Using IEP Goals and Objectives to Teach Paragraph Writing to High School Students with Physical and Cognitive Disabilities

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Abstract: Current research and legislation show a need for special education instruction to be more closely aligned with general education curriculum and develop strategies that support the development of self-determination skills in students with disabilities. The present study embeds self-determination skills of writing annual goals and objectives in the language arts goal of writing a paragraph. GO 4 IT...NOW!, a self-regulated writing strategy, was used with four high school students with disabilities. Paragraphs written about IEP goals were scored for content and quality. Data were also collected on quality scores for daily paragraphs and student satisfaction with learning the strategy. Results showed a functional relationship between GO 4 IT...NOW! instruction and increase in IEP content and quality scores.

Current legislation and research indicate a need for special education instruction to be more closely aligned with the general education curriculum while at the same time, to continue to develop strategies that support the development of self-determination skills in students with disabilities (Baker, Gersten, & Scanlon, 2002; Individuals With Disabilities Education Act [IDEA], 1997; Test et al., 2004; Wehmeyer, Field, Doren, Jones, & Mason, 2004). For example, access to the general education curriculum is mandated by the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA) and is a top concern of service providers, administrators, parents, and individuals with disabilities (Baker et al., 2002; Office of Special Education Programs [OSEP], 2000). IDEA also addresses self-determination by mandating (a) student involvement in the process of developing individualized education programs (IEPs) and (b) consideration of students’ interests and preferences in transition planning.

One approach to teaching self-determination skills that researchers have identified is teaching students to become more involved in their IEP planning. In a recent review of the literature on student involvement in the IEP process, Test et al. (2004) reported that students with disabilities can be successfully involved in the development of their IEP goals and objectives and can increase participation in their IEP meetings. For example, Allen, Smith, Test, Flowers, and Wood (2001) demonstrated that four high school students with moderate developmental disabilities improved their ability to lead IEP meetings and report their interests, skills, and goals. Zhang (2001) found that involving students in planning their IEP goals led to increases in self-determination. Konrad and Test (2004) investigated the effects of a strategy to teach development of IEP goals and objectives using an IEP template in the context of a language arts middle school resource setting. The instructional strategy increased students’ abilities to complete the template meaningfully and accurately, thereby contributing to the
The body of literature that students can learn to participate in identifying and writing their IEP goals and objectives. Although each of these studies shows that students with disabilities can increase self-determination skills, none of these studies examined self-determination skills embedded within a specific curricular content.

Given that stakeholders in special education are concerned about providing access to and progress in the general education curriculum (OSEP, 2000), it would seem a logical next step to investigate ways to integrate self-determination and academic skills. For example, could a learning strategy that embeds a meaningful self-determination skill, such as writing IEP goals and objectives, be used to address standards in an established content area, such as language arts?

The National Council of Teachers of English (NCTE; 1996) developed a list of 12 standards that guides the development of curriculum and instruction in English and Language Arts. Standard five on the list suggests that students develop the ability to use different writing process elements to communicate with different audiences for a variety of purposes. Writing about one’s own goals and objectives in preparation for IEP meetings appears to be a meaningful skill closely aligned to NCTE standard five, in that students must clearly communicate their goals and steps towards reaching those goals to the IEP team.

To inform the process of teaching writing to students with disabilities, recent research has suggested the use of procedural facilitators (Baker, Gersten, & Scanlon, 2002) or self-regulated strategy development models (Harris, Graham, & Schmidt, 1998). With a self-regulated writing strategy, students are explicitly taught to follow a plan in advance of and as they write, thus avoiding the “retrieve-and-write” process typical of writing produced by students with learning disabilities (Troia & Graham, 2002). Baker et al. (2002) suggested that such strategies provide a “plan of action” that gives students organization and structure before attempting the task.

