

Promoting Self-Determination in IEP Meetings

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Abstract

Promoting self-determination has been linked to the IEP process, given the focus on decision making and goal setting within such meetings. A student with a disability can take an active role in his/her meeting by leading the meeting, describing his or her information to others, self-advocating about hopes and accommodation, making choices as it pertains to future goals and transition services, and solving possible problems. The IEP meeting can be a powerful place for students with disabilities to learn and practice decision-making and other skills leading to enhanced self-determination. The purpose of this literature review is to identify the data-based literature on current strategies/interventions focused on improving students' self-determination through student involvement in IEP meetings. Findings indicated the positive relationship between active student participation in IEP meetings and skills promoting self-determination. We identify gaps in the literature and suggest areas where research and policy should focus.

Key words: self-determination, IEP meetings, student involvement

Promoting Self-Determination in IEP Meetings

Over the past few decades, there has been increased interest in promoting and enhancing the self-determination of students with disabilities. Self-determination has become widely accepted as an essential component for achieving positive educational outcomes, accessing the general education curriculum, and enhancing one's quality of life (Turnbull & Turnbull, 2001; Wehmeyer & Field, 2007). With the increased recognition of the benefits of enhanced self-determination (Hapner & Imel, 2002), the development of effective strategies to promote self-determination has become an important issue (Test et al., 2004; Wood, Karvonen, Test, Browder, & Algozzine, 2004). Particularly, there has been increased interest on developing effective strategies to promote skills leading to enhanced self-determination during a student's Individualized Education Program (IEP) meeting (Konrad, 2008; Mason, Mcgahee- Kovac, Johnson, & Stillerman, 2004; Test et al., 2004).

The Individual with Disability Education Improvement Act (IDEA, 2004) required that the IEPs of all students who are ages 16 or above must address needed transition services, and if transition services are discussed, students must be invited to their IEP meeting. The transition services identified at that meeting must be based on students' strengths and needs, taking into account the preferences and interests of the student. Because students must be invited to IEP meetings at which transition services are discussed and the transition services must take into account student strengths, interests, and preference, promoting self-determination in the context the transition planning process becomes important.

Self-determination is defined as “volitional actions that enable one to act as the primary causal agent in one's life and to maintain or improve one's quality of life” (Wehmeyer, 2005, p.117). Self-determined individuals clearly know what they want and understand what they need

to attain their goals and to improve their life satisfaction (Wehmeyer & Schwartz, 1997). Self-determination emerges across lifespan. That is, people continue developing skills and attitudes that enable them to become causal agents to make or cause things happen in their life (Shogren & Turnbull, 2006; Wehmeyer & Field, 2007). Wehmeyer defined these skills and attitudes that are the component elements of self-determination as followings: choice-making skills; decision-making skills; problem-solving skills; goal-setting and attainment skills; self-regulation/ self-management skills; self-advocacy and leadership skills; positive perceptions of control, efficacy, and outcome expectations; self-awareness; and self-knowledge (Wehmeyer & Field, 2007).

The IEP process provides a unique opportunity in which to promote self-determination. The IEP meeting is an annual event during which multiple activities are conducted in the areas of description of disability and performance; evaluation of strengths and needs; communication of interests, hopes, future goals with others; and determination of appropriate goals, services, and accommodation (Test et al., 2004). During the meeting, a student has multiple opportunities to practice and engage in self-determined behaviors. For example, a student can play an active role in the meeting by being aware of his/her disability, strengths, weakness, and needs; self-advocating his or her needs, hopes, and accommodation; making choices to set future goals and arrange related services; solving problems; and introducing and closing the meeting (Martin, Marshall, Maxson, & Jerman, 1997; Test, Mason, Hughes, Konrad, Neale, & Wood, 2004; Wehmeyer, Palmer, Soukup, Garner, & Lawrence, 2007).

Encouraging students to act in a self-determined manner in the meeting supports the development of comprehensive vision statements for the future (Van Dycke, 2005). It also impacts to other IEP members, in that they gain better knowledge about the meeting and the student (Martin, Marshall, & Sale, 2004). Promoting self-determined behaviors in the IEP

meeting also impacts positive postsecondary outcomes and an enhanced quality of life (Benz, Lindstrom, & Yovanoff, 2000; Test et al., 2004; Wehmeyer & Schwartz, 1997). Table 1 describes examples of how the definitions of self-determination components (Wehmeyer & Field, 2007) can be demonstrated during the IEP meetings.

