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EFFECTS OF CURRICULUM MAPS AND GUIDING QUESTIONS ON THE TEST PERFORMANCE OF ADOLESCENTS WITH LEARNING DISABILITIES

B. Keith Lenz, Gary L. Adams, Janis A. Bulgren, Norman Pouliot, and Michelle Laroux

Abstract. Previous research on students with learning disabilities has indicated that they benefit most from explicit instruction. However, few studies have examined how explicit instruction may be translated to the logistical demands associated with large-group instruction in high school general education settings in ways that are socially acceptable to high school teachers. This intervention study evaluated the effects of two types of explicit instruction, curriculum maps and guiding questions, compared to the use of simple reviews of repeated information. Each was used to teach core curriculum content in a group-instruction format with 30 high school students with learning disabilities. A repeated-measures research design was used. Results of the comparison of student test scores associated with the three interventions indicated that the use of the curriculum maps significantly enhanced learning for students with learning disabilities more than guiding questions, and the use of guiding questions enhanced learning more than simple reviews of repeated information. Based on these findings, core curriculum general education teachers may be able to begin making their instruction more explicit and powerful by incorporating simple routines comprised of the use of curriculum maps to depict the importance and structure of the content and using these maps to lead and review learning through guided and interactive questioning.

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The way curriculum is currently delivered in core curriculum classrooms is an obstacle to developing an inclusive learning environment in the high school setting (Bulgren & Schumaker, 2006). Rather than ensuring student understanding, too often the major goal is to “cover” the content. Wiggins and McTighe (1998)

described this approach as “teaching by mentioning it,” or covering topics and ideas by drawing attention to them without developing them with students.

Three planning dilemmas must be addressed to be able to move away from a coverage approach toward a model that ensures understanding for students with

learning disabilities (LD). First, the teacher must sort through the information to be presented and select the chunks that are most critical to student learning. To this end, Wiggins and McTighe have argued for an approach to curriculum planning called "backward design," whereby curriculum and instruction is based on sorting information into three levels: "enduring understanding," "important to know and do," and "worth being familiar with" (Wiggins & McTighe, 1998, pp. 9-10).

Other educators over the last three decades have made similar suggestions (e.g., Beane, 1995; Blythe & Associates, 1998; Bruner, 1960, 1973; Caine & Caine, 1997; Lenz & Deshler, 2004; Perkins, 1992). Sorting the information to denote importance is critical for many students with disabilities, who may not have the same background information as their typical peers or who have trouble distinguishing important from less important information in teacher presentations (Lenz, Alley, & Schumaker, 1987).

The second planning dilemma is providing instruction about critical information in ways that ensure student understanding. As mentioned, previous research on students with LD has indicated that these students benefit most from explicit instruction (e.g., Carnine, Jones, & Dixon, 1995; Gersten, 1998; Hollingsworth & Woodward, 1993). Gersten (1998) proposed that explicit instruction is based on the use of (a) examples to demonstrate a concept or process; (b) models of proficient performance and step-by-step strategies; (c) advance organizers and guiding questions to focus attention and prompt critical thinking; (d) opportunities for student to share decision-making processes; (e) authentic, interactive, and adequate practice; and (f) frequent feedback and support for performance. However, few studies have examined how explicit instruction can be translated to address the logistical demands of group instruction frequently encountered in high school general education settings.

The third planning dilemma centers on how to find the time to identify the content, plan activities that result in explicit instruction, and then incorporate those activities into the instructional time available during the class period. Secondary-level teachers have reported that many activities that might make content accessible to students with disabilities are not feasible for them to implement due to time constraints (Schumm & Vaughn, 1995). In addition, most of the planning time made available to teachers is not quality planning time (Joint Committee on Teacher Planning for Students with Disabilities, 1995). It is spent administering the more functional aspects of getting through the day.

