Enhancing the Note-taking Skills of Students with Mild Disabilities

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Teachers can improve the note-taking skills of students with mild disabilities by either modifying their presentation during lectures or teaching students how to use note-taking techniques. This article begins with a vignette and then describes how teachers can modify their lectures and how they can teach note-taking techniques to students. The two note-taking techniques described are strategic note taking and guided notes.

In his first year of teaching, Mr. Wickman reviewed the requirements for passing his history class with his students and then began his first lesson. Because it was the first day of the new school year, he chose a topic near and dear to his heart—life in Colonial Williamsburg. As he spoke, students frantically began to record notes, trying to write verbatim what was said. Mr. Wickman nervously fumbled through his notes, often speaking too fast to be understood. When he looked up from his handwritten notes, he noticed that all of the students, even Seth, were recording notes. “Good,” Mr. Wickman thought to himself, “even the special education kid can keep up with the rest of the class.” What Mr. Wickman didn’t know was that Seth was lost.

Seth was in deep trouble. This was the first time he had experienced a lecture in which the teacher did not write notes on the board (or use transparencies); instead, Mr. Wickman stood next to the podium and read notes to students. At first, Seth wrote what he could, but before long, he could not keep up with the quick pace of the lecture because Mr. Wickman was talking too fast. This was when Seth had his first panic attack. His mind raced with a million questions: “What should I copy down?” “What is he talking about?” “Is this stuff in the book?” “What did I just miss?” “Why isn’t he writing anything on the board?” As the lecture ended, Seth was exhausted, and when he looked down at his notes, he could not read a word that he had just written. Seth went back to class the next day and was more determined than ever to concentrate harder and take better notes. Unfortunately, the results were very much the same.
As illustrated in the above vignette and as evidenced by various research studies, students with mild disabilities are not effective note takers. For example, students with learning disabilities are often unable to identify the important information to note (Hughes & Suritsky, 1994); are unable to write fast enough to keep up with the lecturer (Suritsky, 1992); and, even when they do record notes, are frequently unable to make sense of their notes after the lecture (Suritsky, 1992), mostly because their notes are illegible. Difficulty taking notes presents a major problem for students’ success in the general education classroom, especially in content area classes, where instructors often use their notes to develop tests, which in turn serve as the basis for grades (Putnam, Deshler, & Schumaker, 1993).

Note taking is a skill that is helpful for all of us. From jotting down a grocery list to leaving Post-it® notes on the computer monitor, we all rely on notes to help us remember. In fact, notes serve as an extension of our long-term memory: What we can’t remember, we write down. For students, notes serve two purposes: (a) They aid student understanding of lecture information, and (b) They serve as reference material for later study. For students with mild disabilities in the mainstreamed classroom, teachers have indicated that students either do not take notes, rely on other students (e.g., note takers) to take notes for them, or rely on special education teachers to assist them with lecture material after class.

Although these accommodations are helpful, and even necessary, it is important for mainstreamed students to learn how to effectively record from lectures. First, note taking allows for active engagement during lectures. Research has indicated that students with mild disabilities are often passive learners, and taking notes is one way to actively engage the student in the learning process (Hughes, 1996). Second, note taking encourages clarification of confusing information and aids encoding during long-term storage (Hughes, 1996). Third, there is a positive correlation between the amount of notes taken and test scores (Peper & Mayer, 1986). In other words, effective note takers are rewarded with high test scores.

As with any act of communication, the role of getting the “message” across relies on both the “sender” (teacher) and the “receiver” (student). Therefore, it is imperative that both teachers and students adhere to a number of guidelines during this communicative process. This will aid students’ understanding during lectures and, hence, improve students’ notes.

Sender

From the sender standpoint, the teacher can make changes in his or her presentation of information that can greatly aid students’ notes. First, the teacher can slow down the pace of the lecture and rate of speaking. When pace slows down, students can better decide which lecture points are important to record, and rather than record notes verbatim, students can think about or process lecture information. Second, during lectures, the teacher can cue students about important lecture points.

According to Suritsky and Hughes (1996), students can be alerted to prominent information through two types of cues: emphasis cues and organizational cues. Emphasis cues alert students to pertinent lecture information through intentional statements or acts, such as teacher statements like, “This point is really important to remember” or prolonged pauses that indicate to students that they should record the information that was just stated. Similarly, the teacher can use organizational cues such as, “There are six parts to a cell,” prompting students to categorize this topic in their notes with six recorded components.

Third, the teacher can allow review time after the lecture for students to review their notes. Typically, at least 5 minutes are allocated to permit students to fill in the gaps in their notes by having them confer with other students or ask questions directly to the teacher. This time can also be spent together reviewing a concept from the lecture that students did not fully understand. The simple act of allowing students to review their notes independently can improve comprehension of the topic, as evidenced by a number of studies (Kiewra et al., 1991).