However, there are gaps pertaining to students' active involvement in their IEP meetings, both in research and practice. Martin and colleagues (2006) conducted a study directly observing IEP meetings, and found that most conversations during meetings were dominated by special education teachers and parents, while students seldom talked or exhibited leadership behaviors. Specifically, students only talked 3% of the time during the meetings, whereas special education teachers and parents talked 51% and 15% of the time, retrospectively. In addition, the National Longitudinal Transition Study-2 (NLTS-2) supports the fact that only 12% of students with disabilities who attended IEP meetings revealed leadership behaviors during the meetings (Cameto, Levine, & Wagner, 2004).

Compared to other participants (e.g., special education teachers, general education teachers, parents, administrators, support staff), students with disabilities had less knowledge about the IEP meeting process such as recognizing reasons for the meetings, knowing what to do, and talking about strengths and needs (Martin, Marshall, & Sale, 2004). Agran and Hughes (2008) noted that junior high and high school students with disabilities had not been taught skills that were directly related to active participation in the IEP meetings, though they had been taught skills to promote self-determination within school curriculum in general.

A growing number of research studies are now available on the strategies to promote self-determination and to enhance students' involvement in IEP meetings. Test and colleagues (2004) reviewed the interventions before 2002 that directly aimed to promote student involvement

during IEP meetings. In this review, interventions to promote student involvement or person-centered planning had been implemented prior to IEP meetings to teach students how to participate and take leadership roles in their meetings. The findings indicated the improvements of students' involvement in their IEP meetings through either the use of published curricula to enhance students' participation or the use of person-centered planning. To avoid overlapping from previous study, this literature review only focused on the studies within recent 10 years.

The purpose of this review was to identify the data-based literature on current strategies/interventions focused on improving students' self-determined behaviors within IEP meetings. Specifically, four strategies/interventions that were identified in the literature review will be discussed; (a) *Self-Directed IEP*, (b) *The Self-Advocacy Strategy*, (c) *Whose Future Is It Anyway?*, and (d) *I Can Use Effort*. The following sections will describe, in-depth, each strategy/intervention and provide implications of future research in order to promote students' self-determined behaviors in the IEP meetings.

Literature Review Process

The studies included in this literature review were identified through a search of the Educational Resources Information Center (ERIC), PsychoINFO, Academic Search Premier, and ProQuest databases for the years from 2000 to 2012. First, the descriptors were developed using three foci areas: (a) IEP meeting, (b) self-determination, and (c) disabilities. Then, the following terms, or various combinations thereof, were used to search the databases: (a) IEP, (b) self-determination, self-advocacy, choice-making, problem solving, involvement, and participation, and (c) disabilities, special education, and special needs. In addition, a hand search from the references of identified articles was conducted.

To be included in the review, studies had to meet the following criteria: (a) the student's age was between 3 to 18, (b) the student was identified as receiving special education services and had an IEP, (c) the study was published in a peer-reviewed journal, (d) the topic was directly related to strategies promoting self-determined behavior of students with disabilities in their IEP meetings, (e) the research design was either experimental, qualitative, or single subject design. Some studies were excluded because: (a) the study was not directly related to the topic of our study (e.g., strategies focused on improving academic skills during IEP meetings, not skills leading to self-determination), (b) the participants' age was above 18, and (c) article reported a literature review and not a study.

Total 10 studies were included in this article. Four strategies were identified from the studies: *Self-Directed IEP*, *Self-Advocacy Strategy*, *Whose Future Is It Anyways?* and *I Can Use My Effort*. Table 2 describes summaries of the included studies. In addition, Table 3 provides how each strategy/intervention is related to components of self-determination.

Four Strategies to Promote Self-determined Behaviors

Self-Directed IEP

The Self-Directed IEP (Martin, Marshall, Maxson, & Jerman, 1993) is a multimedia package program designed to facilitate student involvement in his or her IEP meeting. Specifically, this strategy aims to promote students' leadership in their meetings. It provides instructional materials to teach students 11 steps needed to lead their IEP: (a) Beginning meeting by stating a purpose, (b) Introducing everyone, (c) Reviewing past goals and performance, (d) Asking for others' feedback, (e) Stating educational and transition goals, (f) Asking questions if you don't understand, (g) Dealing with differences of opinion, (h) Stating the support you will need, (i) Summarizing goals, (j) Closing meeting by thanking everyone, and (k) Working on IEP

goals all year. The *Self-Directed IEP* package includes four instructional components: *Self-Directed IEP in Action* video, *Self-Directed IEP* video, Teacher's Manual, and Student Workbook. Eleven sequential lessons are included in the Student Workbook, and each lesson takes approximately 45 minutes to complete. The Teacher's Manual provides a variety of instructional strategies for each lesson (e.g., role-playing, discussion, reading, writing). The effects of the *Self-Directed IEP* process had been documented throughout four literature of the time examined.