Some research on complex teaching routines demonstrates that explicit instruction can be moved success-

fully into general education core classes to improve the performance of students with disabilities (e.g., Bulgren, Deshler, & Schumaker, 1997; Bulgren, Schumaker, & Deshler, 1988; Bulgren, Deshler, Schumaker, & Lenz, 2000; Lenz et al., 1987; Lenz, Bulgren, Schumaker, Deshler, & Boudah, 1994). These routines are comprised of combinations of devices and instructional procedures linked together to help a teacher move through common instructional challenges (e.g., teaching concepts, leading students through a unit). Several research studies (Bulgren et al., 2000; Bulgren et al., 1988; Bulgren, Schumaker, Deshler, & Lenz, in prep.; Lenz et al., 1987; Lenz et al., 1994) have shown that when these complex routines are used on a consistent basis by a classroom teacher, the unit test scores of all students in the class improve significantly, usually by about 10 to 15 percentage points (e.g., Bulgren, Deshler, & Schumaker, 1997).

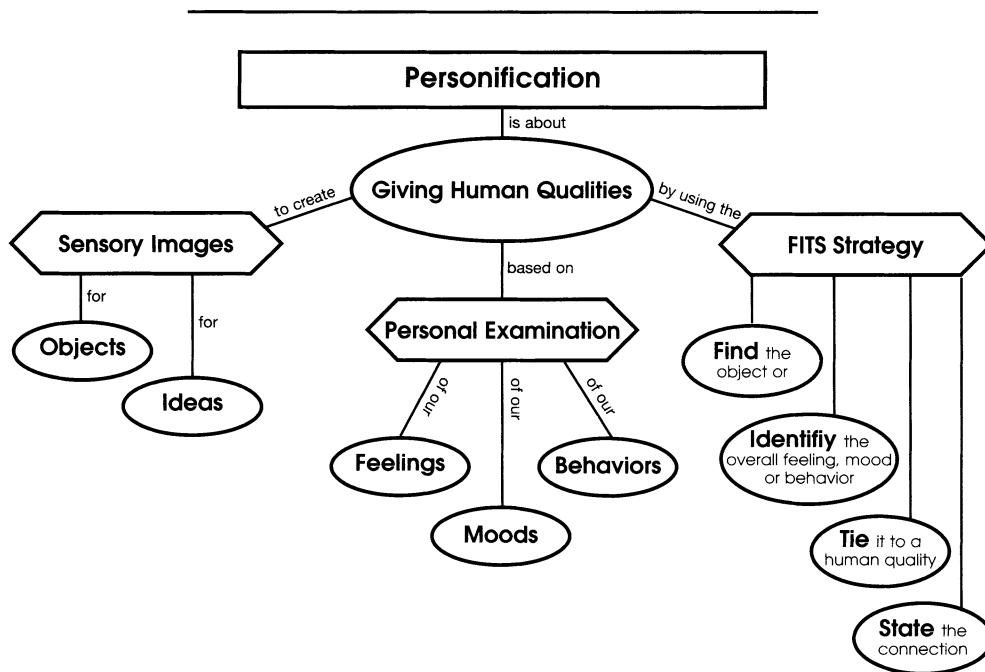
While these routines have been found to be effective, secondary teachers have reported that they are too complex and time consuming for easy integration into ongoing instruction. As a result, some teachers have reported abandoning the routines before mastering them enough to become effective with students with disabilities. In addition, informal reports from teachers involved in inservice activities focused on these routines have indicated that simpler, "starter" routines are needed that can more easily be woven into daily practice and serve as a foundation and springboard for other more explicit teaching activities, leading up to the use of more complex routines.

As a result of these suggestions, two complex teaching routines, the Unit Organizer Routine and the Question Exploration Routine, were selected and analyzed to determine how "starter" routines could be created. Both routines had already been developed and field-tested and were consistent with the criteria for explicit instruction presented by Gersten (1998).

The Unit Organizer Routine (Lenz et al., 1994) is based on a graphic curriculum map (see Figure 1) of an advance organizer designed to help students achieve the learning outcomes for a unit. An advance organizer is information presented "in advance or and at a higher level of generality, inclusiveness, and abstraction than the learning task itself" (Ausubel & Robinson, 1969, p. 606). Graphic representation of the organizer has been found to be an effective way to present the advance organizer to students with disabilities (Anderson-Inman, Knox-Quinn, & Horney, 1996; Bui, Schumaker, & Deshler, 2002; Scanlon, Deshler, & Schumaker, 1996; for a recent review, see National Institute of Child Health and Human Development, 2000).