Troia and Graham (2002) described the effects of self-regulated strategy development (SRSD) instruction on the ability of students with learning disabilities to improve their performance on story writing tasks. Compared to students using a process approach, students using the SRSD model scored higher on measures of writing performance. Sexton, Harris, and Graham (1998) had similar results in quality of essays written using the SRSD model with students with learning disabilities. As a result, self-directed strategy development appears to be a successful tool in teaching writing skills to students with disabilities.

Writing a paragraph requires the writer to identify a main idea, support the idea with specific details, and restate the idea in a concluding sentence (McDougal-Littel, 2001). Writing an IEP goal requires the writer to make an estimate of the outcome to expect in an academic year divided into short-term objectives (Lignugaris-Kraft, Marchand-Martella, & Martella, 2001). Aligning these two tasks may allow teachers to infuse promoting self-determination skills as students work towards general education curriculum goals in language arts. To date, no research has examined the effects of aligning the self-determination skill of writing IEP goals and objectives with the academic skill of writing a paragraph. Therefore, the purpose of this study was to examine the effects of GO 4 IT . . . NOW! strategy instruction on students’ abilities to write IEP goals and objectives and paragraph writing skills. Specifically, this study sought to determine whether GO 4 IT . . . NOW! instruction would lead to (a) improved IEP goal paragraphs, as measured by students’ scores on a paragraph writing scoring guide and an IEP goal content scoring guide, and (b) improved paragraph writing skills, as measured by students’ scores on a paragraph writing scoring guide for daily generalization paragraphs.

Method

Participants

Four high school students certified as eligible for Special Education Services participated in this study. Students were selected from the second investigator’s caseload of 12 students at an urban high school in the southeastern United States. Students attended classes in a self-contained setting for students with orthopedic impairments for 70% or more of the day. Students who (a) showed the greatest
need for intervention, as determined by performance on writing tasks during baseline, and (b) had signed parent consent and student assent were selected to participate. All students had the opportunity to receive instruction once the study was completed.

Dale was a 16-year-old, African-American male. He had been identified with an orthopedic impairment, and he struggled with academic skills. At age 11, he tested at a K.9 grade level for reading and a 1.4 grade level for written expression (Wookcock-Johnson III [WJ III]). Due to his physical disability, Dale uses a portable note taker placed on an adjustable slant board to complete all written assignments.

Jake was an 18-year-old, white male. He had been identified as having an “educable mental disability.” At age 12, he tested at a 1.4 grade level for both reading and written expression (WJ III). Due to his physical disability, Jake uses a word processor with enlarged font size to complete all written assignments.

Mark was a 17-year-old, African-American male. He had been identified with multiple disabilities. At age 15, he tested at a 1.0 grade level for reading and a 1.2 grade level for written expression (WJ III). Due to his physical disability, Mark uses a word processor with word prediction software and auditory feedback to complete all written assignments.

Steve was a 15-year-old, white male. He had been identified with an orthopedic impairment. At age 12, he tested at a 2.0 grade level for both reading and written expression (WJ III). Due to his physical disability, Steve uses a portable note taker placed on an adjustable slant board to complete all written assignments.

All students were enrolled in an occupational course of study, which provides instruction in basic writing and self-determination skills. Prior to the study, all students received instruction on writing a paragraph using the standard model of identifying a main idea, supporting the main idea with details, and summarizing with a concluding sentence (McDougal-Little, 2001). Students practiced writing skills by responding to daily prompts about recently reviewed topics. This daily writing was an established part of the students’ classroom routine. In addition, all students had participated in their IEP meetings by verbally responding to questions from IEP team members and discussing progress toward their transition goals.

Setting

All instruction took place in a self-contained classroom setting. Pre-intervention lessons were taught in a group by the second investigator with the support of a classroom assistant. GO 4 IT . . . NOW! strategy instruction took place in a corner of the classroom with the second investigator delivering instruction 1:1 and the classroom assistant supervising independent work stations.

Experimenter

The second author served as the experimenter. She had a master’s degree in special education and was in her first year of a doctoral program in special education. She had 28 years of experience teaching students with multiple disabilities.

