 6 began with teacher modeling of problem solving when to ask for help and completion of the appropriate section of the *NOW WHAT?* checklist that was begun in earlier lessons. Students were asked to work independently to sort a series of “needs” and a series of “when” cards, identifying whether the need and the timing were an appropriate match. For each need/timing pair, students were asked to generate their own idea for “who” should be asked.

**Week 4: Talk the Talk.** Lesson 7 utilized a collaborative group activity through which students developed a definition for communication and identified both verbal and nonverbal

aspects of the skill. Emphasis was placed on the need for communication for self-advocacy to occur.

The acronym TALK was introduced during Lesson 8 to ensure that when students communicated, they used the appropriate skills:

T- Tone of voice

A- Attitude

L- Look at person

K- Keep on topic

Teacher modeling was used to demonstrate each of the components as the teacher completed the appropriate section of the *NOW WHAT?* checklist.

**Week 5: Walk the Walk.** The final two steps of the *NOW WHAT? Strategy* were introduced during Lesson 9. Teacher modeling was used to complete the strategy checklist with students contributing ideas for specific wording and follow-up actions needed for the example provided.

For Lesson 10, students worked in pairs to complete a *NOW WHAT?* checklist by identifying each step of the strategy based on a written scenario. Once pairs completed the checklist, each pair shared with the group to receive peer feedback. If corrections needed to be made, suggestions from other students were requested prior to the teacher providing corrective feedback.

**Week 6: Tag, You're It!** During Lesson 11, students were each given a different written scenario and asked to complete the *NOW WHAT?* checklist on their own. Teachers could read the scenario to students as needed but did not provide any feedback to students as they worked.

In Lesson 12, students used their completed checklist from the previous lesson to role-play with the teacher to demonstrate the steps they had selected for each of the strategy steps. Remaining students gave feedback on appropriate use of the strategy and/or self-advocacy skills displayed during the performance and provided suggestions for any missteps that may have occurred.

## **Dependent Variables**

### ***Self-Advocacy Levels***

The *Self-Advocacy Measure for Middle School (SAMMS)* was developed for this study using an iterative process. Phase I included identifying an initial item pool constructed from the self-advocacy framework (Test, Fowler, Wood et al., 2005) and from items adapted from informal self-advocacy scales (Indiana University, 2019). Phase II included using a modified Delphi procedure by sending the survey to four middle-school special education teachers and 10 experts in the self-advocacy field from various universities. After review, items that had 90% reviewer agreement for matching the construct being measured were kept. Items that did not meet the requirement were either eliminated or reworded to be more student friendly and sent out for a second review. No changes were suggested after the second review. Phase III included a field test with five general education middle school students who completed the *SAMMS* during individual sessions. Once students completed the survey, they were interviewed to determine if any items were confusing to ensure it was on the independent reading level of the target population. Student suggestions for word choices and instructions were incorporated to make the instrument more suitable for middle school-aged students with mild/moderate disabilities receiving targeted academic instruction.

The *SAMMS* was designed to measure two components of self-advocacy with subscales for Knowledge and Communication. It contains 40 items (20 on self-knowledge and 20 on student communication behaviors) with a four-point Likert-type scale (0- never or almost never, 1- sometimes, 2- often, 3- almost always or always) and is available in both student and teacher versions. The Knowledge subscale is comprised of self-knowledge (12 items) and communication knowledge (eight items) sections with the Communication subscale including what to communicate (nine items), how to communicate (five items), and when to communicate (six items) sections. Items are assigned a point value according to the Likert number for each response. These are totaled within sections; totals are then added to get subscale scores. The Knowledge and Communication scores are combined and converted to a percentage using the graph on the student profile to obtain an overall self-advocacy score.

### ***Identifying Need for Self-Advocacy Behaviors***

Knowing about self-advocacy does not always translate into recognizing the need for and employing appropriate self-advocacy behaviors. To measure student recognition of the need for self-advocacy, both written scenarios and contrived situations were utilized. Student ability to identify the steps needed to self-advocate were measured with a *NOW WHAT?* checklist that required students to use information from the provided scenario and their knowledge of the strategy steps to identify the skills and actions needed. Each scenario, either written or observed, had notes that outlined potential student answers and/or behaviors, but I accepted answers that were appropriate and validated with my assistant researcher. Student responses to presented scenarios were scored as a percent of appropriate behaviors identified for each step of the *NOW WHAT?* checklist, with a potential total of eight correct responses per scenario probe and seven correct responses for the observations (identification of obstacles was omitted).

## **Procedures**

### **Recruitment**

Recruitment letters and parent consent forms were sent home during the second week of school with all students enrolled in each of the classes taught by intervention teachers. Spanish translations were provided for the three families who needed it. To incentivize students to return their forms, I provided each teacher with a variety box of full-sized candy bars to be given to each student when he/she returned the form. Because intervention teachers were blind to student participation, parents were asked to seal the envelope before returning it to school, and all students were given a candy bar once they returned their form. I collected all returned forms at the end of the first week and provided a second form for those students who had not yet returned one. I made phone calls to all parents who did not mark the section for audio recording to gain verbal permission for their student to be included in the potential sample. Students whose parents did not provide this consent for audio recording were omitted before scores were analyzed for qualitative selection, as previously described.

Student assent was requested at the end of the second week of recruitment. To obtain student assent, I briefly pulled students out of a class not taught by the intervention teachers to maintain teacher “blindness” to study participants. After introducing myself, I explained the use of student data for the study. Assent forms were provided to students and summarized to aid understanding of the jargon before students were asked if they agreed to let their unidentified data be included in the study. All students agreed and signed the appropriate form.

### **General**

The day before consent forms were to be sent home, I met with all three of the intervention teachers to go over the study outline (see Appendix E) and the general procedures

for the study. Because the *NOW WHAT? Strategy* lesson package was written as a curriculum that teachers could pick up on their own for instruction, no training on the lessons themselves was provided to study intervention teachers in order to mimic real-world use as much as possible. Each intervention teacher was provided with a box containing the *NOW WHAT? Strategy* lesson package in a three-ring notebook and all printed materials needed to teach the six-week course.

The *NOW WHAT?* lessons were conducted following scripted lesson plans in each of the selected special education teachers' classrooms. Teachers were asked to administer the intervention on Tuesday and Thursday of each week for the duration of the study, delivering one of the twelve lessons during each session. All students in each class participated in the lessons, regardless of participant status. Permanent products were retained only for those students with parental consent/student assent to participate in the study. To ensure confidentiality and consistent procedures across teachers, all study materials were provided in labeled envelopes. Once lessons were completed, all materials were sealed in the provided envelope and collected on days I was at the school for fidelity checks. Sticky notes were attached to all materials to be retained as permanent products so I could replace names written on the sticky notes with participant numbers once materials were collected. Non-participant materials were shredded. If a student was absent on the intervention day, teachers were asked to write the student's name on the sticky note along with the word "absent." Teachers were also asked to keep attendance for lessons and completion of each data probe on a researcher-provided record; however, no effort was made to catch up a student for missed lessons so as not to interfere further with the daily instruction within the special education classrooms.

## **Pre-Test**

Special educators administered the student version of the *SAMMS* on the Monday of the second week of recruitment. Special educators also distributed a teacher version of the *SAMMS* to one general educator for each of the students receiving the intervention with a request for return of the instruments by Friday. On Tuesday of that week, the first probe for self-advocacy knowledge was administered. Students were given Scenario 1 from the lesson package along with a *NOW WHAT?* checklist. Intervention teachers were asked to read the scenario out loud, then give students 10 minutes to complete the checklist without assistance to maintain integrity of the data collected. All student materials were placed in the appropriate envelopes, which were picked up after school on Tuesday so that *SAMMS* scores were available for qualitative sample selection.

## **Pre-Intervention Interview**

Individual face-to-face interviews of approximately 10 minutes in length were conducted three days after the *SAMMS* pre-test. Interviews were held in a small conference room off the main office at the study site to encourage students to be open and honest in answering. A digital recorder was used to capture responses, which were transcribed verbatim before my research assistant checked for accuracy. To avoid potential bias toward intervention effects, questions were open-ended, vague, and centered around how the student perceived participation in the general education classroom. Sample questions are presented below:

1. How do you define self-advocacy?
2. When you need help in a class, what do you do?
3. Describe how you feel when you need help in your general education classroom.



## **Intervention**

Lessons for the *NOW WHAT? Strategy* began the week following the two-week recruitment and baseline data-collection period. Each Tuesday and Thursday, lessons were presented according to the following schedule: Week 1– Lessons 1 and 2, Week 2 – Lessons 3 and 4, Week 3 – Lessons 5 and 6, Week 4 – Lessons 7 and 8, Week 5 – Lessons 9 and 10, and Week 6 – Lessons 11 and 12. Teachers followed the scripted lessons and provided all materials to each student in the class, regardless of participation status. Folders were provided with study materials for storage of student data record sheets that were used throughout the intervention period. These were kept in the intervention classroom and handed out at the beginning of each lesson and collected by teacher at the end of each lesson. Teachers placed all permanent products generated during both classes into the appropriate envelope, which was sealed at the end of each day. Permanent products were collected during fidelity checks, which occurred every other week beginning with week two of the intervention. To maintain integrity of the self-advocacy knowledge probes, Scenarios 1-3 were not included in any activities during the intervention.

## **Mid-Intervention Probe**

The day after Lesson 6, students were given Scenario 2 from the lesson package along with a *NOW WHAT?* checklist. Intervention teachers were asked to read the scenario out loud, then give students 10 minutes to complete the checklist without assistance to maintain integrity of the data collected. Permanent products were collected and placed in the appropriate envelope.

## **Post-test**

The final self-advocacy behavior knowledge probe utilized Scenario 3. Once students received their own copy of the scenario and a *NOW WHAT?* checklist, the teacher read the

scenario out loud, giving students 10 minutes to complete the activity with no further instructions or assistance. Student responses were placed in the appropriate envelope.

The *SAMMS* was administered to students a second time the Tuesday following the final lesson of the *NOW WHAT? Strategy*. Teachers who completed the pre-test version for each student received teacher versions, with a request to return the forms to the intervention teacher by the end of the week.

### **Generalization Probe**

In order to observe student participants in a natural setting to determine if self-advocacy strategy steps generalized to a non-trained setting, contrived situations that could occur naturally in the classroom without disclosing the student's disability were devised. The student would either be given an assignment that had a large chunk of information missing due to a smudge on the page or the teacher would skip the student when handing out needed class materials. Assignment to either scenario was determined by general education teacher plans for the day of observation.

Class schedules were obtained for the nine students in the qualitative participant sample. I identified general education classes for each participant that allowed for (a) no more than one observation per class period and (b) no more than one target participant in the selected class to avoid potential reactivity (Alberto & Troutman, 2013). Once classes were identified, I contacted the appropriate general education teacher by email to explain the situation and provide the date and time of observation. In-person follow-up was made to ensure that teachers understood the contrived situation and to allow me to create any copies needed for distribution during the observation. All teachers stated their preferred scenario, and all declined my help in setting up the situation.

Prior to generalization probes, the assistant researcher was trained on the *NOW WHAT? Strategy* steps using the scenarios from the lesson package. The assistant completed checklists for scenarios until 100% agreement with the lesson answer key was achieved on three consecutive scenarios. I made observations with my assistant researcher. We arrived in each classroom prior to the beginning of class to avoid disruption. *NOW WHAT?* checklists were used as the observation collection tool and were completed independently by both observers for later interobserver-agreement calculation.

### **Post-Intervention Interview**

Post-intervention interviews were conducted with qualitative sample participants the day after the contrived situations using the same conference room as the pre-intervention interviews. Pre-intervention interview questions were repeated with the addition of questions regarding the contrived situations and student responses to it. Questions were modified as needed to address naturally occurring situations observed, and students who did not experience the contrived situation were asked to imagine how they would behave and feel if their teacher had accidentally skipped them when handing out a needed paper. A sample of additional questions follows:

1. How did you use self-advocacy in the situation in \_\_\_\_\_ class yesterday?
2. If you did not use self-advocacy, why is that?
3. How could the *NOW WHAT? Strategy* help other students?

### **Data Analysis**

#### **Quantitative Data Analysis**

##### ***Self-Advocacy Knowledge and Skills***

To determine the effect of the *NOW WHAT? Strategy* intervention on knowledge, communication, and overall self-advocacy levels for students, pre- and post-test scores for all

three levels of the student version of the *SAMMS* were checked for statistical normality using Shapiro Wilkes (Lomax & Hahs-Vaughn, 2012). The combined sample met the assumption of normality for each of the *SAMMS* measure. Effect size for all pre-/post-test comparisons was calculated using Cohen's *d* and are supported by reporting of confidence intervals.