The Unit Organizer device allows a teacher and students to collaboratively explore and identify on the first

Figure 1. Sample curriculum map.



day of the unit: (a) how the unit fits with other units, (b) a curriculum map that focuses attention on the critical ideas and the structure of information in the unit, (c) relationships and types of thinking required in the unit, (d) self-test questions, (e) a schedule of assignments and activities, and (f) the beginning of an expanded map so that new information can be added as it is presented each day of the unit.

Lenz et al. (1994) reported that when teachers used the Unit Organizer for unit instruction, performance of students with disabilities on classroom unit tests increased by an average of 15%. Lenz et al. used a multiple-baseline across-classes/students design with two classes/students in each design and replicated the design twice. Thus, the performance of six students with learning disabilities was evaluated across six secondary classes (three middle schools and three high schools).

The Question Exploration Routine (Bulgren, Lenz, Deshler, & Schumaker, 2001) is based on teacher presentation and use of a guiding question in a course, unit, or lesson. Gersten (1998) proposed the use of guiding questions as a form of explicit instruction and

linked their use to organizers as a way of helping students with disabilities focus attention and prompt critical thinking. Guiding questions are overarching questions that are posed at the beginning of a presentation (see Figure 2 for an example). These questions lead students to think about the critical information in the content and prompt thinking about relationships. After a major question has been presented, background information and subquestions related to the question are surfaced and are subsequently revisited and discussed throughout the presentation.

Specifically, the Question Exploration Routine involves the teacher posing a guiding critical question to students. Next, the teacher and students collaboratively (a) identify what information is needed to answer the question, (b) generate and answer subquestions that can lead to the answer, (c) generate a main idea or kernel answer to the critical question, (d) identify how the answer relates to other course information, and (e) extend the answer to the world or more complex situations.

Bulgren, Lenz, Schumaker, and Deshler (2002) reported that students in experimental classes where

guiding questions were used earned a mean score of 70% on a test taken after the first experimental lesson and a mean score of 72% on a test taken after the second experimental lesson. Students in the comparison classes earned average test scores of 48% after the first comparison lesson and 46% after the second comparison lesson. The comparison lessons were comprised of a presentation that did not include the guiding question. Students with LD in experimental classes earned a mean test score of 63% while students with LD in the comparison classes earned a mean score of 34%.

Based on a review of the Unit Organizer Routine and the Question Exploration Routine, two "starter" routines were selected for this study. The curriculum map showing the critical idea and structure of a lesson was selected from the Unit Organizer Routine. From the Question Exploration Routine, the guiding critical question, the two steps that probed information needed to answer the question, and the step that elicited and answered subquestions were selected as the components of the starter routine.

The purpose of this study was to compare the effects of a starter routine based on the Unit Organizer Routine (graphic curriculum map), a starter routine based on the

Question Exploration Routine (guiding questions), and traditional periodic reviews of repeated information.

METHOD

Participants

Thirty students who qualified for services for students with LD and who were enrolled in general education high school language arts courses were randomly selected from two high schools (serving approximately 925 and 900 students, respectively) in the Puget Sound area of the state of Washington. All classrooms had desks and chairs for 25-32 students and overhead projectors with screens.

Students comprised 20 males and 10 females. Students' average age was 15.87 years ($SD = .81$ yr.). There were twenty 9th graders, seven 10th graders, two 11th graders, and one 12th grader. Seventeen of the students were white, eight were black, three were Hispanic, and two were Asian. The average IQ score, as measured on the most recently administered WISC-III, was 93.8 ($SD = 6.1$). In accordance with state standards (Bergeson, Heuschel, Harmon, & Gill, 2003), identified students demonstrated a severe discrepancy between intellectual ability and academic achievement, with a

Figure 2. Sample guiding questions.

Guiding question:

"How can objects and ideas be given life to express your personal experiences?"

(Write or display this question on the overhead.

Make sure to leave room to write the answers as the lesson proceeds.)

"What do you need to know to answer this question?"

(Elicit and shape a possible definition about each of these with students.

Write these words with the question mark on the overhead.

Make sure to leave room to write the answers as the lesson proceeds.)

Personification?

Ideas?

Objects?

Personal Experience?

regressed standard score discrepancy criterion of 1.55. Fourteen of the students were receiving the majority of their education in special education classes, and six of them were mainstreamed into general education classes for all classes except for one resource-room special education support class.