Three studies had evaluated the efficacy of the *Self-Directed IEP*, which consists of all of 11 lesson steps using the *Self-Directed IEP in Action* video, *Self-Directed IEP* video, and the Student Workbook (Arndt, Konrad, & Test, 2006; Martin, Van Dycke, Christensen, Greene, Gardner, & Lovett, 2006; Snyder, 2002). In the study by Snyder (2002), five adolescents with mental retardation revealed remarkably increased leadership in their IEP meetings following the *Self-Directed IEP* instruction. Eleven lessons of the *Self-Directed IEP* were categorized into 4 instructional units (i.e., introducing the meeting, reviewing past goals, discussing future goals, and closing the meeting), and multiple-probe baseline design across the instructional units was conducted. During six mock and one real IEP meetings, students' leading behaviors were measured using *Self-Directed IEP Behavior Rating Scale* (SD-IEPBRS; Snyder & Shapiro, 1997), which is rating behaviors using 6-Likert scales. A total of 16 items across 4 instructional units could score ranged from 0 to 80, with a total of 20 for each unit. After the intervention implemented, all students revealed remarkably improved leaderships in their meetings across all instructional units such as, introducing the meeting, reviewing past goals, discussing future goals, and closing the meeting. In addition, they generalized their leadership in the real IEP

meeting, showing higher ratings ranged from 9.5 to 12 for all units compared to zero rating prior to the intervention.

Consistent results were supported in a study by Arndt and colleagues (2006). The level of participation of five adolescents with mild to moderate disabilities in the IEP had been evaluated using the *Self-Directed IEP* process. Multiple baseline design was conducted across three instructional units, which were grouped from 11 leadership lessons, during four mock and two real IEP meetings. The level of students' participation was measured to percentage of behaviors existed correctly during the meetings. A *Skills Checklist* was used and total point for each unit was 14, 19, and 12, respectively. When the *Self-Directed IEP* was implemented, all adolescents learned leadership in their meetings, that is revealing substantially increased percentage correct leadership skills across three units; for example, one adolescent scored the average of 12 points following the intervention compared to 1 points prior to the intervention for unit 1. There were remarkable differences across three units between two real IEP meetings prior to and following the *Self-Directed IEP*, which indicates that adolescents could lead their meetings with appropriate leadership skills (e.g., for unit 1, M of prior to the intervention = 2 vs. M of following to the intervention = 14).

The efficacy of providing the *Self-Directed IEP* prior to the IEP meeting was supported through a randomized controlled experimental group study of Martin and colleagues (2006). One hundred and thirty students, 72% had learning disabilities, were assigned to *Self-Directed IEP* intervention group (i.e., implementing a full 11 lessons), and control group (i.e., teacher-directed meeting without any prompt for students' involvement). Students' leadership in IEP meetings were examined through direct observation (10s-momentary sampling) measuring the percentage of intervals IEP participants talked. Perceptions of students and adult participants toward the IEP

meeting, and teachers' measure on students' goal-setting and decision-making skills through *ChoiceMaker Self-Determination Assessment* (Martin & Marshall, 1997) were measured during pre/post intervention.

Students, who received the *Self-Directed IEP* instruction, more frequently started the meeting, and their teachers tended to reduce their initiations for leading compared to students who did not receive any specific instruction (42% vs. 2% for students initiation, and 57% vs. 86% for teachers initiation, respectively). Students reported higher positive perceptions of their meetings. The *Self-Directed IEP* instruction showed a moderate to large effect size (*ES* ranged from .04 to .67), with remarkable differences in students' leadership revealed between two groups. Particularly, the percentage of students' leadership observed in intervention group was 15 % compared to 0% of no instruction group. In both groups, teachers tended to lead meetings than any other participants, however, there was slight difference identified (82% for the intervention group vs. 95% for the control group). Importantly, no differences were found in the length of meetings between using the *Self-Directed IEP* and teacher-directed meeting.

