

Effective Note Taking Strategies The major difference between taking textbook notes and taking lecture notes is the rapidity with which you need to respond to stimuli, understand words and ideas, organize information in meaningful ways, and transfer it into notes—while at the same time taking in new information presented by the speaker. When taking lecture notes, keeping up with the speaker replaces the comfortable pace you use when taking textbook notes. Working memory is challenged. Speaking, Thinking, and Writing Rates Taking lecture notes requires you to adjust to your instructor's rate of speech. The rate of speech indicates an average number of words a speaker says per minute. In personal conversations, for example when you want to discuss serious issues or want to be sure the listener understands your points, you may speak slower than 100 words per minute. Other times in casual conversations, for example when you have exciting news to share, you may speak much faster than the normal rate of 125–150 words per minute for conversations. The average rate of speech during a lecture is 100–125 words per minute—a rate that provides a little more time to create basic understanding and to take notes. You will likely encounter three general speaking rates instructors use during lectures: too slow, comfortable, or too fast. When an instructor speaks too slowly, you may have difficulty staying focused. Your rate of thinking far outpaces the instructor's rate of speech, so your mind tends to wander off the subject. The rate of thinking indicates an average number of words or small units of information a person thinks per minute. The average is 400 words per minute. When an instructor speaks too fast, your rate of writing is too slow to capture the instructor's ideas on paper. The rate of writing indicates the average number of words a person writes per minute. An average rate of writing is thirty words per minute. When an instructor speaks at a comfortable pace, taking notes will still be demanding, but the discrepancies among speaking, writing, and thinking rates will not create as many notetaking difficulties. The following figure summarizes average speaking, writing, and thinking rates.

Rate Discrepancies Dealing with the discrepancies among the rate of speech in lectures, rate of writing, and rate of thinking requires flexibility and familiarity on your part with a variety of strategies you can use to adjust to specific lecture situations. The next figure shows nine strategies to use to deal with discrepancies between rate of speech during lectures, rate of thinking, and rate of writing.

Undivided Attention When your mind wanders, you start daydreaming, or you start doodling or tending to other tasks because of the large discrepancy between the speaker's slow rate of speech and your much faster rate of thinking, you may miss important information and find switching back into the listening mode more difficult to do. Your listening goal is to use strategies to keep your mind focused on the speaker and to maintain undivided attention, even though the presentation of information is not demanding. Use the following three strategies to deal with the discrepancy between a slow speech rate and a fast thinking rate:

- ❶ Strategy 1: Keep Writing Even if the details do not seem vital to your notes, write them down anyway. You can always cross out or eliminate them later. By continuing to write, you keep your working memory focused on the content of the lecture.
- ❷ Strategy 2: Mentally Summarize In your mind, run through the main ideas and the supporting details that have been discussed. Try to mentally summarize and list the details while you wait for new information to be introduced. You can also ask yourself basic questions, such as Do I agree with this information? Is this the way it was presented in the textbook?
- ❸ Strategy 3: Predict the Next Point or Answer to a Question With active listening, you

can often “mentally tune in” to the speaker’s outline or organizational plan for the lecture. Predict the next point that would naturally follow the sequential development of information, or mentally ask yourself a question that you think the next section of information will answer. Then listen carefully to determine if your prediction was correct or if your question was answered. Increase Your Writing Rate More often than not, notetaking problems occur because the rate of speech during a lecture is faster than your rate of writing. Your notetaking goal is not to write fast enough to write word for word; that is not feasible, practical, nor useful as notes should be condensed versions of information. Your goal is to develop a writing fluency or speed that is fast enough to write important information in your notes. Writing fluency is an essential notetaking skill; in fact, research studies show that writing fluency has the greatest impact on the quality of your notes. The following three time-saving strategies can improve your writing rate and fluency:

- ☞ Strategy 4: Paraphrase Paraphrasing is the process of using your own words to rephrase or shorten a speaker’s verbal information. Paraphrasing begins as a mental process that must be done quickly. As soon as you capture the speaker’s words, interpret the information quickly, condense it using your own words, and write the shortened form. Your “sentences” do not need to be grammatically correct. You may omit words such as the, an, and, there, and here and other words that do not add to the overall meaning. Paraphrasing is perhaps one of the most difficult parts of notetaking, but with practice and familiarity with different instructors’ lecture styles, your skills at paraphrasing will improve, and so will your writing fluency.
- ☞ Strategy 5: Use Abbreviations and Symbols You can write faster by using abbreviations and symbols. When you find content-related words that you use frequently, create your own abbreviations for the terms or use common abbreviations, such as the following: Symbols are another form of abbreviations you can use to increase your writing speed. Symbols frequently appear in math notes, but can be used for other words as well. Following are common symbols you can use in your notes:
- ☞ Strategy 6: Use Modified Printing Modified printing is a style of handwriting that is functional and increases writing speed by using a mixture of cursive writing and printing. While taking notes, you can relax your handwriting standards and experiment with switching back and forth from printing and cursive writing to see if this increases your writing speed.

Do Not Stop When You Fall Behind Most students at one time or another experience frustration from not being able to keep up with the speaker—even when using strategies to increase their writing speed. A normal tendency is to simply give up—stop taking notes and just listen. Sometimes that may not be a bad option, but later you may regret not having a written record of the information. Try using the following three strategies when you fall behind.