Materials

Three parallel language arts lessons were designed by a high school language arts teacher with over 25 years of experience. The lessons covered the topics of "personification," "characterization," and "plot." The content of these lessons had not been presented previously as a single lesson in any setting in the same or the previous school year, as reported by the head of the language arts department in each school. Three scripts were constructed for the instructor to use, one for each content lesson. Each script contained all the information to be presented in the lesson in the order in which it was to be presented. A cue was inserted to show where the instructor was supposed to use one of the interventions. The intent of the scripts was to ensure high fidelity of implementation.

The amount of content in the lessons was controlled with matching numbers and difficulty of informational items in each lesson. Prior to the study, six language arts teachers validated the parallel nature of the lessons and the direct relationship of each lesson to state standards.

The traditional periodic review intervention. The traditional periodic review intervention served as the control intervention. It was chosen because traditional periodic review is typically recommended as a method to help students organize thinking about information before moving on to new information (Good & Brophy, 2007; Shostak, 1999).

In this study, the traditional periodic review consisted of three phases. First, the instructor orally specified the objective and topics of the lesson. Second, three times during the lesson, the instructor stopped and reviewed the information that had been presented by repeating important information. Third, at the end of the lesson, the instructor again repeated key information that had been presented in the lesson. No visual graphic organizers, visual representations of the information, or guiding questions were provided. The information was not visually displayed in any way as it was reviewed.

Guiding question intervention. This intervention consisted of three phases. First, a guiding question covering the critical outcome of the lesson was posed and written on an overhead transparency. Students were then asked to list what "must be known" to answer the guiding question and what "other questions" or supporting questions must be answered before the guiding

question could be answered. The instructor wrote the elicited list of information and set of questions on an overhead transparency so that students could see them. Second, three times during the lesson, the instructor stopped, displayed the guiding question, the listed information, and other questions, and asked students questions to determine whether the "must be known" information had been acquired and whether the students knew the answers to the "other questions." Third, at the end of the lesson, an answer to the guiding question was constructed with the students, and the instructor asked the students questions to review the "must be known" information and the answers to the "other questions."

Curriculum map intervention. The curriculum map intervention also consisted of three phases. First, a curriculum map depicting the structure of the content of the lesson (e.g., Figure 1) was shown and described, and students were asked to summarize the structure. Second, three times during the lesson, the instructor displayed the map, elicited a summary of critical points from the students based on the structure, and clarified any misunderstandings. Then a question was asked about each element of the curriculum map to elicit information from the students. Key words were added to the map to record accurate summary statements elicited by the questions. Third, at the end of the lesson, a full review of the critical points of the lesson was conducted with the students using the curriculum map; the students were then asked to summarize the lesson independently using the map.

To get a sampling of the differences among the three intervention conditions, compare the introduction sections of the lessons (see Appendix). Contact the first author to receive a full copy of the lessons.

Measures

Parallel tests were constructed for the three lessons, and the three tests were combined into one pretest to be taken before students were introduced to any lesson and then as a posttest after all three lessons had been presented. The test was comprised of 45 items: 15 were matching items, 15 items were fill-in-the-blank items, and 15 items were multiple-choice items. Five items of each type related to each of the three lessons. As an example, the following are the first five items from the fill-in-the-blank section.

1. The background part of a story introduces characters, setting and _____.
2. Personification is a literary device that gives _____ qualities to objects or ideas.
3. Phrases such as "I imagined" or "I realized" are a way to tell when a character is revealing her _____.

-
4. The stages of plot structure can also be referred to as the _____ of events in a story.
 5. Personification is based on examining the author's mood, behavior, or _____ toward an object or idea.

An answer key was designed for the test. Scorers used the answer key to award one point for each correct answer on the test. Interscorer reliability was determined by having two independent scorers score 100% of the pretests and posttests and match their scores item-by-item. The percentage of agreement was calculated by dividing the number of agreements by the number of agreements plus disagreements and multiplying by 100. The total percentage of agreement was 100% (1,350 agreements out of 1350 opportunities to agree).

Before the study began, the lessons and the test were field-tested with a group of 15 students with LD who did not participate in the study, to evaluate and adjust lesson and test-item difficulty. This field-testing process showed that the test scores among the three lessons did not differ statistically.