### ***Identifying the Need for Self-Advocacy Behaviors***

Self-advocacy behavior knowledge probes were collected using the *NOW WHAT?* checklist. A repeated-measures ANOVA was conducted to determine what differences, if any, existed between the pre- and post-intervention identification of self-advocacy behaviors. Sphericity was tested based on Mauchly's test (Lomax & Hahs-Vaughn, 2012). To examine any relationship existing between mastery level on the strategy steps and overall self-advocacy or ability to identify self-advocacy behaviors, final scores from the *NOW WHAT?* fill-in-the-blank sheet were compared to both the overall *SAMMS* post-intervention score and the score on the final knowledge probe using Pearson's *r*. A third correlation was calculated to compare final knowledge probe and overall self-advocacy scores.

### **Treatment Fidelity**

Observations of each teacher were made for 25% of the lessons taught: once during the second week for Lesson 4, once during the fourth week for Lesson 8, and once during the sixth week for Lesson 11. All participating teachers were observed from the beginning of the period until the lesson was concluded or class ended, whichever came first. To collect fidelity data, I developed a checklist based on the stated goals for each lesson and included each step of the lesson to include (a) check for mastery, (b) state purpose of the lesson, (c) major lesson activity, (d) rapid-response verbal practice, and (e) closing the lesson (See Appendix D). Each objective was evaluated using a four-point Likert-type scale to determine how well the teacher adhered to

the intervention materials. One point was scored for each step of the lesson performed by the teacher. Zero points were scored if the component was not performed. When the step was performed, additional points were given for how closely the teacher followed the lesson script using the following scale: 1- Not at all, 2- Somewhat, 3- Mostly, 4- Completely on script. If a teacher was not able to finish the lesson within the observation period, scores were taken only on the observed portions of the lesson, and the total points possible were adjusted. Fidelity scores for each grade level were calculated by dividing the number of points scored by 25 (or the corresponding adjusted total) and multiplying by 100 to get a percentage. A total study score was obtained by taking the total number of points earned across all observations and dividing by the total number of possible points.

The sixth-grade teacher had fidelity scores of 76%, 44%, and 80% across observations with a mean of 67%. The seventh-grade teacher had scores of 80%, 72%, and 36% with a mean of 63%. The eighth-grade teacher had fidelity scores of 64%, 87%, and 93% with a mean of 81%. The overall combined fidelity for the intervention period was 68%.

### **Interobserver Agreement**

Interobserver agreement (IOA) was calculated for 75% of self-advocacy behavior knowledge probes scored by both the intervention teacher and by me independently using the answer key from the *NOW WHAT? Strategy* lessons to grade student checklist responses. Interobserver agreement was also calculated for the generalization-probe observations. Both instances were calculated by taking the number of agreements, dividing by the number of agreements plus disagreements, and multiplying by 100 to get a percentage. Interobserver agreement for student checklist responses ranged from 74% to 88% with mean score of 81%. IOA for observation probes was 100%.

### **Qualitative Data Analysis**

Students' experiences and responses were explored using deductive coding (Creswell & Plano Clark, 2018) using the following codes derived from current literature: self-knowledge, self-advocacy use, self-advocacy knowledge, and asking for help. Interview transcripts were independently coded by the research assistant and me. Analyses were compared for similarity, and where discrepancies existed, decisions were discussed until an agreement for placement was reached. Because a priori codes were selected, only those responses that fell within the parameters of the codes were used in final analysis, and the others were discarded. Post-intervention interview data were also used to determine social validity of the intervention by calculating the percentage of students who agreed that the *NOW WHAT? Strategy* was beneficial.

### **Mixed-Methods Data Analysis**

Final *SAMMS* scores and the ability to identify the steps needed to self-advocate using *NOW WHAT?* checklist scores were compared to student responses on the post-interview to explore the relationship between self-advocacy knowledge and self-advocating behaviors. Themes that emerged from the qualitative analysis were used to add a layer of description to the *SAMMS* scores and to explore how the intervention impacted student perceptions of self-advocacy behaviors in the general education setting.

## Chapter 4

### Results

#### Overview and Research Questions

The findings from this study are presented below and are organized around each of the four research questions:

1. Does learning the *NOW WHAT? Strategy* increase self-advocacy levels of middle school students with disabilities?
2. Does learning the *NOW WHAT? Strategy* increase student ability to identify situations in which self-advocacy is necessary?
3. To what extent do middle school students with disabilities use the *NOW WHAT? Strategy* to self-advocate in the general education setting during a contrived situation?
4. Does using the *NOW WHAT? Strategy* impact student perceptions of their ability to use self-advocacy in the general education setting, and if so, how?

Question one utilized pre- and post-test scores on the student version of the *Self-Advocacy Measure for Middle School (SAMMS)* (See Appendix B). Both subscale (knowledge and communication) and overall self-advocacy scores were reported as percentages for ease of comparison. Question two utilized student responses to the *NOW WHAT?* checklist, which were reported as a percentage of correct responses. Final scores on the fill-in-the-blank mnemonic for written recall of strategy steps were also incorporated into analysis of question two to determine if mastery of the steps correlated to increased ability to identify self-advocacy needs and behaviors or to overall self-advocacy scores. Question three utilized researcher observations, which were recorded on the *NOW WHAT?* checklist. The final question utilized transcripts from

student interviews to gain insight into students' perceptions of self-advocating in the general education classroom. Social validity data were also collected during student post-interviews.

### Subject Demographics

Recruitment yielded 37 total participants with parental consent across all three grades. Specific demographic information is provided in Table 1. During the study, attrition occurred because one sixth-grade female and one eighth-grade male moved. Additionally, some of the permanent products used for data collection were incomplete or missing; therefore, the sample demographics for each test are reported under the appropriate heading.

Table 1

#### *Participant Demographics*

Factor	Total Sample	Grade		
		6	7	8
Gender				
Male	18	4	5	9
Female	19	4	12	3
Disability Category				
Specific Learning Disability	19	5	8	6
Emotional Disturbance	3	0	1	2
Other Health Impairment	10	3	5	2
Orthopedic Impairment	1	0	1	0
Autism	3	0	2	1
Intellectual Disability	1	0	0	1



## Results

### Research Question 1

Research question 1 sought to answer the following: Does learning the *NOW WHAT? Strategy* increase self-advocacy levels of middle school students with disabilities?

A paired sample t-test is appropriate for comparing before and after scores on the same participants (Lomax & Hahs-Vaughn, 2012); therefore, *SAMMS* scores were analyzed for changes over time for the following *SAMMS* measures: overall self-advocacy score, the knowledge subscale score, and the communication subscale score. It was hypothesized that scores would increase from pre- to post-test as students gained knowledge of self-advocacy skills and appropriate behaviors. Due to incomplete and/or missing instruments, 73% of the initial sample was retained for these analyses, resulting in a total sample size of 27 used for the paired-sample t-tests with groupings as follows: sixth grade ( $n = 5$ ), seventh grade ( $n = 13$ ), eighth grade ( $n = 9$ ), males ( $n = 13$ ), and females ( $n = 14$ ). The return rate for the teacher version of the *SAMMS* was less than 10% on both the pre- and post-intervention measures; therefore, these data were omitted from the final analysis.

Although this was an initial exploratory study, an alpha level of .05 was used for all statistical analyses. Additionally, when outliers were present, tests were run a second time without outliers to determine if an appreciable difference was detected in results. It is possible that the outliers were representative of the population of students with disabilities, as there are often cases that fall above or below the mean within a population (Grubbs, 1969); therefore, outliers were retained for all reported results, which are summarized in Table 2.

#### *Change in Overall Self-Advocacy Score*

A paired sample t-test was conducted to determine if there was a difference in the mean

overall self-advocacy pre-test score as compared to the mean overall self-advocacy post-test score for the total sample. The assumption of normality was tested and met for the distributional shape of the paired differences. Review of the Shapiro-Wilkes test for normality ( $SW = .98$ ,  $df = 27$ ,  $p = .74$ ) and skewness (.19) and kurtosis (-.67) statistics suggest that normality of the paired differences was reasonable. The box plot suggested relatively normal distribution with no outliers present.

Pre-test and post-test data were collected from a sample of 27 students. Although there was a slight increase in mean scores between measures, there was no statistically significant difference in overall self-advocacy score pre-test ( $M = 56.41$ ,  $SD = 16.79$ ) and post-test ( $M = 59.41$ ,  $SD = 16.06$ ) conditions;  $t(26) = -1.23$ ,  $p = .23$ . The effect size  $d$  (calculated as the mean difference divided by the standard deviation of the difference) was 0.18, 95% CI [-0.35, 0.72]. The results support the conclusion that there was no difference in overall self-advocacy scores before and after intervention.

### ***Change in Knowledge Score***

A paired sample t-test was conducted to determine if there was a difference in the mean knowledge pre-test score as compared to the mean knowledge post-test score for the total sample. The assumption of normality was tested and met for the distributional shape of the paired differences. Review of the Shapiro-Wilkes test for normality ( $SW = .97$ ,  $df = 27$ ,  $p = .69$ ) and skewness (0.08) and kurtosis (-1.07) statistics suggest that normality of the paired differences was reasonable. The box plot suggested relatively normal distribution with no outliers present.

Pre- and post-test data were collected from 27 students. Only a slight increase in mean scores was noted with no statistically significant difference between the pre-test ( $M = 60.00$ ,  $SD$

= 14.11) and post-test ( $M = 62.46$ ,  $SD = 15.99$ ) conditions for the total sample;  $t(26) = -1.25$ ,  $p = .22$ . The effect size was reported as .16, 95% CI [-0.38, 0.70]. The results support the conclusion that there was no statistically significant difference in knowledge scores before and after intervention.

### ***Change in Communication Score.***

A paired sample t-test was conducted to determine if there was a difference in the mean communication pre-test score as compared to the mean communication post-test score for the total sample. The assumption of normality was tested and met for the distributional shape of the paired differences. Review of the Shapiro-Wilkes test for normality ( $SW = .98$ ,  $df = 27$ ,  $p = .75$ ) and skewness (0.19) and kurtosis (-0.08) statistics suggest that normality of the paired differences was reasonable. The box plot suggested relatively normal distribution with one outlier present. Removing the outlier did not change the significance of the results; therefore, reported results include the outlier.

Pre- and post-test data were collected from 27 students. An increase in mean scores was noted with no statistically significant difference between the pre-test ( $M = 52.84$ ,  $SD = 21.93$ ) and post-test ( $M = 53.37$ ,  $SD = 18.32$ ) conditions for the total sample;  $t(26) = -0.95$ ,  $p = .35$ . The effect size was reported as .17, 95% CI [-0.36, 0.71]. The results support the conclusion that there was no statistically significant difference in communication scores before and after intervention.

Table 2

*Change in Self-Advocacy Levels Across Time*

SAMMS Score	<i>n</i>	SAMMS Scores as Percentages		<i>t</i>	<i>df</i>	<i>p</i>
		<i>M(SD)</i>				
		Pre-	Post-			
Overall	27	56.41(16.79)	59.41(16.06)	-1.23	26	.23
Knowledge	27	60.00(14.11)	62.43(15.99)	-1.25	26	.22
Communication	27	52.84(21.93)	56.37(18.32)	-0.95	26	.35

**Research Question 2**

Research question 2 sought to answer the following: Does learning the *NOW WHAT? Strategy* increase student ability to identify situations in which self-advocacy is necessary?

The sample retained 89% of the original sample and consisted of 14 seventh-grade participants with 10 males and four females. Disability categories included SLD ( $n = 6$ ), ED ( $n = 1$ ), OHI ( $n = 4$ ), OI ( $n = 1$ ), and Autism ( $n = 2$ ). The remainder of the sample was composed of 10 eighth-grade participants with seven males and three females in the following disability categories: SLD ( $n = 6$ ), OHI ( $n = 1$ ), ID ( $n = 1$ ), ED ( $n = 1$ ), and Autism ( $n = 1$ ). Scores were reported as a percentage correct out of eight possible answers.

A repeated measures ANOVA is appropriate for analyzing multiple measures of the same variable (Lomax & Hahs-Vaughn, 2012); therefore, this was the test utilized to compare *NOW WHAT?* checklist score changes to determine if there was any difference in ability to identify self-advocacy behaviors over time.

The second analysis conducted to answer research question two utilized Pearson's  $r$  to determine if student level of mastery on mnemonic steps correlated to either overall self-advocacy scores on the *SAMMS* post-test or ability to identify self-advocacy behaviors as

measured by the *NOW WHAT?* checklist probe 3 score. An additional comparison was made to determine if there was a relationship between ability to identify self-advocacy behaviors and overall self-advocacy scores. Mastery of mnemonic steps was measured using the lesson 12 fill-in-the-blank data reported as a percentage correct.

### ***Identifying Self-Advocacy Behaviors***

It was hypothesized that the ability to identify self-advocacy behaviors would increase as the intervention progressed; therefore, a repeated measures ANOVA was conducted to compare the effect of the *NOW WHAT? Strategy* instruction on student ability to identify self-advocacy behaviors across time in pre-intervention, mid-intervention, and post-intervention. The null hypothesis tested states that the means for the three probe measures are equal. There were no missing data and no univariate outliers. The assumption of sphericity was met ( $\chi^2 = 4.00$ , Mauchly's  $W = .82$ ,  $df = 2$ ,  $p = .14$ ); therefore, the results reported reflect univariate results.