Data Collection

The primary dependent measures were (a) writing quality of IEP goal paragraphs and (b) content of IEP goal paragraphs. As a generalization measure, we also measured writing quality of daily paragraphs.

Writing quality of IEP goal paragraphs. The writing quality of students’ IEP goal paragraphs was measured using a 10-point paragraph scoring guide. Points were distributed as follows: 2 points for a topic sentence, 1 point for each supporting detail (up to 4 points), 1 point for logical presentation of ideas, 1 point for appropriate use of transition words, 1 point for a restatement of the topic in the concluding sentence, and 1 point for excluding extraneous information. The topic sentence had to be a clear statement of a goal and contain a subject and verb to earn both points. If the sentence stated a goal but was not a complete sentence, the topic sentence earned one point. If it did not state a goal, no points were awarded.

Each supporting detail had to be directly related to the topic and contain a subject and a verb to earn the point. To earn the point for logical presentation, the ideas had to be se-
quenced in an order that made sense, and there needed to be at least two supporting details to earn points for logical presentation. Finally, the concluding sentence had to be a complete sentence and restate the topic to earn the point.

The scale was a modified version of the 8-point scale used by Wallace and Bott (1989) in a study designed to teach paragraph-writing skills to middle-school students with disabilities. The scoring guide was modified in two ways. First, Wallace and Bott awarded points for only three supporting details, rather than four. Students in this study learned to write four objectives as steps toward reaching their goals; therefore, it made sense to award them points for four supporting details in their paragraphs. Second, students in this study received a point for writing a concluding sentence that restated the paragraph topic.

Content of IEP goal paragraphs. The content of students’ IEP goal paragraphs was measured using a 12-point scoring guide. The scoring guide included six items, each of which could be scored with a 0 (i.e., “There is no evidence of this skill or component, or the response is incorrect”), 1 (i.e., “Student shows an attempt; however, the response is incomplete”), or 2 (“Response is complete, makes sense, and reflects student’s understanding of self and process”). This scale is a modified version of the scale used in an earlier study (Konrad & Test, 2004) in which students completed an IEP Template.

Writing quality of daily paragraphs. The writing quality of students’ daily generalization paragraphs was measured using the same 10-point paragraph scoring guide used to measure the writing quality of students’ goal paragraphs.

Interrater reliability. To determine interrater reliability, a second scorer independently scored 20% of the products. An item-by-item analysis was used to determine reliability for the following dependent variables. Specifically, each scorer assigned points for each of the items, and the number of agreements was divided by the total number of items (i.e., 6 items for the goal articulation scale and 9 items on the paragraph-writing scale). This quotient was then be multiplied by 100 to convert it to a percentage. Reliability on writing quality of IEP goal paragraphs ranged from 89% to 100% with a mean of 94%. Reliability on the quality of the goal paragraphs ranged from 56% to 100% with a mean of 87%.

Content validity. Content validity of students’ paragraphs was determined by having a general education English teacher independently score a sample of 40 randomly selected daily journal paragraphs and goal paragraphs written before and after strategy intervention. The scorer did not know about the purpose of the study or when the paragraphs were written. All work samples were submitted without names to ensure confidentiality. Paragraphs were typewritten, with all spelling and punctuation errors corrected. Scoring was based on the North Carolina Writing Assessment Content Rubric. Although this rubric was designed to score essays, the English teacher was asked to rate the single paragraphs as a full product (i.e., no points deducted because it was one paragraph instead of multiple paragraphs).

Social validity. As a measure of social validity, students completed a modified version of the Student Intervention Rating Profile (Snyder, 2002) on the last day of intervention. This survey included 8 items to which students responded using a 6-point Likert scale to indicate their level of agreement or disagreement with the statement. The directions and items were read aloud to the students, so that those with reading difficulties could understand the survey. In addition, students were instructed to leave their names off their surveys and to respond to the items honestly.