Procedures

Instruction took place during a 90-minute time block when students were scheduled to attend class in the resource room. A 10th-grade language arts substitute teacher certified to teach language arts in the state of Washington was trained to deliver all three interventions and was asked to use the standardized scripts, which were designed to ensure that students in all groups received the same information for each lesson. The same amount of time, 90 minutes, was spent delivering the information in each lesson to all groups. The lessons were timed; all lessons began and ended within two minutes of each other. The study was conducted over a three-week period to accommodate the scheduling of the student groups. In each week the pretest was given on Monday, the intervention lessons were presented on Tuesday, Wednesday, and Thursday, and the posttest was presented on Friday.

Design

According to the design of the study, each student participated in each of the three intervention conditions: (a) review, (b) guiding question, and (c) curriculum map. To adjust for potential order effects of presentation, six possible combinations of orders were used (123, 132, 231, 213, 312, and 321). For example, if a participant was randomly assigned to the 321 combination group, she would receive the curriculum map condition for the first lesson, the guiding question condition for the second lesson, and the review condition for the third lesson. In contrast, a participant in the 231 group would receive the guiding question condition for

the first lesson, the curriculum map condition for the second lesson, and the traditional periodic review condition for the third lesson. The 30 participating students were randomly assigned to six groups with five students in each. The students in each group participated in each of the interventions in differing sequences across the three lessons.

After students were assigned to each experimental sequence, they were given the pretest about information covered in all three lessons, and then participated in all three lessons in their assigned sequence. After the sequence of three lessons had been completed, all students were given the posttest covering the information presented across all three lessons. The overall design of the study is shown in Table 1.

The data were analyzed using the SPSS one-way analysis of variance with repeated measures program with three levels (interventions). Also, a Tukey post-hoc test to identify the differences among the groups was used. The data were analyzed to ensure that there were no order (sequence) effects.

RESULTS

No significant differences were found among the segments of the pretests measuring the content of each lesson (mean number correct for Lesson 1 = 1.13 ($SD = 1.11$), Lesson 2 = 1.30 ($SD = 1.15$), and Lesson 3 = 1.37 ($SD = 1.67$). Also, there were no order effects. The paired-samples *t*-test showed a statistically significant difference, $t(29) = 15.6$, $p < .001$, between the average combined pretest score per student ($M = 3.80$, $SD = 2.52$) and the average combined posttest score per student ($M = 17.77$, $SD = 5.85$).

Based on an analysis of variance with repeated measures, a statistically significant difference emerged between the three intervention conditions, $F(2,58) = 91.73$, $p < .001$, with a partial eta square = .77. The mean posttest score for the curriculum map intervention was 8.07 ($SD = 2.33$). The mean posttest score for the guiding question intervention was 6.43 ($SD = 2.54$). Finally, the mean posttest score for the traditional periodic review intervention was 3.27 ($SD = 1.80$).

A post-hoc analysis showed that each of the differences between the three groups was significant at the .001 level. The students earned significantly higher scores when they participated in the curriculum map intervention than when they participated in the guiding questions intervention (effect size = .67) or traditional review (effect size = .228). They also earned significantly higher scores when they participated in the guiding questions intervention than when they participated in the traditional periodic review intervention (effect size = 1.46).

Table 1***The Sequence of Interventions Experienced by the Subjects in Each Group***

Lessons	Student Groups					
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
	Pretest	Pretest	Pretest	Pretest	Pretest	Pretest
1	Curriculum Map	Curriculum Map	Guiding Question	Guiding Question	Review	Review
2	Guiding Question	Review	Curriculum Map	Review	Curriculum Map	Guiding Question
3	Review	Guiding Question	Review	Curriculum Map	Guiding Question	Curriculum Map
	Posttest	Posttest	Posttest	Posttest	Posttest	Posttest

DISCUSSION

The results of this preliminary study indicated that the use of the curriculum map enhanced learning for students with LD more than the use of guiding questions. However, the use of guiding questions enhanced learning more than the traditional periodic review.

Several conclusions may be drawn from these results. First, the visual formatting of information as a planning and presentation tool appears to enhance learning for students with LD. Educators who advocate that general education teachers become more inclusive in content-area classes by providing instruction that is more explicit, organized, and accommodating should seriously consider interactive use of the curriculum map as a planning and presentation tool.