The assumption of normality was tested via examination of the residuals. Review of the Shapiro-Wilkes test for normality ( $SW_{probe1} = .93$ ,  $df = 22$ ,  $p = .14$ .;  $SW_{probe2} = .89$ ,  $df = 22$ ,  $p = .02$ ;  $SW_{probe3} = .93$ ,  $df = 22$ ,  $p = .13$ ), and skewness (probe 1 = 0.72.; probe 2 = -0.32; probe 3 = -0.73) and kurtosis (probe 1 = -0.09; probe 2 = -1.41; probe 3 = 0.05) statistics suggest that normality is a reasonable assumption for probes 1 and 3, but not for probe 2. Thus, while there was nonnormality suggested by the residuals for probe 2, the repeated measures ANOVA is robust to violations of normality with equal sample sizes.

The results of the repeated measures ANOVA indicate a statistically significant within-subjects effect for time (Wilke's Lambda = .32,  $F_{probe(22)} = 22.68$ ,  $p < .01$ ) (probe 1,  $M = 33.82$ ,  $SE = 4.89$ ; probe 2,  $M = 60.46$ ,  $SE = 53.32$ ; probe 3,  $M = 64.14$ ,  $SE = 5.76$ ). The effect size was large (partial  $\eta^2 = .70$ , power = 1.0). The statistically significant main effect for the within-

subjects factor suggests that there are mean differences in scores by time of measure. Bonferroni Multiple Comparison Procedure revealed statistically significant differences between probe 1 and probe 2 ( $p < .01$ ) and probe 1 and probe 3 ( $p < .01$ ) but not between probe 2 and probe 3 ( $p > .99$ ).

**Impact of Identifying Self-Advocacy Behaviors on Overall Self-Advocacy.** To determine whether or not students' ability to identify self-advocacy behaviors impacted overall self-advocacy scores, probe 3 scores were compared to *SAMMS* post-test scores. The sample for this test varied from that of the following comparisons, as there were not completed *SAMMS* post-tests for all students who had final probe scores. The resulting sample included 67% of the original sample with 10 seventh-graders and 8 eighth-graders, composed of 10 female participants and eight male participants. A Pearson correlation coefficient was computed to determine whether there was a relationship between knowledge of self-advocacy behaviors as measured by score on probe 3 and overall self-advocacy level as measured by the post-intervention test. The assumption of independence was not met, nor was linearity reasonable given a review of the scatterplot of the variables. The Pearson correlation between ability to identify self-advocacy behaviors and mastery of strategy steps was 0.01. This was interpreted as no effect and was not statistically different from 0 ( $r = .01, n = 18, p = .99$ ).

### ***Strategy Mastery***

To determine whether or not students' ability to correctly state the strategy mnemonic was related to knowledge of self-advocacy behaviors or overall self-advocacy levels, the final mnemonic fill-in-the-blank scores were compared to probe 3 scores and post-test *SAMMS* scores. A second analysis compared mnemonic mastery to ability to identify self-advocacy behaviors.

**Impact of Mnemonic Mastery on Identifying Self-Advocacy Behaviors.** A Pearson

correlation coefficient was computed to determine if there was a relationship between identification of self-advocacy behaviors based on the probe 3 score and final score on the mnemonic recall measure. The test was conducted using an alpha of .05. The assumption of independence was not met, nor was linearity reasonable given a review of the scatterplot of the variables. The Pearson correlation between knowledge of self-advocacy behaviors and mnemonic mastery was 0.32. This was not statistically different from 0 ( $r = .32, n = 26, p = .16$ ).

**Impact of Mnemonic Mastery on Overall Self-Advocacy Levels.** A Pearson correlation coefficient was computed to determine if there was a relationship between the final score on the mnemonic recall measure and post-test scores on the SAMMS. The test was conducted using an alpha of .10. The assumption of independence was not met, nor was linearity reasonable given a review of the scatterplot of the variables. The Pearson correlation between mnemonic mastery and overall self-advocacy levels was 0.06. This was interpreted as not statistically significant from 0 ( $r = .06, n = 26, p = .76$ ).

From these analyses, it can be stated that mastery of the strategy steps did not affect either the ability to identify self-advocacy behaviors or overall self-advocacy levels, nor did ability to identify self-advocacy behaviors impact overall self-advocacy levels.

### **Research Question 3**

Research question 3 sought to answer the following: To what extent do middle school students with disabilities use the *NOW WHAT? Strategy* to self-advocate in the general education setting during a contrived situation?

The *NOW WHAT?* checklist was utilized by the researcher and assistant researcher to gather data to answer this question from concurrent independent observations. Because not all

*NOW WHAT? Strategy* steps are visible behaviors, students were scored on Name the Need and Options steps based on their actions and statements to teacher during observation. The percentage of successfully completed steps was calculated by dividing student scores by seven (Identifying Obstacles was omitted from the checklist as it is not observable) and multiplying by 100. This method was selected so that total self-advocacy scores and observation scores were on the same scale and could be easily compared.

***Contrived situation observations.***

Generalization probes were completed for three of the eight participants in the qualitative sample. Students were only scored on seven of the checklist options as listed in the table below.

**Max.** Max was observed during his first-hour science class. Before class began, he asked to go to the bathroom and was subsequently gone for the weekly seating chart change. When Max arrived back in the classroom, several students told him he missed the table switch with each pointing to different tables. Max stood in the doorway for a second looking around, and the teacher asked him, “How are you going to figure out where to sit?” Max hesitated, looking at the students in the classroom and then back at the teacher, who said, “Who are you going to believe?” Max gathered his things from his original seat and went to one of the tables, where he politely said to the girl sitting there, “Is this really where I sit?” When she said, “Yes,” he sat down and joined his tablemates in setting up the experiment.

**Izzy.** Izzy was observed in her fourth-hour science class. Her teacher enacted the contrived situation by skipping Izzy when she handed out the note framework that was being used that day during class. Izzy sat quietly with a concerned look on her face as the teacher continued around the room. After approximately two minutes, once the teacher had gone around the room handing out the rest of the papers, she asked, “Does everybody have one?” Izzy silently



raised her hand and was given the needed page and wrote her name on it as soon as she got it, then sat and waited for further instructions from the teacher.

**Alexa.** Alexa was observed in her fifth-hour social studies class just after lunch/recess. She entered the room late and went straight to the teacher, who was talking to the class. Alexa interrupted, draping herself across the teacher's table, encroaching on acceptable personal space, saying, "I don't know where my backpack is," in a whining tone of voice. The teacher responded to Alexa by telling her, "This is not an appropriate time to have a personal conversation; you will need to wait until I finish giving instructions." Alexa began to argue, and the teacher held up a finger to ask her to wait. Once instructions had been given for the class to begin a quiz in Google Classroom, the teacher turned to Alexa and asked what she needed. Alexa restated in a huffy way that she did not know where her backpack was. The teacher said, "Well, you need that for class, so hurry up and go look for it." Alexa left the room and returned four minutes later with her backpack, plunked down in her desk, and sat there without logging in to take the quiz that she needed to complete.

Table 3

*NOW WHAT? Strategy Components Observed During Contrived Situations*

Component	Student Participant		
	Max	Izzy	Alexa
Name the Need	X	X	X
Options (identify)	X		X
Who can help?			X
When should I ask?			
How should I ask?		X	
Ask!			X
Take action!	X	X	
Percent Correct	42.86%	42.86%	57.14%

#### **Research Question 4**

Research Question 4 sought to answer the following: Does using the *NOW WHAT? Strategy* impact student perceptions of their ability to use self-advocacy in the general education setting, and if so, how?

Pre- and post-intervention interview answers were compared to determine if student knowledge of self-advocacy increased. Pre- and post-intervention interview answers were also compared to pre- and post-test scores on the *SAMMS* to determine if self-advocacy scores were reflective of student perceptions of using self-advocacy in the general education classroom.

Student interviews both prior to and after the intervention were used as the data-collection tool to answer this question. Students were assigned to the interview group based on raw pre-test scores from the *SAMMS*. Using the overall self-advocacy score, those students

assigned to the highest score group consisted of Alexa, Rainbow, and River. Students assigned to the lowest score group were Max, Rebellen, and Bear. The third group was assigned based on the discrepancy between knowledge and communication scores. Those with the largest discrepancy in each grade were Bob and Izzy. Pre- and post- scores for *SAMMS* are provided below. It should be noted that the high group was a relative assignment compared to other participants and may not indicate an actual high level (80% or higher) of self-advocacy.

Table 4

*SAMMS Scores as Percentages Pre- and Post-Intervention for High, Low, and Discrepancy Groups*

Student	SAMMS Scores as Percentages							
	Knowledge		Communication		Overall SA		Discrepancy	
	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-
<b>High Overall</b>								
Alexa (6)	75	70	92	60	83	65	17	10
Rainbow (7)	82	83	90	73	86	78	8	10
River (8)	63	50	83	60	73	55	20	10
<b>Low Overall</b>								
Max (6)	38	45	37	38	38	42	1	7
Rebellen (7)	52	58	22	72	37	65	30	14
Bear (8)	42	47	25	55	33	51	17	8
<b>Largest Discrepancy</b>								
Bob (6)	77	75	48	55	63	78	29	20
Izzy (7)	52	53	30	40	41	47	22	13

*Note:* Discrepancy is the difference between Knowledge and Communication scores. Selection for group based on pre-test raw scores.

Open-ended questions were used to determine experiences of middle school students with disabilities specifically as related to recognition of the need for and the use of self-advocacy. Questions centered on students' perceptions of participating in the lessons and the benefit they saw for themselves or for others who might use the strategy in the future. Verbatim interview transcripts were analyzed first, using deductive coding (Ezzy, 2002) to categorize student responses using pre-determined codes of self-advocacy knowledge, self-knowledge, self-advocacy use, and asking for help. Participant responses under each code were quantified using frequency counts. Additionally, responses for the high, low, and discrepancy groups were compared between categories and to quantitative findings to support and explain gathered quantitative data.

### ***Self-Advocacy Knowledge***

To begin interviews, students were questioned to determine if they knew what self-advocacy was. During the pre-intervention interview, none of the eight participants could provide a definition. During the post-intervention interview, 50% of the participants were able to provide a definition, with two of the four responses coming from students in the high self-advocacy group: "Being able to stand up for yourself" (River); "Helping you get stuff, um, if you need something. Like you have to take care of yourself" (Alexa). Bear was the only student in the low self-advocacy group who could provide a definition, stating, "Like taking care of yourself and like take action for yourself." Izzy was the only student in the discrepancy group who could provide a definition, stating, "How you ask somebody, like you help yourself."

When asked how they used self-advocacy during the post-intervention interview, only three students were able to provide a response: two from the low self-advocacy group and one from the high self-advocacy group. While River did not experience the contrived situation, she

reported that a teacher had skipped her when handing out papers the day before, to which she responded by “raising my hand until the teacher noticed and then I said, ‘I didn’t get a paper.’ And she went and got me one.” Max, who experienced a naturally occurring need for self-advocacy during the observation, stated that he used self-advocacy by “thinking because some people have four at their table, some people only have two. I didn’t know—or three [people]—so I just picked the lower one.” This statement does not describe self-advocacy, which mirrors Max’s inability to provide a definition of self-advocacy.

Although Bear was able to provide an appropriate definition of self-advocacy, when asked how she would use it in a situation where the teacher skipped her while handing out papers, she replied that she would “not say anything.” When asked if that was using self-advocacy, she replied, “No,” so she was asked why she would not use it. Her reply was, “Cause I just don’t like working,” which indicates that she appears to understand the concept of self-advocacy. The responses indicated that over the course of the *NOW WHAT?* lessons, some students did gain understanding of the meaning of self-advocacy; however, this low level of self-advocacy knowledge was to be expected based on *SAMMS* scores.

### ***Self-Knowledge***

During the pre-intervention interviews, all eight students were able to identify at least one personal strength and one thing they felt was difficult. Similarly, all but Max were able to describe a time when they needed help. This pattern changed when participants were asked to name supports they needed to be academically successful. All participants in the high self-advocacy and discrepancy groups were able to provide appropriate answers, while only Max from the low self-advocacy group was able to do so.

During post-intervention interviews, there was no change in student ability to identify at

least one strength, but Izzy, Bear, and Rainbow stated there was nothing they found difficult. In the high self-advocacy group, both River and Rainbow were unable to identify a needed support or a time when they needed help, while the low self-advocacy group showed an increase in ability to identify needed support (Bear and Rebellen) and a time when help was needed (Max). Responses representative of the self-knowledge code indicate that most of the students have some degree of self-knowledge, which is consistent with the knowledge scores from *SAMMS*, which ranged from 45-83 on the post-test measures.

### *Self-Advocacy Use*

Prior to intervention, seven of the eight students stated they felt like having a strategy to help them self-advocate would be helpful, yet during the post-intervention interviews, three students (one from each *SAMMS* level) stated they felt a strategy would not be helpful. This indicated negative impact of the *NOW WHAT?* lessons on student perceptions of using self-advocacy in the classroom.