Experimental Design

We used a multiple baseline across participants design in this study. However, this study’s design differed from typical multiple baseline designs in that data were not collected on the primary dependent measures during intervention. Instead, measures related to participants’ goal paragraphs were collected during baseline and after intervention was complete.

All students received three baseline probes, and decisions about with whom to begin intervention were based on the primary dependent variables. We chose the student with the
most stable baseline to begin intervention first. Once the first student began intervention, daily IEP goal paragraph probes were discontinued with all students. After intervention for first student, all four students received the IEP goal paragraph probe three times again. The same decision rules were used to begin intervention with each of the subsequent students.

Procedure

Pre-intervention. Prior to collecting baseline data, all students in the experimenter’s class received instruction on the contents of an IEP. Specifically, they learned the purpose of an IEP, the meaning of present levels of performance and how they may be determined and possible skill areas to target in the goals and objectives section. As part of the pre-intervention training, each student identified 15 needs to address in academic, non-academic, and vocational areas. These needs became the topics of students’ IEP goal paragraphs in subsequent phases of the study.

Baseline. Each day during baseline, students were prompted to write an IEP goal paragraph, addressing one of their needs. The IEP goal paragraph prompt was given over three consecutive days, with instructions to select a need different from the previous day’s need. Specifically, the second experimenter instructed the students to, “Write a paragraph about one of your IEP goals.” Paragraphs were scored using the scoring guides. The student with the most stable baseline was selected to begin treatment intervention first.

Intervention. GO 4 IT . . . NOW! strategy instruction included 11, 45-min lessons that were delivered in a 1:1 format. Table 1 shows an overview of the lesson sequence. All instruction took place in an area of the classroom separate from the other students. GO 4 IT . . . NOW! is a learning strategy that teaches students to write paragraphs about goals and objectives. Specifically, each paragraph includes a Goal, Objectives, (4 Objectives), and an Identified Timeline. In order to help students generalize this strategy to other types of paragraphs, students learn to self-regulate by checking their paragraphs to be sure that they Named their topic, Ordered their steps, and Wrapped it up by restating the topic. Each lesson followed a similar format, with a review of previously learned concepts, statement of the lesson objective, teacher input/modeling, practice with feedback, and a summary of the day’s lesson. The 11 lessons encompassed all six stages of the SRSD model (Harris et al., 1998). No data were collected on students IEP goal paragraphs during intervention.

Post-intervention. On each of the three consecutive days following intervention, all students wrote an IEP goal paragraph about a need not yet addressed. Paragraphs were scored using the scoring guides. At the same time, students who had not yet received GO 4 IT . . . NOW! training also completed three IEP goal paragraphs. The student with the most stable baseline was then selected to begin treatment intervention.

Maintenance. IEP paragraph probes were administered for all students at the completion of each student’s intervention phase. Therefore, for students who had previously received post-intervention probes, additional probes served as maintenance checks. For example, the first student, Dale, received three post-intervention probes immediately following instruction, and three maintenance checks when the second student, Mark, received his post-intervention probes. Again, students were instructed to choose any need from their pre-instruction needs list that had not yet been addressed.

Generalization. Throughout all phases of the study, students continued to write daily journal paragraphs that addressed recently learned material from core classes, current events, or personal topics (e.g., “Describe a perfect Saturday,” “Describe the four main jobs of governor,” “Describe how food moves through the digestive system”). Data were taken on the daily journal paragraph scores to examine possible carryover effects of the GO 4 IT . . . NOW! strategy on paragraph writing.

Procedural reliability. The first author observed six of the instructional sessions to be sure lessons were being implemented correctly. These observations were distributed across the intervention so there were procedural reliability checks in each of the instructional stages. In addition, there was at least one observation for each of the first three students to receive the intervention.

In order to document adherence to the
intervention, the observer used a lesson plan as a checklist. The lesson plan was divided into segments, and the observer marked each segment as present (+) or not present (−). The number of present segments across all six sessions was divided by the total number of segments and multiplied by 100 to obtain procedural reliability score of 96%.