Second, while the guiding question intervention did not produce effects as strong as the curriculum map intervention, the use of a guiding question was more effective than the traditional periodic review intervention. The traditional periodic review intervention was based on routine repetition of the key topic captured in the guiding question and information depicted in the curriculum map. Therefore, oral reviews of information that are based on simply repeating information identified by the teacher as important do not seem to be as useful as techniques that visually depict the informa-

tion and guide students in how to process the information. This may be because repeating information is a strategy that students already use for studying and that does not necessarily help them understand the information. That is, use of the curriculum map and the guiding question may compensate for a lack of the organizing and questioning strategies that are needed to process complex content-area information. Simply identifying and presenting information in terms of importance and expecting students to know how to process that information (i.e., use organizing and questioning strategies) is not likely to be an effective instructional procedure. Another explanation might be that using one modality (auditory) is a weak instructional procedure for students with LD, who may have significant language-processing difficulties.

Third, all three interventions were constructed around what was identified as important information. The first step in constructing each intervention was to determine the relative importance of the information and the structure of the information that was important for students to understand. For example, in the curriculum map intervention, the important information was represented in a hierarchical map structure. In the guiding question intervention, the important information was represented by visually showing students

the relationship between the guiding question and the hierarchical relationship of the supporting questions. In the traditional periodic review intervention, the teacher orally reviewed by repeating information that had been targeted as more important throughout the lesson.

The findings indicate that teacher time spent in selecting the critical information, showing students how that information can be structured, and visually tracking the question-answer process around the critical information can improve the performance of students with LD in content targeted for general education classrooms in high school settings.

Several concerns related to the findings are worthy of note. First, although each intervention produced learning, the actual posttest scores earned by the students were not impressive. After the curriculum map intervention, which produced the highest scores, students were earning scores that would be considered "F's" in school. Thus, these simple interventions do not seem to be powerful enough to boost the performance of students with LD into the passing range. The more complex teaching routines reviewed at the beginning of this article have produced results showing that students with LD can be boosted into the passing range. While the starter routines investigated here may be a way to introduce explicit instruction into core curriculum classes, the more complex routines and devices may well be worth the time and energy required to use them. At the same time, this study only provided relatively few exposures to each intervention.

Second, it is unclear whether or not teachers will find the simpler interventions used in this study acceptable. How easily they might incorporate these techniques into their planning and teaching processes is unknown. While the starter routines were found to increase the learning for students with LD, studies to determine the palatability of the starter routines compared to more complex routines should be conducted.

Third, also unknown are the effects of these interventions on the performance of other students without disabilities enrolled in a general education course. If students are not accepting of the procedures, and if they do not receive much benefit from using them, teachers might reject the procedures (Lenz, Schumaker, Deshler, & Kissam, 1991). Further research will need to be conducted in these areas.

Possible Future Research

The intent of this preliminary study was to identify possible differences in intervention strength based on one session per condition. A study involving more exposure (10-20 sessions) is needed to determine if the magnitude of the differences can be sustained.

In this study, the use of both curriculum maps and guiding questions was more successful than traditional periodic reviews. A possible follow-up study should be a comparison of those interventions with a combined curriculum map-guiding questions condition involving balanced amounts of instructional time per condition. Also, the present study involved only one session per condition. Thus, an issue is the effectiveness of these conditions under normal conditions over an extended period of time. A study could be conducted with secondary teachers who have equivalent classes of students who would be pretested at the beginning of the school year. One group would receive curriculum maps for the first semester and the other group would receive guiding question. After mid-year testing, the interventions would be switched for the two groups, and then both groups would be posttested at the end of the semester.

Implications for Practice

To conclude, the purpose of this study was to examine the effects of curriculum maps, guiding questions, and traditional periodic review on the test performance of students with LD in order to support the use of starter routines that could lead to the use of more explicit instruction by general education teachers. Based on the results of the study, content-area general education teachers can make their instruction more explicit and powerful by using curriculum maps to depict the importance and structure of the content and then using the maps to lead and review learning through interactive questioning around the maps. Use of guiding questions will also contribute to student learning, but not with the same power as the curriculum map if used alone. These methods are more powerful than simple reviews that assume that students have the strategies required to organize the information presented and process it.