Receiver

Just as the sender can improve the message that is sent, the receiver can also improve his or her skills at better understanding, recording, and remembering the message. Because students are seldom taught note-taking skills in school, the simple act of instructing students in how to record notes can prove helpful. Such instruction can include teaching students how to record shorthand or abbreviations, how to record notes at a faster rate, or how to preview the topic in their textbook so that they are familiar with new terms or concepts used during the lecture. Teachers can also instruct students on how to record notes through one of two techniques: strategic note taking or guided notes. Both techniques have been used with high school students with disabilities and both have been demonstrated to be effective techniques.

Strategic note taking was first used with students in regular education (Boyle, 1996) and later with students with mild disabilities (Boyle & Weishaar, 1998). Strategic note taking is based on the premise that students can become more strategic during the note-taking process by using metacognitive or strategic skills. Strategic note taking involves the use of written cues on specially prepared note-taking paper. Students are provided with the note-taking paper prior to the lecture, and the written cues serve to
assist them at using metacognitive skills (i.e., organizing information and combining new knowledge with prior knowledge) during lectures, thereby increasing their engagement during note taking. By using these metacognitive skills, students not only become more actively involved in the learning task, but as a result, improve their comprehension of the lecture. The note-taking paper can be used with most lecture topics because of the generic nature of the cues.

The first portion of the strategic note-taking paper (see an abbreviated version in Figure 1) asks students to quickly identify the lecture topic and relate the topic to their own knowledge of the topic. This step makes the information more meaningful to students. Next, students cluster together three to seven main points with details from the lecture as they are being presented. Clustering ideas together aids retention of information. At the bottom of each page, students are asked to summarize lecture information, again to assist in the long-term storage of lecture material. The steps of naming three to seven new main points and summarizing are repeated until the lecture ends. The last step involves writing five main points and describing each. This step is intended to serve as a quick review of the lecture. In a typical 50-minute lecture, students will record notes on approximately five to eight strategic note-taking pages.

The results from studies that incorporated this technique in the classroom (Boyle, 1996; Boyle & Weishaar, 1998) found that students who used strategic note taking recorded more notes than students who relied on conventional note-taking skills, regardless of topic. Moreover, students who used strategic note taking scored higher than students in the control group on measures of comprehension and immediate and long-term recall of lecture information.

Guided notes (Lazarus, 1991), the second student technique, also uses cued note paper (see Figure 2), but the cues are specific to the lecture topic and are developed by the teacher ahead of time. Using this format, students record their own notes in the space provided under each main point listed, as the teacher verbally presents the material. Guided notes are typically two or three pages in length, and the teacher often simultaneously uses transparencies that contain the main points listed in the guided notes. In the Lazarus (1991) study, of the six students with LD who used guided notes, all of them improved over baseline levels, and students' scores on the chapter tests were nearly equivalent to nondisabled, peer scores.

Regardless of which note-taking technique is chosen, teachers must provide formal training in the technique before allowing students to use it in general education classes. This training phase should involve having students practice the technique under both controlled and advanced conditions. Under controlled conditions, the teacher should lecture using familiar information and the presentation should allow for a number of breaks during which students receive feedback about their note-taking. During these early sessions, the primary emphasis should be on students acquiring the note-taking skills necessary to use the technique properly, with a secondary emphasis on learning the information presented. Once students reach a proficient level of mastery, they are ready to apply the strategy to grade-level topics from their textbooks. The level of mastery should be based on both an increase in the number of notes recorded and an increase in comprehension, as determined by tests or quizzes adminis-

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**Strategic Note-taking Form**

**Fill in this portion before the lecture begins.**

What is today's topic?

Describe what you know about the topic.

**As the instructor lectures, use these pages to take notes of the lecture.**

Today's topic?

Name three to seven main points with details of today's topic as they are being discussed.

Summary—Quickly describe how the ideas are related.

New Vocabulary or Terms:

Name three to seven new main points with details as they are being discussed.

New Vocabulary or Terms

Summary—Quickly describe how the ideas are related.

Name three to seven new main points with details as they are being discussed.

New Vocabulary or Terms

Summary—Quickly describe how the ideas are related.

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At End of Lecture

Write five main points of the lecture and describe each point.

1

5.

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Figure 1. An abbreviated strategic note-taking form
Frogs and Toads That Live in the Desert

I. Similarities—Frogs and Toads
A. 
B. 

II. Differences—Frogs and Toads
A. Frogs
B. Toads

III. Survival Strategies to Prevent Water Loss
A. 
B. 
C. 
D. 

Figure 2. Student copy of guided notes.

tered after each note-taking session. Finally, after reaching proficient levels of mastery on grade-level materials, students are ready to use the technique in mainstreamed classes. At this point, it may be possible to fade the cued note-taking paper by writing the prompts on the board, but the teacher should continue to monitor student progress to ensure that the student is still reaching proficient levels of comprehension.

In summary, the teacher should decide which technique would be appropriate for each lecture topic or content area. It is possible that students need more specific cues, such as the ones used with guided notes, with less familiar lecture topics. Despite the technique used, in order for all students to benefit from lectures, the teacher should still emphasize important lecture points so that students can gain the maximum benefits from lectures and, later, from their own notes.

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REFERENCES