**Results**

**Content of IEP Goal Paragraphs**

Figure 1 presents students’ scores on the content indicators of the IEP paragraph scoring guide. The effects of the intervention were positive for all students. During baseline, Dale’s scores ranged from 4 to 6 with a mean of 5.3. His first three post-intervention scores immediately following GO 4 IT . . . NOW! instruction ranged from 10-12 with a mean of 11.3. At his 2-week maintenance check, Dale’s scores ranged from 8-12 with a mean of 10.6, and his 4-week and 6-week maintenance scores were all 12.

Results were similar for the second student, Mark. During baseline, Mark’s scores ranged from 0 to 6 with a mean of 3.0. His first three post-intervention scores immediately following GO 4 IT . . . NOW! were all 12. At his 2-week and 4-week maintenance checks, his scores were also 12.

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**TABLE 1**

**Overview of the GO 4 IT NOW! Lesson Sequence**

<table>
<thead>
<tr>
<th>Writing Stage</th>
<th>Lesson(s)</th>
<th>Objective(s)</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop and activate prior background knowledge</td>
<td>1–3</td>
<td>Student will be able to (a) identify strong and weak goals, (b) match objectives to goals, and (c) identify parts of a paragraph</td>
<td>Teacher (a) explains difference between a goal and an objective, (b) helps student identify well written and poorly written goals, (c) models process of turning poorly written goals into better ones, (d) models process of turning needs into goals, and (e) explains what a paragraph is, using examples and non-examples</td>
</tr>
<tr>
<td>Introduce the strategy</td>
<td>3</td>
<td>Student will be able to identify the purpose of the GO 4 IT . . . NOW! strategy and when to use it.</td>
<td>Teacher introduces GO 4 IT NOW! strategy and explains that student will be learning to apply the strategy for writing paragraphs about his/her IEP goals and objectives, as well as for other types of sequential writing.</td>
</tr>
<tr>
<td>Model use of the strategy</td>
<td>4–5</td>
<td>Student will be able to describe how the GO 4 IT . . . NOW! strategy is applied</td>
<td>Teacher models strategy use with at least one academic and one non-academic need/goal.</td>
</tr>
<tr>
<td>Memorize the strategy</td>
<td>6–8</td>
<td>Student will be able to memorize the GO 4 IT NOW! strategy.</td>
<td>Teacher uses flash cards to help student memorize the mnemonic devices.</td>
</tr>
<tr>
<td>Support strategy use</td>
<td>6–8</td>
<td>Student will be able to write a goal paragraph with assistance from the teacher.</td>
<td>Teacher assists as student uses the GO 4 IT NOW! strategy worksheet to develop goal paragraphs based on the needs identified in pre-instruction.</td>
</tr>
<tr>
<td>Independent performance</td>
<td>9–11</td>
<td>Student will be able to (a) write a goal paragraph independently and (b) edit a goal paragraph with assistance from the teacher.</td>
<td>Teacher instructs student to write a paragraph about an IEP goal, using goals from previous writing activities. Student writes paragraph independently, with verbal reminder to use strategy. When finished, student and teacher use IEP paragraph quality scoring guide to edit paragraph.</td>
</tr>
</tbody>
</table>
Figure 1. IEP paragraph content scores.
During baseline, Steve’s scores ranged from 2 to 6 with a mean of 2.9. The first three post-intervention scores immediately following GO 4 IT . . . NOW! instruction were all 12. At his 2-week maintenance check, Steve’s score was also 12.

During baseline, Jake’s scores ranged from 0 to 6 with a mean of 1.1. The first three post-intervention scores immediately following GO 4 IT . . . NOW! instruction were all 12. No maintenance data were available for Jake due to time constraints imposed by the school calendar (i.e., summer vacation).