Planning and teaching routines that teachers can use to select and deliver content and that simultaneously work to compensate for students' lack of strategies should be a guiding principle in attempts to make general education courses more accessible to more students. Starter routines that are based on simple components of more complex routines may be an effective way to introduce more explicit instruction and may increase the likelihood that more explicit instruction can be maintained in high school core curriculum classes.

APPENDIX

A Comparison of the Introduction of the Three Interventions for "Personification" Lesson

Reviewed Information Intervention

As I present this lesson, I am going to stop four times and repeat critical information that will help you learn

about “personification.” I will repeat information that I think will help you learn the information. You can ask me questions at any time; you can also take notes on the paper that I have given to you.

By the end of this lesson:

You will understand how “personification” can be used to give objects and ideas life to express your personal experience.

Do you have any questions before we begin? [Answer any questions]

STOP #1: Repeat these points:

Personification is a literary device that gives human qualities to an object or idea.

We give human qualities to objects or ideas so that when someone is reading, the reader gets a sensory image.

Guiding Questions Intervention

As I present this lesson, I am going to start by asking you a question about “personification” that will guide our learning in lesson. We will start by talking about what the question is asking us. During the lesson, we will stop four times to see how well we can answer the question about “personification.” You can ask me questions at any time; you can also take notes on the paper that I have given to you.

Do you have any questions about how we are going to use the guiding question before we begin? [Answer any questions]

The guiding question is:

“How can objects and ideas be given life to express your personal experience?”

Curriculum Map Intervention

As I present this lesson, I am going to stop four times and show you a map of the information in this lesson and ask you questions that will help you learn about “personification. You can ask me questions at any time; you can also take notes on the paper that I have given to you. Here is our lesson map.

[Show Curriculum Map of Personification Lesson.]

I am writing the word “Personification” here because that is our topic. We are going to learn that personification is about “giving human qualities” to something. I am going to write that in the oval underneath the lesson topic. I will fill in the rest of the map as we complete the lesson. Notice that the information is divided into three groups. A part of the lesson covers each group of information.

So, tell me: What is the lesson topic? [Elicit Answer.]

What is lesson about? [Elicit Answer.]

REFERENCES

Anderson-Inman, L., Knox-Quinn, C., & Horney, M. (1996). Computer-based study strategies for students with learning

disabilities: Individual differences associated with adoption level. *Journal of Learning Disabilities*, 29(5), 461-484.

Ausubel, D. P., & Robinson, F. G. (1969). *School learning: An introduction to educational psychology*. New York: Holt, Rinehart, & Winston.

Beane, J. (Ed.). (1995). *Toward a coherent curriculum: The 1995 ASCD yearbook*. Alexandria, VA: Association for Supervision and Curriculum Development.

Bergeson, T., Heuschel, M. A., Harmon, B., & Gill, D. H. (2003). *Identification of students with specific learning disabilities: State of Washington severe discrepancy tables WAC 392-172-130*. Olympia: Washington Department of Education.

Blythe, T., & Associates. (1998). *The teaching for understanding guide*. San Francisco: Jossey-Bass.

Bruner, J. (1960). *The process of education*. Cambridge, MA: Harvard University Press.

Bruner, S. (1973). Organization of early skilled action. *Child Development*, 44(1), 1-11.

Bui, J., Schumaker, J. B., & Deshler, D. D. (2002). *The demand writing instructional model: Impacting the writing performance of students with learning disabilities and low-performing students from culturally and linguistically diverse backgrounds on the statewide writing assessment*. Unpublished doctoral dissertation, University of Kansas, Lawrence.

Bulgren, J. A., Schumaker, J. B., & Deshler, D. D. (1988). Effectiveness of a concept teaching routine in enhancing the performance of LD students in secondary-level mainstreamed classes. *Learning Disability Quarterly*, 11(1), 3-17.

Bulgren, J. A., Deshler, D. D., & Schumaker, J. B. (1997). Use of a recall enhancement routine and strategies in inclusive secondary classes. *Learning Disabilities Research & Practice*, 12(4), 198-208.

Bulgren, J. A., Deshler, D. D., Schumaker, J. B., & Lenz, B. K. (2000). The use and effectiveness of analogical instruction in diverse secondary content classrooms. *Journal of Educational Psychology*, 92(3), 426-441.