A study of a modified version of the *Self-Directed IEP* was conducted by Allen, Smith, Test, Flowers, and Wood (2001). This study focused on students' verbal responses related to goal statements during the meeting, rather than written expressions. The modified version included only 6 out of 11 lessons that are goal articulation skills (i.e., beginning the meeting by stating a purpose, introducing everyone, reviewing past goals, stating transition goals, summarizing goals, closing the meeting) and excluded 5 lessons (i.e., asking for other's feedback, asking questions, dealing with differences, stating the support, working on IEP goals all year). Real videotaped IEP meeting was used instead of the example video that was included in the *Self-Directed IEP* package. Four adolescents with mental retardation participated in one

mock and two real IEP meetings. Their participation in meetings was measured through a *Skill Checklist*, which was adapted from *ChoiceMaker* curriculum and included 34 skills. A total score could range 0 to 34. Multiple baseline design across 4 instructional units (i.e., introducing the meeting, reporting interests, reporting skills, and reporting options) was conducted.

Allen and colleagues (2001) determined that instruction using the modified version of the *Self-Directed IEP* was also effective on improving students' participation during meetings. Specifically, substantial improvements in the areas of introducing the meeting, reporting interests, reporting strengths and limitations, and reporting options and goals were identified. With a large effect size ($ES = 26.56$, $M = 2.7$ vs. $M = 28.2$), the modified *Self-Directed IEP* revealed a significant effectiveness compared to the situation without any instruction before the IEP meeting. These results were consistent with those from studies of the full *Self-Directed IEP* (Arndt, Konrad, & Test, 2006; Martin et al., 2006; Snyder, 2002).

These studies indicated that instruction using the *Self-Directed IEP* supports students with disabilities to take greater leadership during their IEP meetings. Both full and modified versions of *Self-Directed IEP* instruction were effective. Students were able to acquire and use skills to lead their meetings: such as starting and closing the meeting; introducing people to each other; proposing the agenda (i.e., goals, services, and supports); collecting opinions; making choices and decisions; and using self-advocacy skills. None of these studies measured impact on self-determination, directly, but one would hypothesize that promoting these leadership and self-advocacy skills would lead to enhanced self-determination. A second positive outcome of the implementation of the *Self-Directed IEP* was on students' positive perceptions in their IEP meetings. That is, once students led their meetings, teachers and parents became less involved in

leading the meeting and provided opportunities to students to contribute to their own plans (Martin et al., 2006).

The Self-Advocacy Strategy

The *Self-Advocacy Strategy* is a program designed to support students with learning disabilities to become more involved in any type of conference or meeting, including IEP meetings (Van Reusen, Bos, Schumaker, & Deshler, 1994). The primary instructional component is a five-step rubric, I PLAN, that students can use to advocate for themselves and increase involvement in planning. Students are taught the following steps: (a) Inventory includes student's interests, strengths, and goals; (b) Provide an inventory with appropriate behaviors; (c) Listen and respond; (d) Ask questions; and (e) Name your goals. Appropriate behaviors during the conference are described as SHARE Behaviors: (a) Sitting up straight, (b) Having a pleasant tone of voice, (c) Activating your thinking, (d) Relaxing, and (e) Engaging in eye communication (Van Reusen, Bos, Schumaker, & Deshler, 1994). Given direct instruction on self-advocacy skills that could occur during the IEP meeting, students are taught skills leading to behaviors in the following areas; increased verbal responses, increased relevant responses, sharing information related to IEP meetings, and improved advocacy skills. The effectiveness of the *Self-Advocacy Strategy* process has been supported throughout three literature of the time examined: implementing a teacher-directed *Self-Advocacy Strategy* instruction (Test & Neale, 2004), and implementing an interactive hypermedia program, the *Self-Advocacy CD-ROM* (Hammer, 2004; Lancaster, Schumaker, & Deshler, 2002

Test and Neale (2004) implemented the teacher-directed *Self-Advocacy Strategy* with four adolescents with disabilities who had not previously participated in their IEP meetings. Students' self-advocacy skills were scored using *The Probe Questions* (Van Reusen et al., 1985)

during each probe sessions, which is asking students on how and what extent they respond related to IEP meeting information. Students' responses given the 10 probe questions were scored using 4-point scale (e.g., I don't know, response but not related, response and related, response and specific). In addition, self-determination was measured using *The Arc's Self-Determination Sale* (Wehmeyer & Kelchner, 1995) prior to and following the instruction. The results found that four students given instruction using the *Self-Advocacy Strategy* increased quality of verbal responses specifically related to the IEP information; for example, the average score of four students' verbal responses in intervention was 23.2, while verbal responses in baseline was 10.4. Once students learned the strategy, their verbal responses rapidly increased compared to the baseline. Students generalized their verbal responses in the real IEP meeting, that is they shared more detailed and accurate information (M of four students = 21.25) compared to the baseline. However, their generalized verbal responses were slightly decreased from what they responded during the intervention. In terms of students' self-determination, there were no significant changes between pretest and posttest measures (*Wilcoxon* $Z = -1.83$, $p = .068$).