Writing Quality of IEP Goal Paragraphs

Figure 2 presents each student’s writing quality scores on students’ IEP goal paragraphs. Again, the effects of the intervention were positive for all 4 students. During baseline, Dale’s scores ranged from 3 to 5 with a mean of 3.6. The first post-intervention three scores immediately following GO 4 IT . . . NOW! instruction ranged from 9 to 10 with a mean of 9.3. At his 2-week maintenance check, Dale’s scores ranged from 9 to 10 with a mean of 9.3. At his 6-week maintenance check, all three of Dale’s scores were 10.

During baseline, Mark’s scores ranged from 0 to 7 with a mean of 2.8. With the exception for the first data point, there was a stable baseline before intervention. On the first paragraph, we discovered that Mark received prompting from a substitute teacher assistant who was not aware of the data collection procedures. The first three post-intervention scores immediately following GO 4 IT . . . NOW! instruction were all 10. No maintenance data were available for Jake due to time constraints imposed by the school calendar (i.e., summer vacation).

Writing Quality of Daily Generalization Paragraphs

Figure 3 presents each student’s quality scores on their generalization paragraphs. During baseline, Dale’s scores ranged from 1 to 4 with a mean of 2.33. During intervention, his scores ranged from 3 to 8 with a mean of 6.1. Visual inspection of the graph shows an ascending trend, indicating the possibility of generalization of the GO 4 IT . . . NOW! strategy to other writing prompts. At his 2-week maintenance check, Dale’s scores ranged from 6 to 7 with a mean of 6.6. At his 4-week maintenance check, his scores ranged from 7 to 8 with a mean of 7.6. At his 6-week maintenance check, Dale’s scores ranged from 3 to 10 with a mean of 7.33.

During baseline, Mark’s scores ranged from 5 to 8 with a mean of 6.3. During intervention, his scores ranged from 4 to 9 with a mean of 7.36. Visual inspection of the graph shows an ascending trend, indicating the possibility of generalization of the GO 4 IT . . . NOW! strategy to other writing prompts. At his 2-week maintenance check, Mark’s scores ranged from 8 to 10 with a mean of 9.3. At his 4-week maintenance check, his scores ranged from 9 to 10 with a mean of 9.8.

During baseline, Steve’s scores ranged from 3 to 5 with a mean of 4.33. During intervention, his scores ranged from 4 to 9 with a mean of 6.62. Visual inspection of the graph shows an ascending trend, indicating the possibility of generalization of the GO 4 IT . . . NOW! strategy to other writing prompts. At his 2-week maintenance check, Steve’s scores ranged from 7 to 8 with a mean of 7.33.

During baseline, Jake’s scores ranged from 6 to 9 with a mean of 7.33. During intervention, his scores ranged from 5 to 10 with a mean of 7.5. Visual inspection of the graph shows an ascending trend, indicating the possibility of generalization of the GO 4 IT . . . NOW! strategy to other writing prompts. No
Figure 2. IEP paragraph quality scores.
Figure 3. Daily generalization journal paragraph scores.
maintenance data were available for Jake due to time constraints imposed by the school calendar (i.e., summer vacation).

**Content Validity Data**

Forty daily journal and IEP goal paragraphs were selected randomly from all four participants and scored by a general education English teacher. Seventeen paragraphs written in the pre-intervention phase were scored “NS,” which is the code used on the state assessment rubric for compositions that are unscorable because they are blank, off-topic, or incoherent. Of the 23 paragraphs written in the post-intervention phase, 19 earned a score of “Level 3,” which is a passing score. The teacher commented that, although the paragraphs followed an obvious formula, they met the criteria for “proficient” writing.

**Social Validity Data**

As a measure of consumer satisfaction, following intervention, the students completed a modified version of Snyder’s (2002) **Student Intervention Rating Profile**. The total scores could range from 8 (I disagree) to 48 (I agree), with higher scores indicating greater treatment acceptability. Table 2 presents students’ scores on the SIRP. Total scores ranged from 44 to 48 with a mean of 45.5, indicating that the students found the IEP writing instruction acceptable.