When further probed to describe how she would use self-advocacy, Izzy described her experience with the contrived situation in this way:

I was like, “I can’t answer the questions,” and like I might miss it and I’ve got to like go over it again. So, um, she [the teacher] was like, “Do any of you need a paper?” so I raised my hand. I think I was trying, like waiting for her.

When asked what would have happened if the teacher had not asked that question, Izzy replied, “I would have waited like a lot longer, and it would have made it more to, like a bigger thing.”

Bob did not get to experience the contrived situation; therefore, he was asked to imagine being skipped when the teacher handed out a paper. He stated, “I would just go up to the teacher and [say] like, ‘Hey, you accidentally skipped me. Like, can I have a piece of paper, please?’”

When imagining the same situation, Rainbow shared, “I would say, ‘Can I, I have another one?’ Because there’s, because I can’t read it.”

Other participants did not use self-advocacy behaviors when faced with the imagined situation. Max encountered a situation in which self-advocacy was needed, but he did not exhibit use of appropriate skills. When asked whether he used self-advocacy when he did not know where to sit, he simply responded, “I don’t think so.” When asked why he didn’t use the strategy, he was unable to articulate an answer. Alexa did not see herself asking to go look for her backpack as using self-advocacy, but as responding to teacher questions.

I came in late and I forgot my backpack. She, she wanted to know where I was at so I was telling her. She got mad at me because I told her, so yeah. Like she asked me and then I told her and she gets mad at me.

When it was pointed out that stating one’s needs to the appropriate person is using self-advocacy, Alexa responded with, “But I didn’t like, like go down the list of the steps.”

Because students did not appear to perceive the strategy steps as necessary for their interactions in the general education setting, they were asked what would help them use the strategy in the future. Bear’s response reflected her low *SAMMS* scores as she stated, “She [the teacher] could repeat questions again.” When probed to think about how the teacher would know that Bear needed the question repeated, she said, “Like, she’d say, ‘Does anyone need to repeat the questions?’” When asked if she felt like having a strategy was useful, her response was, “No. I already know how to do those things.” This indicated that Bear was not seeing the strategy steps as a means for getting what she needs in the classroom, but rather perceiving that it was the teacher’s job to ensure students are receiving what they need.

Izzy, as well, did not equate strategy use with self-advocacy. In response to asking what

would help her use the strategy in the future, she said, “If I keep on improving me, like not getting nervous. Like, um, improve my talk, uh, talking to people basically.” River was asked if she was likely to use the strategy in the future. Her response was:

Everyone, like, makes mistakes, and it’s, you know, like, I don’t know. I don’t know, I’m just not the worst at speaking up for myself. I don’t well, you could say that I do, but I don’t stop and think back to that and go, “OK, let’s slow it down,” because I don’t need to use the steps.

Student perceptions did not appear to show importance placed on either use of the strategy or self-advocating behaviors in the general education setting.

### ***Asking for Help***

Student responses on pre-intervention interviews revealed that, for the low and discrepancy groups, passive actions (raising hand) were used to seek help at school. The high self-advocacy group showed greater variety, with one stating the passive action, one stating taking an active role by emailing the teacher, and River stated she did not ask for help. “Um, I will keep it to myself and just, like, don’t talk to anybody.” Post-intervention interviews showed differences in responses across low and discrepancy groups but not the high self-advocacy group. In the low group, Rebellen remained in the passive action group, while Bear and Max moved to not asking. Bear explained that “some people know that I’m asking, and they ask for me because I’m embarrassed to ask.” Max decided that his best course of action was to “just sit there and try to pay attention.”

Examination of student feelings toward needing help when in their lab class compared to their general education classes showed clear differences between the two settings in the pre-interview statements. All three students in the low self-advocacy group had positive feelings



toward asking for help in their lab classes. Bear shared, “I feel comfortable by asking [my lab teacher] because I don’t usually feel comfortable asking other teachers.” Rebellen explained her reluctance to ask for help in the general education setting when she stated, “It kinda bugs me when I don’t get it.” In the discrepancy group, Bob reported having negative feelings toward asking for help in both settings, while Izzy showed positive feelings in the lab setting but not in the general education setting, as she stated, “Um, feel like I really can’t raise my hand or something. I don’t really wanna ask when it’s the bigger classes.” In the high self-advocacy group, Alexa and Rainbow both held negative feelings toward asking for help in the lab setting, but River explained, “I feel comfortable being able to just raise my hand and ask for help.” All three girls reported negative feelings toward asking for help in the general education setting. River’s statement demonstrated the difference in her experiences: “There are a lot more students, and, like, it’s very crowded for asking.”

Post-intervention interviews revealed no changes in feelings for the low self-advocacy group, with all participants stating positive feelings toward seeking help in the lab class, and all stating negative feelings toward asking for help in the general education setting. In the discrepancy group, the pattern also held between positive feelings in the lab class and negative feelings in the general education class. The high self-advocacy group did show some changes. Rainbow and Alexa both reported feeling positive toward asking for help in their lab classes, and River shared feeling negatively toward such requests; however, she did report feeling positively toward asking for help in her general education classes when she shared, “It’s not like I’m too nervous to ask, but it’s a little more nerve-racking because it’s a bigger class.” Alexa reported feeling “happy” because her science teacher “jokes around” when she asks for help. While most students continued to feel negatively toward asking for help in the general education classes,

there were some shifts toward positive feelings after instruction in the strategy steps.

### ***Social Validity***

Though most of the students stated they didn't use the strategy, they shared that they liked the lessons except for having to write the steps out so many times. "We kept on doing it and doing it, and we already knew them!" (Alexa). River thought the lessons were too easy. Bear felt they were "kind of helpful." Bob liked "learning how to ask for help and not be, like, scared." Rainbow "memorized [the steps] so I could do it like every time." When asked if they thought the lessons would be helpful to other students, responses from all eight participants were positive and can be summed up by Bob:

Some people just don't know what to do and they're like, "Uhh, I don't want to ask the teacher," so they could just think about the *NOW WHAT?* thing and just be like, "When should I ask her? How can I ask her?" And then, then I'll be good to do my stuff.

## **Chapter 5**

### **Discussion**

Students with disabilities do not develop self-advocacy skills on their own and must be taught the skills and behaviors needed to ask for help and supports (Stang et al., 2009; Weimer & Cappotelli, 1994). Historically, this instruction has not been included in special education classes; therefore, students continue to lack the skills necessary to self-advocate (Wehmeyer, 2015). The purpose of this study was to determine if the *NOW WHAT? Strategy* increased the ability of middle school students with disabilities to recognize the need for self-advocacy in the general education classroom and subsequently employ appropriate behaviors to address their needs. Additionally, the study served as the initial field study for both the *NOW WHAT? Strategy* lesson package and the *Self-Advocacy Measure for Middle School (SAMMS)*. Provided below are an overview and discussion of the study findings organized around curriculum development, implementation of intervention, and research questions. Implications for future research and limitations of this study will be discussed.

### **Findings**

#### **Curriculum Development**

The choice to develop a curriculum for this study came out of personal experience as a special education classroom teacher. There were existing curricula with proven success that addressed leaning self-advocacy in conjunction with IEP meetings or methods such as the *Self-Determined Learning Model of Instruction (SDLMI)* (Shogren et al., 2017), which can be tailored to teach any subject or skill a student chooses; however, the goal for this study was to move self-advocacy out of the IEP meeting and into the everyday needs of students with disabilities, thereby eliminating the *Self-Advocacy Strategy (SAS)* (Van Reusen et al., 2007). Lessons also needed to be short to fit into existing class periods without taking a large portion of the time

allocated to content learning; therefore, *SDLMI* was also eliminated as an option, as it required multiple one-on-one sessions between student and teacher, making it less than ideal for group instruction. Modeling the *NOW WHAT? Strategy* lessons after the format found in the *SAS* allowed for group instruction, provided a proven framework of effective teaching strategies, and fit within time constraints created by school-based research. Using small-group instruction twice weekly was also supported by guidelines for intervention (Hughes & Dexter, 2011).

As fidelity checks were conducted, casual conversations were held with the implementing teachers, and notes of changes to be made to the lessons were collected. This list was further refined through examination of both quantitative and qualitative data. The first area of focus that bears examination focuses on student understanding of why the strategy is important and how it can impact their classroom experiences. Additional time needs to be spent on students generating lists of their experiences when help was needed and how strategy use can bring about positive results. The second area of focus centers on student practice of skills. Students may not have the prerequisite self-examination skills necessary to use strategy steps; therefore, adding lessons at the beginning of the curriculum to address both these skills and problem-solving strategies is suggested. Adding scenarios that show mistakes in applying the strategy or misjudging the need should be added to existing lessons. Students would then be required to identify the error made and provide an appropriate solution. Additionally, using the student-generated list, students will either role-play with intervention teacher or be assigned to act on their need and seek the help from the appropriate teacher, with follow-up discussion on what changes occurred because of the use of self-advocacy skills to underscore the importance of self-advocacy in everyday settings. This will also allow students to internalize strategy steps and help them see usage as applicable to themselves.

Lesson scripting may have inadvertently added to low fidelity. Teachers who are overloaded may not have read over lessons thoroughly prior to instruction, assuming that the prep work had been done for them. Lesson formatting could be changed by adding small boxes to highlight the main point/activity of each component. More explanation for why certain lesson aspects are included may encourage teachers not to skip steps.

Knowing strategy steps is important if students are to implement them; therefore, it is suggested that the verbal and written practice of steps remain as written in the lessons. Additional suggestions to encourage student use of strategy include (a) having the strategy steps visually accessible in the classroom, (b) providing students with portable cue cards of mnemonic, and (c) more controlled practice with teacher feedback on performance (Vitalone-Roccaro, 2017). Further activities to help students use the strategy include (a) teaching students relevant self-regulation skills and goal setting for strategy use (Sawyer et al., 1992), (b) teaching students to respond to changing needs with continual monitoring and evaluation of strategy use (Cantrell et al., 2010), or (c) requiring students to report back on how they have used the strategy since the last lesson (Reid & Borkowski, 1987). To increase student use of the strategy, individual reinforcement or a student tracking board could be used (Vitalone-Roccaro, 2017). Additionally, selecting a focus for students each week to practice both in their intervention classes and their general education classes could improve student use of the strategy. Timeline for the lessons should be extended to 10 weeks to include suggested additions. Boosters should be added to the lessons at specific intervals after intervention so that teachers and students retain focus on strategy implementation once lessons have been completed.

## **Implementation of Intervention**

### ***Interventionist Selection***

Because this was the first field test for a brand-new curriculum, tighter control would have been optimum for identifying impact of intervention. Ideally, this would have been accomplished using research team members for implementation. This was not feasible, as I did not have a large research staff, nor was my assistant or I able to take time off from our current teaching positions to teach the intervention.

When deciding how to approach selecting teachers for implementation, the focus was placed on the lab setting because these classes are less than 15 students and the curriculum was developed for small-group instruction. Selecting this environment forced using only one special education teacher per grade level, as some students received instruction in both mathematics and English Language Arts lab classes and would, therefore, receive double dosages of intervention, causing threats to study validity. This reduced the potential participant pool, while also excluding students with disabilities who have IEPs but are served exclusively in the general education setting. This setting also seemed ideal for intervention to determine the feasibility of “pick up and use” ease of the lessons that would be encountered in real-world settings should *NOW WHAT?* prove beneficial and be shared with the field.

The school has a period called “overtime,” which acts as a type of homeroom and is used for remediation, study hall, Positive Behavior Intervention and Support global instruction, and school-wide anti-bullying curriculum instruction. This year, for the first time, each of the six grade-level special education teachers had their complete caseload as their overtime class. Targeting these classes would have widened the net for sample selection and intervention teachers, which would have increased study validity. It might also have increased fidelity of

implementation, as the intervention teachers would have had a full class period to devote to lessons rather than trying to fit *NOW WHAT?* into time designated for content instruction. These classes were eliminated for potential intervention delivery, as the size ranges from 22-28, and it was determined that group size was too big for the lesson design.

### ***Fidelity of Implementation***

The most significant impact on this study was lack of researcher control over intervention application, which resulted in lower-than-expected fidelity of implementation. On the first fidelity observation, the sixth-grade teacher had already taught the lesson that was to be observed, so she repeated Lesson 4. The same teacher gave students the teacher version of the *SAMMS* to complete for the post-test measure. Because the only difference between versions is in the wording, (“I know what I like” on student version versus “Student knows personal preferences” on teacher version), using the data collected immediately after intervention was considered accurate. In hindsight, gathering information on the student version even a week later may have produced different results, either because the students understood the items better or because “I” statements would allow students to internalize items and accurately document how they felt. The sixth-grade teacher’s failure to collect data using probe 2 and probe 3 limited analysis options. Additionally, due to normal classroom activities and interruptions, teachers were not providing instruction on lessons simultaneously. The twice-weekly dosage did not remain stable across the intervention period, though all three teachers did complete the lessons during the sixth week of instruction.