The effects of intervention using an interactive hypermedia component of the Self-Advocacy Strategy, the *Self-Advocacy CD-ROM* (SACD), were investigated across two studies (Lancaster, Schumaker, & Deshler, 2002; Hammer, 2004). The SACD involves computer-based instruction to support students to learn self-advocacy strategies on their own, without teacher assistance. In the study of Hammer (2004), three adolescents with learning disabilities participated. Self-advocacy skills as a function of involvement with the SACD (Lancaster & Lancaster, 2003) was measured by scoring how and to what extent students respond to *The Probe Questions* (Van Reusen et al., 1985) during IEP meetings. Their responses were scored into three ways (i.e., positive, negative, irrelevant) and frequencies of those responses were

recorded during baseline, one mock IEP meeting, and one real IEP meeting. The hypermedia *Self-Advocacy Strategy CR-ROM* helped adolescents to advocate themselves by sharing positive and relevant responses in the areas of their strengths, preferences, limitations, and future career goals during mock and real IEP meetings. Once the SACD was implemented, all adolescents rapidly increased positive and relevant responses compared to baseline ($M = 23.33$, vs. $M = 8.33$), while negative and not informative responses were decreased ($M = 0$ vs. $M = 4.58$) and irrelevant responses were also rapidly decreased ($M = 0$ vs. $M = 2.09$). In addition, adolescents generalized their self-advocacy skills showing increased positive responses to the *Probe Questions* ($M = 23$), and no negative or irrelevant responses ($M = 0$).

Lancaster and colleagues (2002) validated the efficacy of the *Interactive Hypermedia Program (IHP)* using the *Self-Advocacy Strategy* with twenty-two adolescents, who had learning disabilities, behavior disorders, and other health impairments. Adolescents were randomly assigned into two intervention groups (i.e., the group using *IHP Self-Advocacy Strategy* on their own, and the group receiving teacher-directed *Self-Advocacy Strategy*) and one control group. Their self-advocacy skills were measured by scoring the number of relevant responses to *The Probe Questions* (Van Reusen et al., 1985) during three baselines, one controlled practice, one simulated IEP, and one real IEP meeting. The percentage of points earned in *PLAN steps Checklist* and *SHARE behaviors Checklists* were measured in the real IEP meeting. All adolescents revealed increased relevant responses to the *Probe Questions*, once any self-advocacy instruction was introduced. Even though all adolescents showed the highest number of relevant responses during the real IEP meeting, adolescents who were in any self-advocacy strategy instruction groups revealed significantly higher responses than adolescents in the no instruction group ($X^2 (2, N = 22) = 12.537, p < .002$). However, no significant differences

reported on the quantity of relevant responses between IHP group and teacher-directed instruction group, during simulated ($X^2 (1, N = 16) = .8960, p = .34$) and real IEP meetings ($X^2 (1, N = 16) = .0028, p = .96$). Adolescents who received any self-advocacy strategy instruction were better able to follow the PLAN steps (e.g., naming strengths and preferences, listening and responding others, asking relevant questions, and stating future goals), when compared with the control group ($X^2 (2, N = 22) = 25.33, p < .0001$). They also evidenced higher knowledge on IEP meetings and made more contributions pertaining to developing their future goals compared to the adolescents who did not receive any instruction ($X^2 (2, N = 22) = 12.731, p < .002$). Even though there was a lack of evidence supporting the efficacy of hypermedia self-advocacy strategy instruction compared to the teacher-directed instruction, the *IHP Self-Advocacy Strategy* instruction was time effective approximately two hours per student compared to the teacher's direct instruction.

Taken together, the research on the *Self-Advocacy Strategy* provides preliminary evidence of its capacity to support students to advocate themselves more effectively by sharing valuable information with other IEP meeting participants, promoting their listening and responding skills, and increasing their contributions to developing future goals and plans. Both the traditional and hypermedia versions *Self-Advocacy Strategy* were able to help students to acquire self-advocacy skills. Increased self-advocacy skills through the *Self-Advocacy Strategy* would lead to promote self-determination. In particular, the hypermedia *Self-Advocacy Strategy CD-ROM (SACD)* has the advantage of being time effective instruction compared to face-to-face traditional *Self-Advocacy Strategy*. Studies suggest that the SACD reduces teachers' instructional time by approximately two hours per student on teaching the strategy. However, to use the hypermedia *Self-Advocacy Strategy CD-ROM (SACD)*, students need to acquire basic

computer skills such as keyboarding, following direction, eye and hand coordination, and basic work reading skills.

Whose Future Is It Anyway?