**TABLE 2**

**Students’ Ratings on the Student Intervention Rating Profile**

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>The writing training was fair.</td>
<td>5.5</td>
<td>4–6</td>
</tr>
<tr>
<td>The training was challenging but not too difficult.</td>
<td>5.7</td>
<td>5–6</td>
</tr>
<tr>
<td>This was a good way to train me how to write paragraphs.</td>
<td>6.0</td>
<td>6–6</td>
</tr>
<tr>
<td>The training I received would be good for other students.</td>
<td>6.0</td>
<td>6–6</td>
</tr>
<tr>
<td>I like the training I received for writing paragraphs.</td>
<td>5.7</td>
<td>5–6</td>
</tr>
<tr>
<td>I think learning to write paragraphs will help me do better in school.</td>
<td>6.0</td>
<td>6–6</td>
</tr>
<tr>
<td>The training helped me know more about my IEP.</td>
<td>6.0</td>
<td>6–6</td>
</tr>
<tr>
<td>This was a good way to train me how to write IEP goals.</td>
<td>5.7</td>
<td>5–6</td>
</tr>
</tbody>
</table>

**Discussion**

Results of this study indicate a functional relationship between GO 4 IT . . . NOW! strategy instruction and students’ abilities to articulate potential IEP goals and objectives and write paragraphs. Specifically, given 11 instructional sessions on how to write paragraphs based on IEP goals and objectives, the students in this study were able to improve their ability to write six-sentence paragraphs about potential IEP goals. In addition, students were able to generalize these paragraph-writing skills to other types of paragraphs and maintain their skills over time.

To date, studies have shown students can prepare for their IEP meetings (Cross, Cooke, Wood, & Test, 1999; Powers, Turner, Matuszewski, Wilson, & Phillips, 2001; Zhang, 2001), lead portions of their IEP meetings (Allen et al., 2001; Cross et al., 1999; Snyder, 2002; Reusen & Bos, 1994; Van Reusen, Deshler, & Schumaker, 1989), and implement their IEP goals and objectives (German, Martin, Marshall, & Sale, 2000). The findings of the current study contribute to the existing literature by providing initial evidence that students with disabilities can be involved in bridging the gap between the planning phase and meeting phase. Specifically, students in this study learned to write complete paragraphs about potential IEP goals and objectives, which could be used in developing an IEP draft.

Further, this study provides initial evidence that students can learn skills to promote IEP involvement while simultaneously learning academic skills. Given the current legislation...
(i.e., No Child Left Behind Act, 2001; IDEA, 1997) that calls for special education instruction to be more closely aligned with the general education curriculum and the importance of self-determination skills, it is important to identify such interventions (Baker et al., 2002; IDEA, 1997; Test et al., 2004; Wehmeyer et al., 2004). Aligning student involvement in the IEP process with written expression skills may allow teachers to promote the development of their students’ self-determination skills, while helping them work toward general education curriculum goals in language arts.

**Limitations and Implications for Future Research**

One limitation of this study was that the first baseline data point for Mark and Jake was contaminated because the substitute teacher assistant provided assistance to them on their paragraph quality. However, in both cases, once the problem was remedied, there were several additional baseline points that provided evidence that the students did not have the skills as indicated by the score on the first probe.

In addition, the small number of participants in this study limits generalizability of findings. This limitation is important to note because a practice cannot be considered “evidence-based” until there are enough data to demonstrate the intervention will be effective for individuals outside the participants in a study. According to Horner et al. (2005), a practice cannot be validated as evidence-based through single-subject research until there have been at least five studies across at least 20 participants conducted by at least three different researchers. Therefore, future research should focus on systematic replications of this study.