Low fidelity impacted reliability of this study. It is possible that these scores are inflated due to the way fidelity was calculated. If time ran out in the middle of a lesson, the total points possible were reduced so that only observed practice was measured; however, there was no way

to verify that teachers made up those components in subsequent scheduled lesson times or in additional sessions. Because teachers are not always cognizant of their own practices (Taylor et al., 2013), the following remedies are suggested to address fidelity issues in future studies: (a) fully training implementation teachers prior to beginning of study so that explanation can be given on the importance of each of the lesson components, (b) beginning fidelity checks with the first lesson and providing immediate feedback to teachers so that necessary adjustments can be made before moving forward, (c) asking teachers to self-check fidelity using the same tool used for researcher observation, and (d) asking teachers to keep a running written record of lessons completed (Sawyer et al., 1992). Weekly check-in emails or phone calls by the researcher to intervention teachers should be conducted to ensure that implementation is on schedule and provide an opportunity for teachers to ask questions.

### **Research Question 1**

Quantitative data were used to answer research question 1: Does learning the *NOW WHAT? Strategy* increase self-advocacy levels of middle school students with disabilities and what impact, if any, do gender and grade level have on score changes?

It was hypothesized that self-advocacy scores would increase from pre- to post-test across all participants. The lack of statistical significance found during analysis does not allow for any conclusions to be drawn about the effectiveness of this curriculum. Lack of conclusive change in self-advocacy levels could be due to lesson construction, fidelity of implementation, or to reliability/validity of measurement instrument.

The choice not to train the implementation teachers was a shortcoming of this study. Part of the rationale was to limit the amount of time participating teachers would have to dedicate to the study, as I wanted to be respectful of their willingness to help without overburdening them



with study requirements. While the logic behind it was well intentioned, trying to measure the ease of use for a non-vetted curriculum was several steps ahead of what a field study should entail. A more logical first step would have been a highly controlled research endeavor but, for reasons previously mentioned, was not possible for this project. The next best option would have been to train the implementation teachers, followed by periodic independent coaching sessions (Kretlow & Bartholomew, 2010) to ensure fidelity of implementation, as low or inconsistent fidelity of instruction correlates to lower student achievement (Furtak et al., 2008). Further, teaching practices do not happen in a vacuum; therefore, discussion of implementation must also acknowledge that classroom management, teaching style or experience, and class composition, while beyond the control of the researcher, all influence student outcomes.

Instrumentation also warrants exploration. Completing the teacher form rather than the student form may have resulted in misinterpretation of items by participants, which has shown to be a pitfall of self-report instruments (Duckworth & Yeager, 2015). Literature also provides other examples that may have contributed to lack of significant changes observed in student permanent products. Selecting one option repeatedly within a subsection could be a sign of such as careless responses due to rushing (Rosen et al., 2017). Decreased scores on post-tests could be a reaction to learning more about self-advocacy, and, therefore, judging responses more stringently on the post-test measure (Kruger & Dunning, 1999), or perhaps students felt that they were supposed to rate themselves on how they thought the teachers perceived them based on item wording. Instructions on the *SAMMS* could also be the cause of the decrease, as they ask students to rate themselves on how they feel the day of completion, which could inflate or decrease scores based on student experiences prior to administration of instrument.

The above rationales indicate potential difficulties with using self-reports for collecting data. However, these questionnaires are quick, reliable, and well suited for assessing internal states (Duckworth & Yeager, 2015); therefore, using the *SAMMS* as a measure of self-advocacy made sense for this study.

## **Research Question 2**

Quantitative data were used to answer research question 2: Does learning the *NOW WHAT? Strategy* increase student ability to identify situations in which self-advocacy is necessary?

### ***Identifying Self-Advocacy Behaviors***

It was hypothesized that student ability to identify needed self-advocacy skills would increase from probe 1 to probe 2 to probe 3. The statistically significant gains seen between probe 1 and probe 2 but not between probe 2 and probe 3 could be explained as a function of the lessons themselves. By the time of the mid-intervention probe, students had been exposed to four of the seven steps; thus, there was less knowledge to gain between the second and third probes, which may not have been enough to reach statistical significance.

An interesting phenomenon occurred with probe 3 scores. Six of the participants had lower scores on probe 3 than they had on probe 2, with two resulting in scores lower than the baseline measures of probe 1. Examination of the probe responses indicated that students did complete all steps of the checklists, but those that decreased in score were providing the same responses for the “how” to ask and “ask” steps when one requires students to provide appropriate nonverbal communication skills and the other requires the student to provide wording for an appropriate request for help. When probe 3 was implemented, the students had completed three checklists as part of the lesson activities and may have shown reactivity responses (Rosen et al., 2017) when

completing the probe, or they may have been overly confident in their knowledge (Kruger and Dunning, 1999), resulting in careless errors. An additional point to consider is that four students missed the *Take Action!* step by stating that asking for help was the action rather than stating how removing the need allows for participation in the class activity. This issue should be addressed in future revisions of the lessons by emphasizing that communicating a need in and of itself is not the purpose of self-advocacy.

### ***Impact of Strategy Mastery***

**Mnemonic Recall and Knowledge of Self-Advocacy Behaviors.** It was hypothesized that, as mastery of mnemonic steps increased, knowledge of self-advocacy skills and behaviors would increase. Results indicated that while the activities to aid in memorizing the mnemonic were effective, students appeared to see naming mnemonic steps as an independent activity rather than as the springboard for increasing self-advocacy through strategy use. A clue to high mnemonic recall with low understanding of strategy steps may be found in the fidelity observations. Across all nine sessions, the opening fill-in-the-blank activity was completed with 100% accuracy. Reid and Borkowski (1987) found that for students to conceptualize behavior as controllable and changeable, there must be repeated emphasis on the importance of effortful strategy performance for consistent use and generalization of new skills. It could be that, because there were more opportunities for students to demonstrate mnemonic recall than to demonstrate ability to identify self-advocacy behaviors, students felt that the emphasis was placed on merely knowing the steps. Students must not only know when and where to use a strategy (Wood et al., 1998) but also have the affective and motivational beliefs that the underlying behaviors are necessary (Reid & Borkowski, 1987) if self-advocacy is to increase. Failure to translate mnemonic recall to changed behavior informs future revisions of the lesson package.

**Self-Advocacy Knowledge and Level.** It was hypothesized that as self-advocacy knowledge increased, overall self-advocacy levels would increase. It appears that although students were able to identify needed behaviors in written scenarios, they did not generalize these behaviors as actions they needed to take themselves. The *NOW WHAT?* lessons include several steps suggested as necessary for strategy generalization, as reported in a 2017 study by Vitalone-Roccaro, such as class discussion on the purpose of using the strategy, identifying settings and situations where the strategy can be used, and stating why the strategy is important. Other components of the lessons, such as modeling and role-play, could be supplemented by incorporation of self-monitoring and having students evaluate their use of self-advocacy behaviors to increase strategy usage (Cantrell et al., 2010).

### **Research Question 3**

Quantitative data were used to answer research question 3: To what extent do middle school students with disabilities use the *NOW WHAT? Strategy* to self-advocate in the general education setting during a contrived situation?

General education teachers were less than cooperative in planning and executing contrived situations. Once the observation schedule had been finalized, science or social studies teachers were contacted by email explaining the intervention and the nature of the observation. Date and class period for the observation were provided to these teachers three weeks ahead of selected day. Emails contained an outline of contrived situation choices and a request to contact me with any questions. Emails also stated my intent to be at the school the Friday before the observations in case special copies needed to be made for the “can’t read my material” situation. Only the sixth-grade social studies teacher responded to this outreach.

Upon arrival at the school the day before interventions, I met with a sixth-grade social

studies teacher (two observations), a sixth-grade science teacher (one observation), a seventh-grade science teacher (one observation), a seventh-grade social studies teacher (two observations), and two eighth-grade social studies teachers. Both the sixth-grade teachers stated they were going to skip the target student when handing out materials. The seventh-grade science teacher and one of the eighth-grade teachers chose the same situation. The second social studies teacher informed me that the target student was no longer in her class and had moved to the self-contained moderate/severe program. The remaining seventh-grade social studies teacher used a guided-notes format with all her students and said she would hand the target student a copy with “obviously missing pieces.” She declined my offer to prepare materials.

On the day of observation, two eighth-grade students were excluded from the sample: Bear had changed schedules and was no longer in any general education classes at the time of observation, and River’s teacher was out sick on the day of the observation, thereby unable to assist in employing the contrived situation. Only the seventh-grade science teacher followed through with the agreed-upon situation. I remained in each classroom with the assistant researcher for the duration of all class periods to obtain any data that might emerge from naturally occurring situations. This resulted in a total of three observations completed, two in the sixth grade and one in the seventh grade. Because of the difficulty in securing general education cooperation, the follow-up maintenance observation originally scheduled for January was removed from the study.

Examining student responses to the contrived situation indicated that knowledge of self-advocacy does not always generalize to experiences requiring its employment. Two of the three observations occurred with sixth-grade students who did not have probe scores for comparison; however, Izzy, who had the lowest score on the observation (usage), had an 88% on probe 3

(knowledge). Strategy lessons did not appear to have a positive effect on self-advocacy behaviors. The discrepancy between self-advocacy knowledge and self-advocacy behavior underscores the lack of generalization shown during observations and the need for more student practice utilizing strategy steps.

#### **Research Question 4**

Qualitative data were used to answer research question 4: Does using the *NOW WHAT? Strategy* impact student perceptions of their ability to use self-advocacy in the general education setting, and if so, how?

Overall, students reported strategy-instruction as beneficial for others; however, coding for self-advocacy knowledge, self-knowledge, self-advocacy use, and asking for help did not support an underlying belief in a benefit of strategy use. Interview responses were compared to quantitative data to reveal the following themes under each code.

#### ***Self-Advocacy Knowledge***

Students had low self-advocacy knowledge as identified in both pre- and post-intervention interview responses, although more students were able to provide a definition of self-advocacy after participating in the *NOW WHAT?* lessons. This is not unexpected, as *SAMMS* scores were generally low even for the high self-advocacy category, as the designation for this group was relative to all other participants in the same grade. Lack of self-advocacy knowledge underscores the rationale for this study, as middle school students with disabilities do not appear to develop these skills naturally.

#### ***Self-Knowledge***

Student responses indicated low self-knowledge through inability to identify either needed supports or things they found difficult. Differences in high, low, and discrepancy groups

emerged from the data. Those in the high self-advocacy group reported nothing as difficult in post-intervention, interviews, whereas they had named something during initial interview, while those in the low self-advocacy group were able to identify either a difficult task or a needed support once intervention was complete. Students also demonstrated low self-knowledge by inability to identify disability category or how it impacted their learning. The failure to identify disability status or impact on learning could be due in part to the wording of the question, as the students were asked only to name something they found difficult. Another option to consider is that students need to be taught self-examination skills (Flitton & Buchroyd, 2005), and as this was not a component of the lessons, inability to accurately identify strengths, weaknesses, or needed supports should be expected.

Knowledge of how disabilities affect learning and participation are essential for understanding the need for self-advocacy (Hammer, 2004; Test, Fowler, Wood, et al., 2005); however, not all self-advocacy needs are related to disability. As posited in chapter 1, students have self-advocacy needs beyond their disability, as evidenced by student responses such as the teacher moving too quickly during instruction or being unsure of what to do next. Because student ability to identify situations where help was needed decreased during the post-intervention interview, I was prompted to further examine probe 3 responses, which showed that seventh- and eighth-graders were able to identify the need in the presented scenario. This suggests that students were not able to recognize the need for self-advocacy when they were not prompted to do so. McNamerra et al. (2006) suggest a remediation for this situation. In their study, they found that construction of a situation model using visualization or self-questioning increased student use of strategies by providing a mechanism for connecting the situation and prior knowledge. Addition of such exercises to the lesson package should be considered.

### *Self-Advocacy Use*

Overall, it appears that self-advocacy knowledge did not positively impact student use of self-advocacy behaviors. Students' reported perceptions from interview responses indicate that students placed no importance on strategy use or on self-advocacy in their general education classrooms. This aligns again with lower *SAMMS* scores both pre- and post-intervention. Bear's response in particular demonstrated what appears to be a high level of learned helplessness when she described letting classmates ask questions on her behalf and her expectation that teachers should know to ask questions a second time so she does not have to. Literature provides several potential explanations for this result. First, the older students get, the more they attribute failure to internal factors (Luchow et al., 1985); therefore, she was unlikely to identify self-advocating behaviors as necessary to gaining success in the classroom. Secondly, as an eighth-grader, she may have a higher degree of learned helplessness (Luchow et al., 1985), as they have had more time to experience others making decisions on their behalf and providing unnecessary supports.

Lack of student engagement may also have contributed to the lower *SAMMS* post-test scores. During the second fidelity check, a pair of students was overheard stating that the lessons were boring, a sentiment that was echoed by half of the participants in the post-intervention interviews. A study by Bae and DeBusk-Lane (2109) found that students can demonstrate on-task behavior without interest in the activity, and these disengaged students show lower academic achievement. While self-advocacy is not the same as academic behaviors, it stands to reason that students could participate in the *NOW WHAT?* lessons without engaging, leading to lower ability to identify self-advocacy behaviors. This theory is supported by students' ability to correctly identify strategy steps without applying strategy to situations encountered during



observations.