Whose Future Is It Anyway (WFA) was designed to promote greater involvement in transition planning for secondary-age students with disabilities (Wehmeyer et al., 2011). It includes 36 sessions to support students to understand the concept of transition and transition planning. It enables students develop the following skills: (a) self- and disability awareness; (b) making decisions about transition-related outcomes; (c) identifying and securing community resources to support transition services; (d) writing and evaluating transition goals and objectives; (e) communicating effectively in groups; and (f) developing self-advocate skills. In the first section (Getting to Know You), students learn the concepts of transition and educational planning, how to arrange their meetings (e.g., who has attended in their past meetings or who they want to invite for meetings), four transition outcome areas (employment, community living, postsecondary education, and recreation and leisure), as well as what their needs are regarding disability supports. In the second section (Making Decisions), students learned how to solve simple problems and make decisions about potential goals relevant to each of the four transition outcome areas. The third (How to Get What You Need, Sec. 101) and the fourth (Goals, Objectives and the Future) sections enable students to locate community resources, identify and set goals, and evaluate progress toward goals on their IEP or transition planning form. In the last two sections (Communicating and Thank You, Honorable Chairperson), students learn how to effectively communicate in small group and how to take a meaningful role in planning and participating the meeting. Two recent studies (Wehmeyer et al., 2011; Lee et al., 2011) were

conducted to examine the effectiveness of *Whose Future Is It Anyway?* on middle or high school students with disabilities.

Wehmeyer and his colleagues (2011) used a randomized-trial, placebo control group designed and repeated measures multivariate analysis of variance to examine the influence of WFA on the transition knowledge and self-determination scores of students with disabilities. This study included 493 middle or high school students across multiple disabilities receiving special education services. The researchers used two measures of self-determination, *The Arc's Self-Determination Scale* (SDS) and *The AIR Self-Determination Scale* (AIR), to measure participants' levels of self-determination. The first measure, SDS, was developed by Wehmeyer and Kelchner (1995). It is a 72-item self-report format measuring four essential characteristics of self-determined behavior (behavioral autonomy, self-regulation, psychological empowerment, and self-realization). The second measure, AIR (Wolman et al., 1994), is a measure of individual capacity for and opportunity to act in a self-determined manner, and includes educator, student, and parent forms. The results showed that although all students performed better in self-determination scores during the time period, students in the intervention group displayed significantly more positive gains than did students in the control group.

In another study, Lee and colleagues (2011) examined the effects of WFA with a computer-based reading support program on the self-determination of students with disabilities in a middle school. A total of 168 junior or middle school students with disabilities were assigned to an experimental group ($n=86$) or a control group ($n=82$) in this study. The students in the experimental group received WFA lessons delivered using a cognitively accessible text reader (Rocket Reader) while the students in the control group received WFA without Rocket Reader. For students' self-determination, data were collected from the *The Arc's Self-*

Determination Scale and *The AIR Self-Determination Scale*. Student self-efficacy for educational planning was measured using a 20-item questionnaire constructed by Wehmeyer and Lawrence (1995). In addition, all students also received a feedback form about the WFA and Rocket to provide written social validation data. The results showed that all students displayed better performance in self-determination scores after the intervention. In addition, all students self-efficacy and outcome expectance improved was significant (*Wilk's A* = .95, $F(2, 162) = 4.18$, $p < .05$, $\eta^2 = .05$). For the understanding the transition planning meeting measurement, the results showed that all students increased after the intervention and there was significant difference between experimental and control group ($t(166) = 2.26$, $p < .025$).

I Can Use Effort

The *I Can Use Effort* strategy is an adaptation of the Self Advocacy Strategy for elementary school-age students (Neale & Test, 2004). The strategy was modified by adapting the skill lists to match the curriculum requirements for elementary grade levels and to set specific steps of the intervention. The goal of this strategy was to encourage students' active involvement early in their education process and to help students identify and communicate their learning needs. Six steps were included in this strategy: (a) discussing with the students about the importance of knowing their strengths and needs; (b) Introducing "I CAN" strategy and "EFFORT" behavior; (c) implementing "I CAN" strategy and "EFFORT" behavior to identify and effectively communicate students' strengths and needs to set up goals; (d) reviewing the goals and practicing the communication skills students learned before; (e) presenting what they learned in a role-playing situation; (f) practicing the skills in role-playing activities again and get feedback from teachers.