Another limitation of this study is variability of the generalization measures. While there appear to be ascending trends for all students, the variability makes the findings inconclusive. One possible explanation for the variability in students’ responses to the generalization probes may be that the various writing prompts had varying difficulty levels. For example, some prompts asked the students to write a paragraph about a personal topic (e.g., “What did you do over the weekend?”), whereas other prompts dealt with specific academic subject matter (e.g., “Explain how food moves through the digestive system.”).

Future research should control for this variability by developing prompts of similar difficulty level and having an expert (i.e., a language arts teacher) examine the prompts to ensure comparability. Then, each day throughout the study, a generalization prompt should be randomly selected from the pool of prompts.

Another potential limitation of this study is that there were no data collected on the primary dependent measures during intervention. There were several reasons we decided not to collect data continuously throughout intervention. First, each goal paragraph that students wrote had to be based on a need the student identified during pre-instruction. It did not make sense to have students develop superficial needs for the purposes of research. Instead, students’ goals were based on authentic needs. There would not have been enough authentic student needs to have students write a novel goal paragraph every day throughout intervention. In addition, with written expression, gains are often not seen immediately (Sexton et al., 1998), so again, it did not make sense to collect data throughout intervention.

Precedent has been set for this type of design in single subject studies examining the effects of written expression interventions (Troia & Graham, 2002). A future examination of the effectiveness of GO 4 IT . . . NOW! strategy instruction may employ a group design to address the limited number of needs from which students can develop goal paragraphs. A group design would only require students to develop enough needs to write a pre-instruction paragraph, 4-6 instruction paragraphs, and a post-instruction paragraph.

Another possible limitation was the fact that instruction was delivered in a one-on-one format, which may not be practical for teachers who are responsible for teaching larger groups of students. Future research should seek to determine if this instruction could be modified to be effective with groups of students. In addition, could this strategy be used in a general education setting?

Further, the school year ended before we had an opportunity to measure any generalization to other stages of the IEP process. Fu-
ture studies should investigate whether GO 4 IT . . . NOW! strategy instruction increases students’ participation in their IEP meetings and whether the goals students develop end up in their IEPs. In addition, is there an improvement in levels of goal attainment for students who develop their goals using this strategy?

Implications for Practice

Findings from this study indicate that GO 4 IT . . . NOW! is one potential strategy that may help students learn to write paragraphs and become actively involved in their own educational planning. Classroom teachers, before using this strategy, will need to make instructional decisions to modify the intervention to fit their students’ needs. For example, teachers may wish to build in more direct instruction on how to apply the strategy to other kinds of writing in an effort to increase generalization and thereby make the intervention more efficient.

In addition, the experimenter noticed that students in this study struggled with how to break down a goal into objectives. Students may need additional examples and practice to master this skill. Teachers may want to consider providing students with a “bank” of appropriate objectives once they have identified their goals. This would still allow students to have a voice in choosing objectives; however, it would provide assistance for students who struggle with generating the ideas.

Once students become proficient at developing goal paragraphs, teachers should identify meaningful ways for students to use their products and build on their skills. For example, students can learn how to string their paragraphs together into a complete “IEP essay.” Students may be encouraged to send these essays home to their families with their official invitations to attend IEP meetings. Or teachers may want to help students come up with more creative ways to share their paragraphs. Perhaps students could develop brochures, scrapbooks, or presentations to share at their IEP meetings.

The current standards-based reform movement, which emphasizes teaching academic skills to all students, holds promise for students with disabilities, who have traditionally been excluded from the general curriculum (Thurlow, 2002). However, this movement’s sole focus on academic skills is concerning to some special educators who are responsible for teaching transition and life skills (deFur, 2002). Thus, there has been a call for aligning transition education and standards-based education (Kochhar-Bryant & Bassett, 2003). One approach to this alignment may lie in identifying interventions that can teach transition skills (e.g., self-determination) and academic skills (e.g., writing skills) simultaneously. This study provides preliminary evidence that the GO 4 IT . . . NOW! strategy is such an intervention.

References


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Received: 30 October 2004
Initial Acceptance: 22 December 2004
Final Acceptance: 13 April 2005