### ***Asking for Help***

Probe responses indicated that students were generally able to identify needs of others in written scenarios; however, students did not appear to perceive identifying needs as a skill to apply to their own classroom experiences. Additionally, the number of students who reported doing nothing when needing help increased post-intervention. Whether this was due to negative feelings toward seeking help or lack of communication skills is unclear.

During pre-intervention interviews, students expressed a reluctance to seek help in the general education classroom. This, in part, stemmed from their wishes not to be viewed as different from classmates and can be attributed to developmental stage (Keiffer & Ryan, 2011). During the post-intervention interviews, there was an increase in positive responses concerning asking for help in the general education classroom; however, students continued to report being nervous about asking for help, which compounds the issue of not wanting to attract attention and decreases the chances that students will self-advocate. While the *NOW WHAT?* lessons included components on how and when to ask for help, they did not provide instruction on how to address feelings that could impede use of the strategy, and this should be addressed in lesson package revisions.

### **Implications for Future Research and Practice**

There is a need for easily accessible self-advocacy curricula that can be incorporated into existing classroom routines (Copeland & Cosbey, 2008). This study extends current literature on teaching self-advocacy while bridging the gap between research and practice. Unsolicited anecdotal information from cooperating teachers indicate that the *NOW WHAT? Strategy* lessons fill this need, as evidenced by their requests to keep the teacher's manual for use with future

classes. This information supports the social validity data provided by students and places perceived value on the skills taught in the lessons.

As seen with previous studies, student practice in real-world settings is needed for students to generalize strategy use to non-trained situations. Identifying the needs of others in written scenarios did not make strategy use personally relevant to participants. Research examining whether strategy instruction increases self-advocacy behaviors in the special education setting could shed light on whether lack of generalization in this study was a function of skill level or environment. Additionally, longitudinal studies should be undertaken to determine whether repeated exposure to self-advocacy curricula increases student levels of self-advocacy and their use of such skills in the general education setting.

### **Limitations**

Several limitations were identified during the study. First, using existing classes for assignment to intervention group does not allow for randomization, which impacts validity of the study. This, combined with small sample size, precludes results of this study from generalization to any other population. Future iterations of the study should attempt to use multiple school sites to improve sample size. Other threats to internal validity (Campbell & Stanley, 1963) impacted this study. Intervals between probes and pre-/post-test measures were short, increasing the probability of testing effects. Statistical regression also appeared to affect results, as those students with the highest pre-test scores showed decreases in scores on the post-test.

School-based research is difficult at best, as exemplified by issues experienced while conducting this study. Mayeux et al. (2017) outlined these as low consent rates, overburdening of staff and faculty, lack of teacher prioritizing of study, and designing a project to fit within a single class period. Several of the general educators asked to complete the *SAMMS* sent

messages stating that they had not known the student long enough to complete the pre-test or that they had too many other things to do to complete the forms. Some of the teachers received the instrument for more than one student, adding to general educator frustration with the process. Because intervention teachers were not invested in collection of these data and had their own work requirements, follow-up on teacher form completion was low, resulting in a less than 10% return rate. This missed opportunity was compounded by the lack of teacher interviews, which were left out of this design to keep the study manageable; however, in future executions, teacher voice should be included in order to triangulate student responses.

*NOW WHAT?* lessons were written to take approximately 25 minutes to minimize the time taken away from content instruction; however, after observing instruction, it became clear that more time was needed for class discussion and student practice of the skills. The eighth-grade teacher commented that she wished she could continue lessons into the following day or have more flexibility than outlined in the study design. Because she was trying to stay true to the prescribed format, she often skipped components or did not give students as much time as needed to thoroughly engage with the lesson, leading to lower-than-desired fidelity. It can also be argued that the total time spent on the intervention was not long enough to bring about changes in self-advocacy levels.

Additional limitations exist in the instrumentation of the study. Reliability and validity of the *SAMMS* has not been established, and, as such, results must be approached with some modicum of caution. *SAMMS* instructions ask the students to rate how they are feeling on the day of completion; therefore, results could be skewed based on fluctuations in student mood or situations that affect student efficacy beliefs. As discussed previously, because it is a self-report instrument, students may rush or provide answers they feel are socially acceptable rather than

honest answers (Rosen et al., 2017). Inaccurate results may also stem from student lack of insight into their own behaviors or because of anonymity associated with study participation as it removes accountability to provide accurate answers (Duckworth & Yeager, 2015). Addition of a self-efficacy measure could provide evidence of stability of *SAMMS* results. Low self-efficacy would be expected to lead to low self-advocacy levels; if the student does not believe they have control over a situation, why would they attempt to self-advocate if they do not believe it will change the outcome? Even with the myriad of drawbacks associated with self-reports, use of a researcher-created instrument has been shown as sufficiently sensitive to measure dependent variables (Taylor et al., 2013); therefore, this limitation may be mitigated through further validation studies.

### **Conclusion**

The overarching goal of this study was to explore whether middle school students with disabilities could learn to recognize situations in which they needed to self-advocate and then utilize appropriate behaviors to gain the help needed. Self-advocacy instruction remains a fringe activity in many special education classes (Wehmeyer, 2015); however, having a ready-made lesson package alleviates the need for teachers to determine how and what to teach, potentially increasing the likelihood that self-advocacy skills are taught. Though results were not statistically significant, replication of the current study using suggested modifications to improve fidelity is a worthwhile use of instructional time to determine whether the *NOW WHAT? Strategy* lessons are an effective means by which to improve student levels of self-advocacy.

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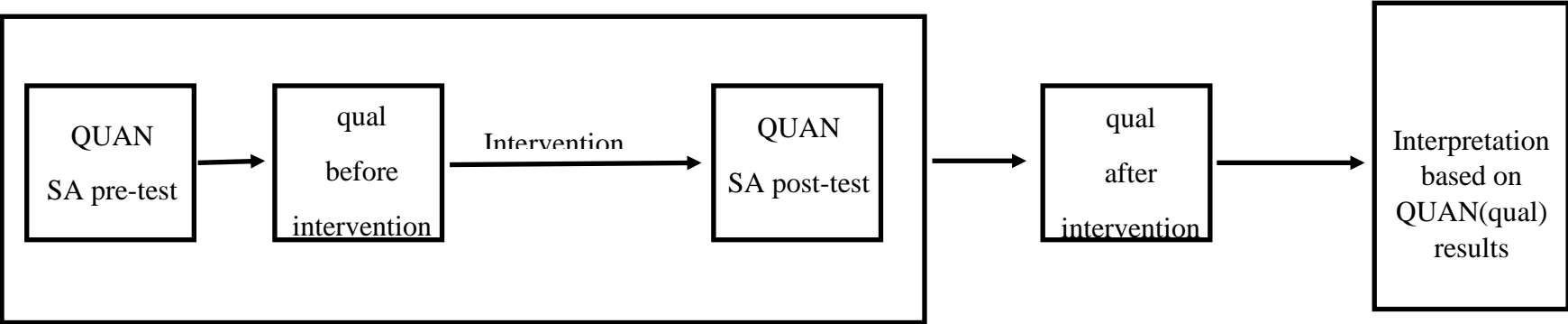


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**Appendix A: Flowchart of Study Design**



**Appendix B: Self-Advocacy Measure for Middle School**

**Self-Advocacy Measure for Middle School (SAMMS)**

**Student Version**

**Directions:** Read the following statements. Mark the appropriate box on the scale to show how you feel *today* about each item. Do not mark in the gray shaded boxes on this form. This is not a test and there are no right or wrong answers.

**Knowledge Scale**

<b>Self-Knowledge:</b>	Never or Almost Never	Sometimes	Often	Always or Almost Always
1. I know what I like				
2. I know what I like to do.				
3. I can describe what I do well				
4. I know my limits				
5. I know when I need to get better at something				
6. I can name and describe my disability				
7. I know how my disability affects my learning and/or behavior				
8. I know what kinds of help I need at school				
9. I know how I feel about things				
10. I can describe my point of view				
11. I can state when something confuses me				
12. I know when something is difficult				
<b>Number of Checkmarks in Column:</b>				
	x 0	X 1	X 2	X 3
<b>Column Subtotal:</b>				
<b>Self Section Total</b> (add subtotals for items 1-12) transfer to student profile				

	Never or Almost Never	Sometimes	Often	Always or Almost Always
<b>Communication Knowledge:</b>				
13. I know who to ask for help				
14. I know how to ask follow-up questions if I don't fully understand an explanation or answer				
15. I know how to ask for help				
16. Even if a topic is uncomfortable, I know how to bring it up when talking to my teacher or other adult				
17. I know the difference between stating my need and being rude				
18. I know when it is okay to speak up				
19. I believe my teachers listen when I talk to them about my needs				
20. I know what body language is				
<b>Number of Checkmarks in Column:</b>				
	x 0	x 1	x 2	x 3
<b>Column Subtotal:</b>				
<b>Communication Section Total:</b> (add subtotals for items 13-20) transfer to student profile				

Go to next page.

	Never or Almost Never	Sometimes	Often	Always or Almost Always
<b>What to Communicate:</b>				
21. I tell others what I like				
22. I tell others what I like to do				
23. I tell others what I do well				
24. I tell others my limits				
25. I tell others when I need to get better at something				
26. I describe my disability to others				
27. I tell others how my disability affects my learning and/or behavior				
28. I tell others what kinds of help I need				
27. I tell others how I feel about things				
28. I tell others what is confusing me				
29. I tell others when something is difficult				
<b>Number of Checkmarks in Column:</b>				
	x 0	x 1	x 2	x 3
<b>Column Subtotal:</b>				
<b>What Section Total:</b> (add subtotals for items 21-29) transfer to student profile				
<b>How to Communicate:</b>	Never or Almost Never	Sometimes	Often	Always or Almost Always
30. I talk to others to get them to see things my way, to get what I want, or to get what I need				
31. I stick to the subject when I state my needs				
32. I use a pleasant tone of voice when speaking with others				

## Communication Scale

	Never or Almost Never	Sometimes	Often	Always or Almost Always
33. I make eye contact when speaking with others				
34. I use body language to signal I am listening (nodding, facing speaker)				
35. I ask the correct person for help				
<b>Number of Checkmarks in Column:</b>				
	x 0	x 1	x 2	x 3
<b>Column Subtotal:</b>				
<b>How Section Total:</b> (add subtotals for items 30-35) transfer to student profile				
	Never or Almost Never	Sometimes	Often	Always or Almost Always
36. I ask follow-up questions if I don't fully understand an explanation or answer				
37. When I need help, I ask for it				
38. I wait for an appropriate time to ask for help				
39. I speak up when something is urgent and cannot wait				
40. I can bring up uncomfortable topics with my teacher or other adult				
<b>Number of Checkmarks in Column:</b>				
	x 0	x 1	x 2	x 3
<b>Column Subtotal:</b>				
<b>When Section Total:</b> (add subtotals for items 36-40) transfer to student profile				