Bulgren, J. A., Lenz, B. K., Schumaker, J. B., & Deshler, D. D. (2001). *The question exploration routine*. Lawrence, KS: Edge Enterprises, Inc.

Bulgren, J. A., Lenz, B. K., Schumaker, J. B., & Deshler, D. D. (2002). *The question exploration routine: Trainer's guide*. Lawrence: University of Kansas Center for Research on Learning.

Bulgren, J. A., & Schumaker, J. B. (2006). Teaching practices that optimize curriculum access. In D. D. Deshler & J. B. Schumaker (Eds.), *Teaching adolescents with disabilities: Accessing the general education curriculum* (pp. 79-120). Thousand Oaks, CA: Corwin.

Bulgren, J. A., Schumaker, J. B., Deshler, D. D., & Lenz, B. K. (in prep). *The use and effectiveness of a comparison routine in diverse secondary content classrooms*.

Caine, R. N., & Caine, G. (1997). *Education on the edge of possibility*. Alexandria, VA: Association for Supervision and Curriculum Development.

Carnine, D., Jones, E. D., & Dixon, R. (1995). Mathematics: Educational tools for diverse learners. *School Psychology Review*, 23(3), 405-427.

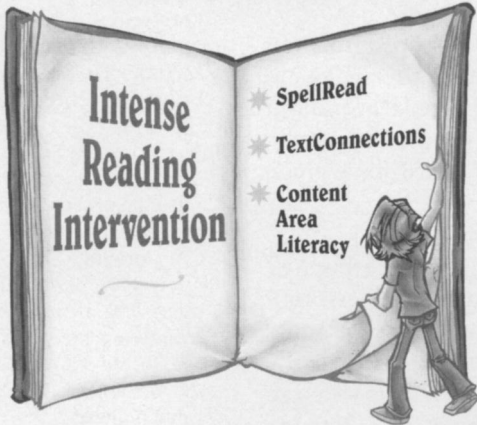
Gersten, R. (1998). Recent advances in instructional research for students with learning disabilities. An overview. *Learning Disabilities Research and Practice*, 13, 162-170.

Good, T. R., & Brophy, J. (2007). *Looking in classrooms* (10th ed.). Boston: Allyn and Bacon.

Hollingsworth, M., & Woodward, J. (1993). Integrated learning: Explicit strategies and their role in problem-solving instruction

- for students with learning disabilities. *Exceptional Children*, 59, 44-455.
- Joint Committee on Teaching Planning for Students with Disabilities. (1995). *Planning for academic diversity in America's classrooms: Windows on reality, research, change, and practice*. Lawrence: The University of Kansas Center for Research on Learning.
- Lenz, B. K., Alley, G. R., & Schumaker, J. B. (1987). Activating the inactive learner: Advance organizers in the secondary content classroom. *Learning Disability Quarterly*, 10(1), 53-67.
- Lenz, B. K., Bulgren, J. A., Schumaker, J. B., Deshler, D. D., & Boudah, D. J. (1994). *Unit organizer routine*. Lawrence, KS: Edge Enterprises.
- Lenz, B. K., & Deshler, D. D. (2004). *Teaching content to all: Evidence-based inclusive practices in middle and secondary schools*. Boston: Pearson.
- Lenz, B. K., Schumaker, J. B., Deshler, D. D., & Kissam, B. (1991). A goal attainment approach to improve completion of project-type assignments by adolescents with learning disabilities. *Learning Disabilities Research and Practice*, 6(3), 166-176.
- National Institute of Child Health and Human Development. (2000). Report of the National Reading Panel. *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- Perkins, D. (1992). *Smart schools: From training memories to educating minds*. New York: Free Press.
- Scanlon, D., Deshler, D. D., & Schumaker, J. B. (1996). Can a strategy be taught and learned in secondary inclusive classrooms? *Learning Disabilities Research & Practice*, 11(1), 41-57.
- Schumm, J. S., & Vaughn, S. (1995). Meaningful professional development in accommodating students with disabilities: Lessons learned. *Remedial and Special Education*, 16(6), 344-353.
- Shostak, R. (1999). Involving students in learning. In J. Cooper (Ed.), *Classroom teaching skills* (pp. 77-99). Boston: Houghton Mifflin.
- Wiggins, G., & McTighe, J. (Eds.) (1998). *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development.
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