Neale and Test (2010) conducted a study of the I Can Use Effort strategy with third- and fourth- grade students to evaluate its effectiveness on verbal contributions to IEP participation. The authors used a single subject design for four students aged range between nine to 11 years old. Each student was taught the I Can Use Effort strategy steps listed previously. Once they completed the six steps, a mock IEP was provided for testing their generalization and maintenances skills. The researchers asked questions related to students' IEP meetings to measure the quality of student verbal contributions and generalization of skills in the mock IEP. Social validity was measured by "student intervention rating profile". The results of this study indicated that all students score significant higher (range between 2.2 to 8.9 ($M=5.2$)) on their verbal contributions and IEP participations from intervention probes. Visual inspection of the graphs also showed a steady ascending trend in the data among all students. Furthermore, this study demonstrated that students at this young age could be taught to improve their self-advocacy skills.

Conclusion

The importance of student involvement in Individualized Education Program (IEP) meetings has been emphasized in the IDEA 2004. Most adolescents with disabilities attend in their IEP meetings; however, they hardly involve actively (Cameto, Levine, & Wagner, 2004; Martin et al., 2006). There are many reasons students may not participate more actively: limited opportunities to act in a self-determined manner in the meeting, lack of instruction on skills leading to enhanced self-determination, lack of instructional training for teachers, and dominated teacher-led meetings. Research to date has suggested that students with disabilities can be actively involved in the IEP process and their self-determination can also be promoted through involvement of the meetings.

In terms of implications for practice for educators related to promoting self-determination in the IEP meeting, three factors seem important to consider: what skills lead to enhanced self-determination, what current instructional strategies lead to increased self-determination in IEP meetings, and how so these strategies emphasize component elements of self-determined behavior (Wood, Karvonen, Test, Browder, & Algozzine, 2004). In this literature review, all three factors were addressed in following strategies: The *Self-Directed IEP* focuses on teaching 11 leadership behaviors to improve student choice-making, decision-making, self-advocacy, and leadership skills. The *Self-Advocacy Strategy* promotes 5 advocacy skills and 5 appropriate behaviors for the purpose of promoting student choice-making, decision-making, problem solving, self-advocacy, and self-awareness skills. *Whose Future Is It Anyway?* supports students to gain a concept of transition planning and enables them to self-direct their educational plans, in doing so, they are expected to develop choice-making, decision-making, problem-solving, self-advocacy, self-efficacy, and self-awareness skills. *I Can Use My Effort* focuses on “I CAN” strategy and the “EFFORT” behaviors to enable students choice-making, decision-making, problem-solving, self-advocacy, self-efficacy, and self-awareness skills.

The most important finding was that given appropriate instruction, students with disabilities could learn skills leading to enhanced self-determination. All four strategies were effective, at varying levels, in promoting component elements of self-determination such as: choice-making, decision-making, problem-solving, self-advocacy, self-awareness, self-knowledge, and leadership skills. These outcomes are consistent with components of self-determination (Wehmeyer & Field, 2007). Such instruction supports students to gain an equal status in the IEP and to be more actively involved. The findings contribute in several ways in the current literature on the active student participation in their IEP meetings.

Across studies, two unique findings were identified. The first one relates to participants. Most participants were middle or high school students. Only one study investigated students during elementary school years (Neale & Test, 2010). There is a need, most likely, to begin instruction on these skills when students are younger.

The second is on participants' disability. Most studies recruited students with mild to moderate levels of disabilities (e.g., learning disability, emotional and behavioral disability, intellectual disability). The importance of promoting the self-determination of students with severe disabilities has not been as extensively discussed in the literature on promoting student involvement. However, it does not mean that students with severe disabilities cannot lead their IEP meetings. There is a need for future study to investigate how to support students with severe disabilities to lead their IEP meeting.

Implications

All in all, the effectiveness of these four strategies has implications for policy. As mentioned previously, IDEA 2004 played an important role for students' attendance in IEP meetings to plan for achieving positive educational outcomes. However, insufficient descriptions exist regarding students' role in the meeting or instructional support for the meeting. Most decisions have been made by adults including teachers or parents (Martin, Marshall, & Sale, 2004). The preliminary data suggests that strategies such as *Self-Directed IEP*, *Self-Advocacy Strategy*, *Whose Future Is It Anyway?* and *I Can Use My Effort* supports a need for policy change to recognize the importance of students' active involvement and self-determined behaviors during IEP, and consider adding a description on instructional practices prior to the meeting.