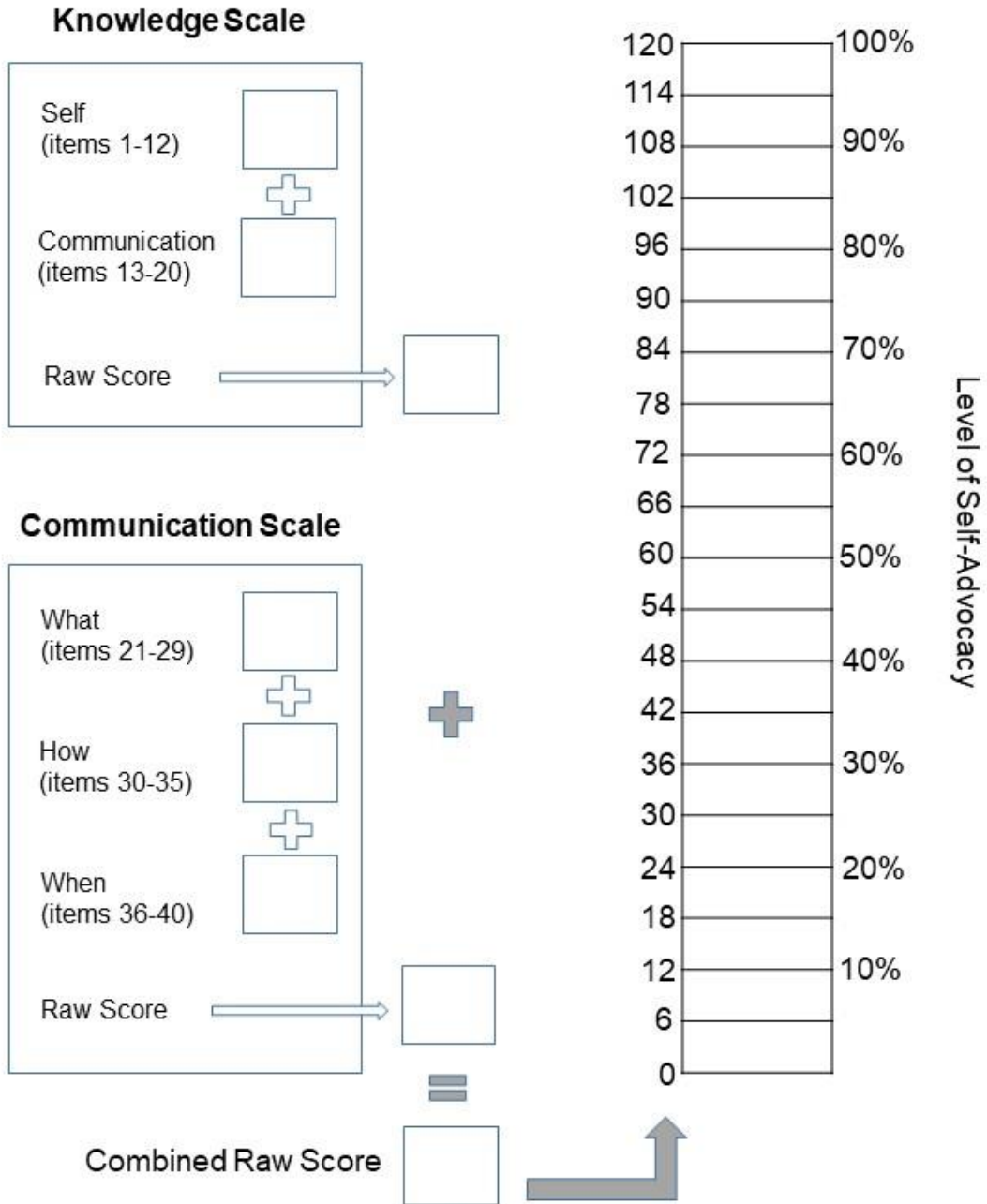


## Student Profile

**To Score:** Working one section at a time, record the number of checkmarks in each column. Multiply the checkmark total by the number indicated below each and record the answer in the column subtotal box. Add across the column subtotals to get the section total. Transfer section totals to the student profile sheet.

Add section totals for Communication Sale for raw score. Add Knowledge and Communication raw scores to obtain the Combined Raw Score. Using the scale on the left side of the bar graph, color in the combined raw score and read across the top of the bar to the scale on the right side to convert to a percentage of skills and beliefs demonstrated by the student. This gives the overall level of self-advocacy.

# Student Profile



Student Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Teacher Name: \_\_\_\_\_

## Appendix C: Selected Lessons of the NOW WHAT? Strategy

### Lesson 4

#### Lesson Goals:

1. Students will be able to identify a need within a situation either presented in a story or from their own experiences.
2. Students will be able to identify options and obstacles to a given need.
3. Students will be able to state the NOW WHAT? acronym components verbally and in writing

#### Materials Needed:

- Student folders containing tracking sheets
- Student writing utensil
- NOW WHAT? Checklist (one for each class to be used throughout the next 4 weeks, p. 74)
- NOW WHAT? Cue Cards #1, #2, #3 (p. 55-57)
- NOW WHAT? Strategy Fill in the Blank (one for each student, p. 71)
- Document camera
- Markers for students to check progress (these may be different colors)
- Timer or other means of keeping time

#### How to prepare:

- Read over all instructions before beginning lesson. Ensure that you understand the flow of the lesson and the information to be shared. Use the boldfaced headings to remind you of what to do in each section. While these lessons are scripted, think about how you can adapt them to your own teaching style and your students without changing the content of the statements
- Make copies and gather needed materials.

**Time Needed:** approximately 25 minutes

#### What to Do:

##### 1. Check for Mastery

[Give students NOW WHAT? Strategy Fill in the Blank face down on the desk and ask them to wait for instructions.]

*Say: When I tell you to turn over your paper, I want you to write down as many of the strategy steps as you can remember from last week. If you can't remember a step, move on to the next one. We are only going to take 3 minutes on this, but do not worry if you cannot get all of the steps before time is called. You may begin.*

[Once time is up, have students put pencils down and give them a marker for grading.]

*Say: Use the marker to place a star next to each letter you got correct on your fill in the blank. This does not affect your grade, so be honest in your marking.*

[Display Cue Card #1 so students may check their work.]

*Say: Put today's date at the top of the next blank column. Count the number of stars you have on your fill in the blank. Starting at the bottom, color one box on your chart for each star you have. When you are finished, put your chart in your folder.*

[When all students have completed chart,]

*Now let's review the steps of the strategy out loud together. N-Name your Need, O-Options and Obstacles, W-Who can help?, W-When should I ask?, H-How should I ask? A-Ask!, T-Take action!*

## **2. State Purpose of Lesson**

*Say: Who remembers the definition for self-advocacy?*

[Wait for student responses.]

*Say: Right, self-advocacy is speaking up for your needs. How does understanding yourself help you self-advocate?*

[Wait for student responses.]

*Say: Today we are going to look at how self-knowledge can help you use the NOW WHAT? Strategy to self-advocate.*

*Say: Sometimes I have a hard time remembering things. If it is not written down, there is a good chance that I will forget it. Because I know this about myself, if someone asks me to do something, I make sure to write it down in my calendar, so I always know where my list of things to do is.*

*Can anyone tell me how that helps me self-advocate?*

[Look for student responses such as "You know what you need."]

## **3. Model Identifying Naming Need and Options/Obstacles Steps of Strategy**

*Say: Let's look at this example. I run into the principal in the hallway, and he wants to meet with me after school one day next week. He needs an answer before we go home*

*today. I know this is important, but I also don't know exactly what I have already planned after school and my calendar is on my desk. NOW WHAT?*

[Display Cue Card #2.]

*Say: When I am Naming my Need, I ask myself these questions. What is the problem? What am I missing? How am I stuck?*

[Display a NOW WHAT? Checklist and fill it in as you speak.]

*Say: Name my Need: I can't give the principal a date because I don't know my schedule, In this first box, I write my need, "I can't give the principal a date because I don't know my schedule."*

*The next step in the strategy is Options and Obstacles. Who knows what option means?*

[Look for student responses such as "choices" or "different things you can do."]

*Say: Right. Most of the time there are different actions or choices I can make. Sometimes there is only one. Think of breakfast. You have lots of options to choose from if you want cereal. Cereal can be made of wheat, or rice, or corn, with or without sugar, but if you want eggs, even if you cook them different ways, there is still only one ingredient.*

*Who can tell me what an obstacle is?*

[Look for student responses such as "something that gets in your way" or "something that keeps you from doing something."]

*Say: Yes, obstacles keep me from getting what I want or need. Let's go back to the breakfast example. What is one obstacle for eating cereal for breakfast?*

[Look for student responses such as "mom won't buy the sugary kind that I like" or "you could be allergic to wheat."]

[Display Cue Card #3.]

*Say: In my example, one option I could choose is just picking a day to tell the principal right now. An obstacle for that option would be I could pick a day I already have something planned.*

[Display checklist again and put a 1. in the options box with "just pick a day" written after it. Then in the obstacles box put a 1. followed by "something already planned for that day."]

*What is another option I could try?*

[As students respond, agree or probe their thinking to see if they can get to a more reasonable answer.]

*Say: Another option might be to say, "I need to let you know later, so that I can look at my calendar, before I make a choice."*

[In the option box, put a 2. followed by "let him know later."]

*Say: What could be an obstacle for that option?*

[Wait for student responses and probe as needed. Write a 2. in the obstacle box and write "might forget to look at calendar."]

*Say: Yes, I might forget to look once I have my calendar. Knowing about myself will help me know what my needs and obstacles are.*

*Is there another option? I could self-advocate by asking the principal to send me an email so that I have a reminder once I'm back to my desk and can look at my calendar.*

[Put a 3. in options box with "ask for email" after it.]

*Say: One obstacle for this might be "I'm afraid I'll bother the principal by asking." So of these three options, which one is the best?*

[Wait for student replies.]

*Right, number 3 is the best choice. It is important to consider other people when asking them to do something, but if I explain the situation to him, do you think he would be willing to help me? (Yes)*

[Place a star next to option 3.]

### **3. Student Activity: Rapid-Response Verbal Rehearsal**

[Display Cue Card #1.]

*Say: Remember the game we played last week to help you remember the strategy steps? I'll be the leader by pointing to each of you in order. When I point at you, I want you to say the next step in the NOW WHAT? Strategy. Remember to give your answer as fast as you can. You may look at the board if you need help but try not to because I am going to remove the cue card after we do a few rounds. When we get really good at naming the steps, I'm going to change up the order I point to you, so you need to pay attention to where we are in the steps each time, and don't try to figure out what word will be yours next. Does everyone understand how to play?*

[Start the game by pointing to the first student. If necessary, prompt him/her to name the first step. After each student provides a step, give positive feedback by saying "Great!" or "Super!" before pointing to the next student.

If a student cannot name the next step, point to the step on the displayed chart or give the

letter of the step in the mnemonic Now What? Start each new round with a new person.

After 3 rounds, remove Cue Card #1 from display.]

*Say: Now you will need to use your memory to help you remember the NOW WHAT? steps. Ready, go!*

[Continue with one round of choosing students in order before beginning to point to them in a random order. If you want to make it more of a game, students who miss a step can be “out” and the winner of the round gets to lead the next round. Complete 5 rounds total, e.g. 3 rounds with the visual aid, 2 without.]

#### **4. Close the Lesson**

*Say: Today you learned how knowing yourself can help you figure out what you need and what options would work for you to help you solve that problem. Please put all of your papers in your folder before you hand it to me.*

[Collect folders and store them for the next lesson.]

## Lesson 8

### Lesson Goals:

1. Students will be able to identify how to ask for help.
3. Students will be able to use the TALK acronym components to communicate appropriately.
4. Students will be able to state the NOW WHAT? acronym components verbally and in writing

### Materials Needed:

- Student folders containing student tracking sheets.
- Student writing utensil
- NOW WHAT? Checklist (from prior weeks, one for each class)
- NOW WHAT? Cue Cards #1, #9, #10, #11, #12, #13 (p. 55, 63-67)
- NOW WHAT? Strategy Fill in the Blank (one for each student, p. 71)
- Document camera
- Markers for students to check progress (these may be different colors)
- Timer or other means of keeping time

### How to Prepare:

- Read over all instructions before beginning lesson. Ensure that you understand the flow of the lesson and the information to be shared. Use the boldfaced headings to remind you of what to do in each section. While these lessons are scripted, think about how you can adapt them to your own teaching style and your students without changing the content of the statements
- Make copies and gather needed materials.

**Time Needed:** approximately 25 minutes

### What to Do:

#### 1. Check for Mastery

[Give students NOW WHAT? Strategy Fill in the Blank face down on the desk and ask them to wait for instructions.]

*Say: When I tell you to turn over your paper, I want you to write down as many of the strategy steps as you can remember from last week. If you can't remember a step, move on to the next one. We are only going to take 3 minutes on this, but do not worry if you cannot get all of the steps before time is called. You may begin.*

[Once time is up, have students put pencils down and give them a marker for grading.]

*Say: Use the marker to place a star next to each letter you got correct on your fill in the*



*blank. This does not affect your grade, so be honest in your marking.*

[Display Cue Card #1 so students may check their work. While they do this, hand out student folders.]

*Say: Please get your tracking chart out of your folder. Put today's date at the top of the next blank column. Count the number of stars you have on your fill in the blank. Starting at the bottom, color one box for each star you have. When you are finished, put your chart in your folder.*

[When all students have completed chart,]

*Say: Now let's review the steps of the strategy out loud together. N-Name your Need, O-Options and Obstacles, W-Who can help?, W-When should I ask?, H-How should I ask? A-Ask!, T-Take action!*

## **2. State Purpose of Lesson**

*Say: Today we are going to look at how the way we communicate with others is just as important to the message as the words we say.*

## **3. Introduce TALK Behaviors**

*Say: We have been talking about verbal and nonverbal ways of communicating, but is it only about getting my message out?*

[Student responses should be no, but if not, ask probing questions to get them to realize listening is part of communicating.]

*Say: Yes, listening is important in communicating too! Let's look at an acronym that will help you communicate appropriately when you need to self-advocate.*

[Ask for a student volunteer to come stand next to you. Talk to the student while looking at the ceiling or the floor and lowering voice while mumbling so they can't understand you. If they say something about not being able to hear you, sigh loudly and repeat the script in a snippy tone with your arms crossed.]

*Ask student: How did that make you feel?*

[Once student has responded thank him/her and ask to take a seat.]

[Display Cue Card # 9 Talk the Talk]

*Say: TALK stands for Tone of voice, Attitude, Look at the person, and Keep on topic.*

*How did I just do using TALK?*

[Wait for student responses.]

Say: *Right, I wasn't a very good communicator.*

[Display Cue Card #10.]

Say: *How did I do on T- tone of voice? Did I have a pleasant tone? Did I speak loudly enough to be heard? Did I speak too loudly?*

*Why is this important if I'm asking someone for help?*

[Wait for student responses.]

