Take Note
Effective practices for teaching students how to collect and utilize information

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Ask almost anyone to describe the behavior of students in a college lecture hall, and note-taking will probably be referenced as a common activity. Indeed, the ability to take notes is essential in college. Professors at nearly every community college and university will describe note-taking as key to learning, but its usefulness beyond higher education should not be overlooked. In the workplace, for example, meetings with supervisors are often technical in nature, with decisions made and follow-up actions assigned. Taking notes in such an environment can spell the difference between success and failure.

Of course, writing things down isn’t enough. There’s a habit to be developed in utilizing notes, and it’s difficult for students to develop this habit if they cannot identify a purpose for doing so. Often, teachers view note-taking as a method of receiving information, and may not require students to use their notes once they’ve been collected. Worse yet, students may become conditioned to copy information from boards or presentation slides, leaving them unprepared to formulate notes on their own. And as we know, in a real-world college or work environment, notes aren’t put forth in advance.

Middle and high school students can’t be expected to exhibit the note-taking skills that adults possess, but educators should think carefully about how students are taught to gather and study from notes. In this column, we’ll look at effective practices for teaching students how to construct and utilize notes.

Note-Taking Skills
The benefits of note-taking can be assigned to two distinct processes: encoding and external storage. Encoding is the act of composing notes during a lesson. Studies have demonstrated that students who write down information during a lecture have a slightly better rate of retention than those who merely listen to it (Kobayashi, 2006). The rate of retention is significantly improved when students avail themselves of the second process: external storage. When students review their notes outside of the lesson, they learn more about what was taught (Kobayashi, 2006). What follows are some techniques to help improve that rate of retention.

Teach note-taking principles
Many students have limited experiences with taking notes. It is often believed that someone has already taught students how to take notes; this is rarely the case. Devote time to the subject of note-taking, and review the information periodically throughout the course. There are a number of note-taking frameworks that work well for students. One of the most frequently utilized is the Cornell note-taking system developed by education professor Walter Pauk (Pauk, 1974). These three-part notes are comprised of a narrow column on the left for major ideas, a larger area on the right for details, and a two-inch horizontal segment at the bottom for summarizing information. Whether using the Cornell note-taking system or any other, consider adopting a schoolwide process to capitalize on the consistency of collective instructional efforts.

Ask students to paraphrase
Good note-taking is not the same as transcription, despite what many secondary students mistakenly believe. Trying to write down every word uttered is unnecessary; the real skill of composing notes lies in one’s ability to paraphrase information. Regularly ask students to paraphrase information during lectures and discussions to exercise their working memories—the cognitive functions that enable students to hold on to short pieces of information long enough to transform them into something meaningful. When an important point is made in a discussion, ask another student to paraphrase it: “Alex, can you put the statement Renee made into your own words for us?” Similarly, pause during extended direct explanations and ask students to paraphrase the information, and then remind them to record the summary in their notes. When you notice students trying to copy down all of the words on a slide, announce that you will allow 20 seconds for them to jot down important concepts before removing the information from their view.
Teach symbols
Every subject relies on symbols to represent concepts. This is especially true in math and science, which have precise notations for processes and procedures. More broadly, editing symbols work well across subject areas. Upward- and downward-facing arrows are universally understood as increasing and decreasing, while e.g. denotes the phrase “for example,” and re: means “in reference to.” Teach students several notations, and they will be able to capture relationships between concepts and ideas, rather than simply listing them. But don’t go overboard with tricky or obscure symbols—too much shorthand notation has the potential to make notes undecipherable.

Teach students to summarize
Create opportunities for students to draw on the external storage function of their memories by asking them for daily summaries of their notes. Set aside a few minutes at the end of each lecture for students to compare their notes in small groups and summarize their content in three sentences. To further enhance learning, ask students to reflect on a statement of purpose that you have previously set forth for the lesson, and have them compare that purpose to their summaries. By revisiting the purpose and analyzing their notes, students will build the habit of ensuring they have captured the right information.

Supporting Notes in the Classroom
Good note-takers aren’t born; they’re taught. That means that the skills needed to compose and utilize notes must be taught as purposefully as the content of the course itself. Principals should look for these teaching techniques in the classrooms they observe. If they are not apparent, ask the teacher how he or she reviews note-taking skills in class.

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Demonstrate note-taking practices through the use of videos
Show students how to compose notes, and think aloud as you do so—this will give them a peek at the cognition that occurs in the mind of an effective note-taker. Write notes on a document camera while a short video is playing. The video may be one used in content instruction, or on another interesting topic; TED Talks videos are high quality and readily available (www.ted.com/talks/browse). Another option is to play a portion of an archived professional webinar and demonstrate how to take notes on this content. For high school juniors and seniors, a video of a college lecture on an applicable topic can be a real eye-opener.

Build in time to take notes
It can be easy to move quickly from one topic to the next, but it’s important to set aside time for students to refine and clarify their notes during intense note-taking sessions. The time period doesn’t have to be lengthy; try a 60- or 90-second pause. For younger and less experienced note-takers, consider posting an outline of lecture topics, including the correct spellings of unfamiliar words.

Cue note-taking
Simple verbal cues alert students to essential points that shouldn’t be missed: “Did everyone get that written down? If you didn’t, be sure to include it in your notes right now.”

Make smartpens available
Smartpens work like regular pens, but have several other features that make it possible to transform written notes into digital files with audio support. A small recording device on the smartpen makes it possible to play back the teacher’s voice at the time the notes were originally made simply by touching the pen to sensor-embedded paper. The written notes and audio files can be uploaded to a computer and to the school’s learning management system. This is a useful system for students with disabilities that make conventional note construction more difficult. It can also be used by a designated note-taker to capture notes for absent students.

Making Notes Meaningful
The notes students construct are rendered more effective when there are authentic reasons to review them after the class meeting.

Use notes in discussion
Invite students to use their notes in Socratic seminars and other extended class discussions. Use techniques to cue, paraphrase, and summarize information that is discussed. When student discussion stalls, remind them to consult their notes, and give them time to do so before resuming the conversation.

Assess student notes
Provide feedback for students on a regular basis so they can refine their note-taking skills. Create monthly notebook checks for students to assess whether they have the information they need, and provide tips for improving notes in the areas of legibility, organization, and thoroughness of the content.

Use notes on assessments
Make the most of a time-honored practice by allowing students to use their notes on portions of exams. Nothing reinforces what needs to be included in notes more than discovering useful information precisely when you need it. Mathematics teacher Dina Burrow goes a step further. Before major exams she invites students to write as much information as they can on the outer peel of a banana. Students bring the banana to class and eat it during the test. It’s the act of rewriting and summarizing information that helps effectively promote note-studying.

Conclusion
Note-taking is an essential college and career readiness skill, and like all skills, it needs to be taught with intention. As you meet with teachers, discuss their plans for teaching this skill. You can support note-taking instruction when you’re in classrooms, too. Arrange classroom visits where you silently model note-taking for students as the teacher leads the lesson. This offers you a unique perspective in which you can gain insight into both the organization of content and the students’ skills all at once. PL

References


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