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Table 1. Self-determination Component Definitions and Examples of SD Skills in IEP Meetings

Component Elements of Self-Determined Behaviors	Definition	Examples of teaching self-determined behaviors in IEP meeting
Choice-making	Choice-making is a process of an identification of a preference and an acting of choosing.	Help students identify their shopping list for her grocery shopping.
Decision-making	Decision-making is a process of selecting one of several already identified options.	Let students decide what they want to do during leisure time.
Problem-solving	Problem solving is a process of identifying and designing solutions to problems by using available information.	Given some challenging situations, enable students to analyze the problems and find out the solutions.
Goal-setting and attainment	Goal-setting and attainment involves students' abilities to determine and set a goal, to develop a plan to achieve that goal, and to monitor and adjust the goal accordingly.	Help students develop a goal and set up a plan to obtain what they want to do for future career.
Self-regulation/ self-management	Self-regulation refers to individual's ability to examine their environments and their repertoires of responses, and to revise the strategies as needed.	Help students set up weekly schedule and checklist for it.
Self-advocacy and leadership	Self-advocacy requires individuals to stand up for them self and to advocate on their own behalf.	Enable students to effectively communicate for their rights.
Positive perceptions of control, efficacy, and outcome expectations	It refers to individual's belief in his/her abilities to successful in certain behaviors.	Help students value their strengths and abilities.
Self-awareness and self-knowledge	Self-awareness means a comprehensive and reasonable knowledge and understanding of one's own strengths and limitations.	Help students understand their disabilities.

Adapted from Wehmeyer & Field, 2007

Table 2. Summary of Included Studies

Study	Participants	Target Behaviors	Research Design	Intervention	Findings
Allen et al. (2001)	4 adolescents with mental retardation; 15-21 years old	Leading the meeting behaviors, reporting interests, reporting skills and limits, and reporting options and goals	Multiple baseline across instructional 4 units	<i>Self-Directed IEP instruction</i>	Positive
Arndt et al. (2006)	5 adolescents with mental retardation, autism, learning disability, emotional and behavioral disability, and cerebral palsy; 14 -18 years old	Introducing meeting, reviewing past goals, discussing future goals, and closing meeting	Multiple baseline design across instructional 3 units	<i>Self-Directed IEP instruction</i>	Positive
Hammer (2004)	3 adolescents with learning disabilities; 12-13 years old	Advocating behaviors (responding IEP related information, sharing specific information)	Multiple baseline design across subjects	<i>Self-Advocacy Strategy</i>	Positive
Lancaster et al. (2002)	22 adolescents with learning disabilities, behavior disorders, health impairment; 16-17 years old	Advocating behaviors (responding IEP related information, sharing specific information), percentage of goal score	Multiple baseline design across subjects	<i>Self-Advocacy Strategy</i>	Positive
Lee et al. (2011)	168 junior or middle school students with reading difficulties	Self-determination, self-efficacy, outcome expectancy for planning improved	Randomized controlled experimental design	<i>Whose Future Is It Anyway?</i>	Positive
Martin et al. (2006)	130 adolescents with learning disabilities, mental retardation, emotional disorders, health impairment; middle and high schools	Percentage of talking, percentage of discussing transition issues, eleven leadership behaviors, perspectives on meeting	Randomized controlled experimental group design	<i>Self-Directed IEP instruction</i>	Positive
Neale & Test, 2010	4 elementary students with intellectual or learning disabilities	Verbal contribution, IEP participations	Multiple probes across participants design	<i>I Can Use Effort</i>	Positive
Snyder (2002)	5 adolescents with mental retardation; 14-20 years old	Introducing meeting behaviors, reviewing past goals, discussing future goals, and closing meeting behaviors	Multiple baseline design across instructional 4 units	<i>Self-Directed IEP instruction</i>	Positive
Test & Neale (2004)	4 adolescents with learning disabilities, mental retardation; 8 grade	Advocating behaviors (responding IEP related information, sharing specific information)	Multiple baseline design across subjects	<i>Self-Advocacy Strategy</i>	Positive
Wehmeyer et al. (2011)	493 middle or high school students with multiple disabilities	Transition knowledge, self-determination	Randomized-trial, placebo control group	<i>Whose Future Is It Anyway?</i>	Positive

Table 3. Component Elements of Self-Determined Behavior

	<i>Self-Directed IEP</i>	<i>Self-Advocacy Strategy</i>	<i>Whose Future Is It Anyway?</i>	<i>I Can Use Effort</i>
Choice-making skills	X	X	X	X
Decision-making skills	X	X	X	X
Problem-solving skills	X	X	X	X
Goal-setting and attainment skills	X	X	X	X
Self-management skills				
Self-advocacy and leadership skills	X	X	X	X
Positive perceptions of control, efficacy, and outcome expectations	X		X	X
Self-awareness	X	X	X	X
Self-knowledge	X	X	X	X