Say: *Right, the person needs to feel appreciated and needs to be able to hear what I have to say. Yelling might make me seem angry or rude.*

[Display Cue Card #11.]

Say: *What attitude did I display the first time I spoke to (student name)? How do you know?*

[Look for answers like unsure or scared.]

Say: *How about the second time I said it? How do you know?*

[Look for student responses indicating rude.]

Say: *When I speak to someone, I need to have a good attitude. I need to be calm, I need to be aware of my body language, and I need to thank them. It sounds to me like there are a few ways I can seem rude when I talk to people if I don't watch my nonverbal communication.*

[Display Cue Card #12.]

Say: *Why is looking at the person I'm speaking to important?*

[Look for student answers such as it shows you are listening or paying attention or that what you are saying is important enough to focus on.]

Say: *Right, facing the person and nodding show that I am listening. Making eye contact shows that I am confident, and I think they are important.*

[Display Cue Card #13.]

Say: *The final step in talk wasn't in my example, but why do you think it's important to keep on topic?*

[Look for student answers such as "so people know what you need." ]

Say: *You've got it. When I ask for help, I need to be specific, I need to say why I need help, I need to say what help I need, and I need to get to the point.*

*Now let's look at how I can apply TALK to the example I have been using for the past few weeks.*

[Display the NOW WHAT? Checklist for the class you are teaching.]

*Say: When I think about How I am going to ask I need to remember to use a pleasant tone of voice that can be heard clearly.*

[Write "tone of voice" in the How column.]

*Say: I need to remember to have a calm attitude and watch my body language*

[Write "attitude" in the How column.]

*Say: I need to look at the person remembering to make eye contact and nod when I am listening.*

[Write "look at person" in the How column.]

*Say: And I need to be specific about what I need and why I need help, getting to the point so I keep on topic.*

[Write "keep on topic" in the How column.]

#### **4. Student Activity: Rapid-Response Verbal Rehearsal**

[Display Cue Card #1.]

*Say: We are going to play our rapid-response game now to help you remember the steps in the NOW WHAT? Strategy. Does everyone remember how to play?*

[If necessary, repeat instructions that follow, if not, begin playing the game.]

*Only if needed, Say: I'll be the leader by pointing to each of you in order. When I point at you, I want you to say the next step in the Now What? Strategy. Remember to give your answer as fast as you can. You may look at the board if you need help but try not to because I am going to remove the cue card after we do a few rounds. When we get really good at naming the steps, I'm going to change up the order I point to you, so you need to pay attention to where we are in the steps each time, and don't try to figure out what word will be yours next. Does everyone understand how to play?*

[After 2 rounds, remove Cue Card #1 from display.]

*Say: Now you will need to use your memory to help you remember the NOW WHAT? steps. Ready, go!*

[Continue with one round of choosing students in order before beginning to point to them in a random order. If you want to make it more of a game, students who miss a step can be "out" and the winner of the round gets to lead the next round. Complete 5 rounds total e.g. 2 rounds

with the visual aid, 3 without.]

## **5. Close the Lesson**

*Say: Today we talked about the How? step of NOW WHAT? Who can tell me why it is important?*

[Look for student answers that reflect understanding that communication is more than the words you say, it also involves nonverbal cues.]

*Say: Make sure your tracking sheet is in your folder before you give it to me.*

[Collect student folders and store until the next lesson.]

# Week 6- Tag, You're It!

## Lesson 11

### Lesson Goals:

1. Students will be able to work independently to identify the knowledge/actions needed for each step of the NOW WHAT? Strategy when given a written scenario
2. Students will be able to state the NOW WHAT? acronym components verbally and in writing

### Materials Needed:

- Student folders containing tracking sheets
- Student writing utensil
- NOW WHAT? Fill in the Blank (one for each student, p. 71)
- NOW WHAT? Cue Card #1 (p. 55)
- NOW WHAT? Checklist (one for each student, p. 74)
- Student Scenarios (enough that each student can have a different scenario, see p. 80-87)
- Document camera
- Markers for students to check progress (these may be different colors)
- Timer or other means of keeping time

### How to Prepare:

- Read over all instructions before beginning lesson. Ensure that you understand the flow of the lesson and the information to be shared. Use the boldfaced headings to remind you of what to do in each section. While these lessons are scripted, think about how you can adapt them to your own teaching style and your students without changing the content of the statements
- Make copies and gather needed materials.

**Time Needed:** approximately 25 minutes

### What to Do:

#### 1. Check for Mastery

[Give students NOW WHAT? Strategy Fill in the Blank face down on the desk and ask them to wait for instructions.]

*Say: When I tell you to turn over your paper, I want you to write down as many of the strategy steps as you can remember from last week. If you can't remember a step, move on to the next one. We are only going to take 3 minutes on this, but do not worry if you*

*cannot get all of the steps before time is called. You may begin.*

[Once time is up, have students put pencils down and give them a marker for grading.]

*Say: Use the marker to place a star next to each letter you got correct on your fill in the blank. This does not affect your grade, so be honest in your marking.*

[Display Cue Card #1 so students may check their work. While they do this, hand out student folders.]

*Say: Please get your tracking chart out of your folder. Put today's date at the top of the next blank column. Count the number of stars you have on your fill in the blank. Starting at the bottom, color one box for each star you have. When you are finished, put your chart in your folder.*

[When all students have completed chart,]

*Now let's review the steps of the strategy out loud together. N-Name your need, O-options and obstacles, W-Who can help?, W-When should I ask?, H-How should I ask? A-Ask!, T-Take action!*

## **2. State Purpose of Lesson**

*Say: Today you are going to work independently to complete a NOW WHAT? Checklist using different scenarios that a student might face at school.*

## **3. Student Activity**

### **a. Independent Completion of Checklist**

*Say: I am going to give each of you a situation like the ones we used last week. If you get the same one today, let me know and I will give you a different one. You are going to have 15 minutes to work through the NOW WHAT? Checklist. Keep in mind that during our next lesson day, you will be using role-play to practice.*

[Hand out student scenarios, ensuring that no one gets a scenario he/she has used in a prior lesson. Give each student a copy of the Checklist. You may read scenarios to students if necessary but give no further assistance on the strategy steps or student responses.]

### **b. Rapid-Response Verbal Rehearsal**

*Say: We are going to play our rapid-response game now to help you remember the steps in the NOW WHAT? Strategy.*

*Today is a little different, because we are going to do it without using the cue card at all!*

[Begin with one round of choosing students in order before beginning to point to them in a random order. If you want to make it more of a game, students who miss a step can be “out” and the winner of the round gets to lead the next round. Complete 5 rounds total.]

#### **4. Close the Lesson**

*Say: You need to put your checklist in your folder to make sure you have it for our next lesson. Please double check your scenario number is on your paper before you give the scenario back to me.*

*Your tracking sheet should also be in your folder before you hand it to me.*

[Collect student folders and store until the next lesson.]

**Appendix D: Example Fidelity Checklist**

Teacher Name \_\_\_\_\_ Date \_\_\_\_\_

Lesson 10 Goals:

1. Students will be able to work in pairs to identify the knowledge/actions needed for each step of the NOW WHAT? Strategy when given a written scenario.
2. Students will be able to state the NOW WHAT? Acronym components verbally and in writing.

Lesson Components:

Scale: 1- Not at all, 2- Somewhat, 3- Mostly, 4- Completely on script

Check for mastery completed: \_\_\_\_ Yes \_\_\_\_ No

How well did teacher adhere to script?      1      2      3      4

State purpose of lesson completed: \_\_\_\_ Yes \_\_\_\_ No

How well did teacher adhere to script?      1      2      3      4

Commit and Toss completed: \_\_\_\_ Yes \_\_\_\_ No

How well did teacher adhere to script?      1      2      3      4

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Rapid response verbal rehearsal completed: \_\_\_\_ Yes \_\_\_\_ No

How well did teacher adhere to script?      1      2      3      4

Closing the lesson completed: \_\_\_\_ Yes \_\_\_\_ No

How well did teacher adhere to script?      1      2      3      4



## **Appendix E: Teacher Intervention Timeline**

Thank you for agreeing to share your class with me! Following are the additional directions to supplement the NOW WHAT? Strategy lessons you will be teaching. First, I will provide some general guidelines that apply to all lessons, then under each week, there are additional materials/information you will need.

### **Prior to study:**

1. Parent consent forms should be sent home with students on Tuesday, September 3 and returned no later than Friday, September 6. **Because you will be blind to which students are participating in study, ask student to seal the envelope before turning it in.**
2. I will provide a mixed assortment of candy bars as the incentive for students returning forms. Any student who returns the forms in the envelope (or you provide one if needed, because we all know they lose stuff....) will get a candy bar regardless of whether they are participating in study (again, you won't know who is participating so candy for all who return the forms!)
3. I will come by after school on the 6<sup>th</sup> to pick up any forms that have been returned, and I will be calling any parent (this is why I asked for the phone numbers, because you are not allowed to participate in the recruitment process) who has not returned the forms to ensure that they have seen them. If necessary, you have extra forms and I will email you the names of students who need a second copy sent home. I will come by again on the 11<sup>th</sup> to pick up any additional forms that may have come in.

### **General Guidelines:**

1. All materials for these lessons will be provided to you and organized into manila envelopes. **All students in your lab classes will be participating in the lessons.**
2. Some of the study materials will be used for data collection. These will have a sticky note attached where the name blank is. **Use the sticky notes attached to each page to write student names.** I will transfer participant numbers to the appropriate pages and will shred those for non-participants.
3. When teacher SAMMS forms are completed (on each student in your classes), they too should only have student names written on the sticky notes. Teacher names may be written directly on the form. **Please put the student and teacher name on the form before you give it to the general ed teacher.**
4. When the SAMMS is given to the student, **please give the teacher version on the same day.** You may put the teacher forms in the manila envelope with the student forms.
5. When you are completing the lessons, **please do not use Scenarios 1-3** as these will be used as checkpoints throughout the study. Each student will have their own copy of the scenario and may write on it if they wish. Please collect the scenarios when you collect student work.

6. I have provided a class roster for you to mark attendance so that I know who participated in each lesson. Please do your very best to complete that each day! Thanks!!

7. Please feel free to make notes on your copy of the lessons. Any feedback is welcome! **All study materials will be returned to me at the end of the intervention period.**

8. I have tried very hard to get the correct number of copies for each activity/lesson. You should probably double check my counting. I based the numbers off the class totals you gave me at the beginning of the year, so if something has changed, and you need more materials, please let me know as soon as possible.

### **Pre-test (9/9 -9/13)**

\*Have all students in your classes complete Student Version of SAMMS on 9/9. I will come by after school on 9/11 to pick these up.

\*Have 1 Gen Ed teacher complete SAMMS on each student in your classes. It is best that these be done on 9/9 as well but must be returned by 9/11. This will be the same teacher who completes the post-test so it might be helpful to label two pages for each student/teacher pair at the beginning of the study.

\*Give students Scenario #1 on Tuesday 9/10 (I have made class sets for you) and a Checklist and give them 10 minutes to complete the checklist. Chances are they will have no clue what to do and this will take less than 10 minutes. **Do NOT give the students any help to protect the integrity of the data.**

### **Intervention Week 1 (9/16 – 9/20)**

\*NOW WHAT? Lessons 1 on Tuesday

\*NOW WHAT? Lesson 2 on Thursday

### **Intervention Week 2 (9/23 – 9/27)**

\*NOW WHAT? Lesson 3 on Tuesday

\*NOW WHAT? Lesson 4 on Thursday

### **Intervention Week 3 (9/30 – 10/4)**

\*NOW WHAT? Lesson 5 on Tuesday

\*NOW WHAT? Lesson 6 on Thursday

\*Give students Scenario #2 on Friday (I have made class sets for you) and a Checklist and give them 10 minutes to complete the checklist. **Do NOT give the students any help to protect the integrity of the data.**

#### **Intervention Week 4 (10/7 – 10/11)**

\*NOW WHAT? Lesson 7 on Monday

\*NOW WHAT? Lesson 8 on Wednesday

#### **Intervention Week 5 (10/14 – 10/17)**

\*NOW WHAT? Lesson 9 on Tuesday

\*NOW WHAT? Lesson 10 on Thursday

#### **Intervention Week 6 (10/21 – 10/25)**

\*NOW WHAT? Lesson 11 on Tuesday

\*NOW WHAT? Lesson 12 on Thursday

\*Give students Scenario #3 on Friday (I have made class sets for you) and a Checklist and give them 10 minutes to complete the checklist. **Do NOT give the students any help to protect the integrity of the data.**

#### **Post-Test (10/28 – 10/31)**

\*Have all students in your classes complete Student Version of SAMMS on 10/29. I will come by after school on Monday, 11/4 to pick them up.

\*Have 1 Gen Ed teacher complete SAMMS on each student in your classes. This needs to be the same teacher who completed the pre-test for each student. It is best that these be done on 10/29 as well but must be returned by end of week

Thank you again! If you have any questions, don't hesitate to email [casxxxxx@xxx.com](mailto:casxxxxx@xxx.com) or call me at XXX-XXX-XXXX. You guys ROCK!!