- ☞ Strategy 7: Leave a Gap and Start Writing Again Instead of giving up, leave a gap in your notes and start taking notes again for as long as you can keep up with the instructor. After class, ask another student or the instructor to help fill in the gaps.
- ☞ Strategy 8: Shift to Paragraph Form Sometimes becoming overly concerned with the notetaking format slows you down. If you find yourself spending too much time trying to decide how to number, label, or indent a detail, stop using your notetaking format and shift instead to writing paragraphs. Continue to paraphrase and use abbreviations or symbols in your paragraphs when possible. Later, when you have more time, you can reread the paragraph and organize it in a more meaningful way, such as making the recall column in Cornell notes or highlighting headings and numbering main ideas.
- ☞ Strategy 9: Tape the Lecture If you consistently

have difficulties keeping up with one instructor's style and rate of speech in lectures, ask your instructor for permission to tape the lectures. If permission is granted, sit near the front of the room. Start your tape recorder, and then begin taking notes on paper. If your tape recorder has a counter on it, when you run into notetaking problems or fall behind in your notes, jot down the counter number as it appears right then on your recorder. After class, return to specific sections of the tape so you can listen to the information one more time and add missing details in your notes. Your tape recorder should supplement, not replace, notetaking during the lecture. Strategies to Organize Information Quality notes show the structure, the levels of information, and sufficient details to support main ideas. If your notes are too brief and lack sufficient details, they will not be very helpful when you need to study the information or prepare for tests. By listening carefully for key words, you will be better equipped to identify main ideas and shifts made to supporting details. Listen for Key Words Signaling Headings The words in the following list often signal a new heading. When the words are repeated, they signal supporting details. For example, if the instructor says, "Let's look at the major causes of global warming," the word causes signals a new heading. As the lecture progresses, the instructor will use the word causes several more times to identify and explain each individual cause, which you can then number as details. Following are key words to listen for as they may help you identify major headings or topics. Listen for Terminology and Definitions Terminology and definitions are important details to include in your notes. Word clues often signal definitions and help you identify key words to include in your notes. The following words can be used to signal definitions. When you hear these words, use the abbreviation DEF to signal that you are writing a definition. Or you may want to use the equal sign (=) symbol to connect a word to a definition. For example, you could write paraphrasing = rephrasing or saying in your own words. Listen for Other Supporting Details Dates, names, facts, statistics, and examples are additional kinds of supporting details that are important to include in your notes. These details develop, support, or "prove" the main idea and help you understand concepts more thoroughly. Many instructors use ordinals (number words) to provide you with verbal clues for organizing the details in your notes. When you hear "first," make that point number 1 in your notes. Continue to use ordinals and placeholder words that represent a number: first, second, next, also, in addition, another, and last or finally. Many instructors also include informative and interesting examples or anecdotes in their lectures. Why? Vivid examples serve as memory triggers or cues and create associations for a specific main idea or concept. For that reason, references to the example should be in your notes. Sometimes, however, the instructor may spend a considerable amount of time on an example, especially if it is an anecdote of a personal experience. Your notes only need to show the basic idea of the example; your notes do not need to "retell the whole story" with all its details. Instructor Clues As you become accustomed to your different instructors and their lecture styles, you will be able to use their verbal, visual, and nonverbal clues to help identify important information. Listen for Verbal Clues Key words such as kinds of, steps, advantages of, and so forth, are verbal clues that signal that the information is important. Other kinds of verbal clues may be even stronger signals of information that you should include in your notes. For example: A person's intonation (pitch of his or her voice), volume of voice, and rate of speech are also verbal clues. Listen to your instructor's patterns carefully. Does he or she speak louder, more enthusiastically, faster, slower, or at a different pitch when giving

important information? Many speakers may not even be aware of the verbal patterns they use to emphasize important points, but skilled listeners can identify the patterns and use the information to help select the important ideas for their notes.

Watch for Visual Clues Information that the instructor writes on the chalkboard or visual graphics that instructors display on a screen are visual clues that information is important. Include visual information as much as possible in your notes. If you recall seeing the same chart or visual information in your textbook, jot down a quick reminder to yourself to refer to the textbook chapter.

Watch for Nonverbal Clues Watch your instructor's nonverbal clues or patterns as well. Body stance, hand gestures, and facial expressions (forehead wrinkles, eyebrows rise) are nonverbal clues that communicate to observant listeners. If the instructor pauses to look at his or her notes or simply pauses to allow you time to write, the pauses are nonverbal clues. Writing information on the board, pointing to parts of it over and over, and circling words on the board are also nonverbal clues indicating that information is important.

Working with Your Notes Taking lecture notes helps you stay focused on the lecture and keeps your mind from wandering. The most significant purpose of taking notes, however, is to create study tools to use after the class has ended. As you learned in before, scheduling a study block as soon after a lecture as possible gives you the opportunity to work with your notes while the information is still fresh in your mind. Use the following five strategies as soon after class as possible.

☐ **Complete Your Notes:** Add missing details, fill in gaps, and correct any misspelled key terms that appear in your notes. Confer with other students or your instructor, or refer to your textbook for missing information or correct spellings. If you chose to use the Cornell Notetaking System, complete the reduce step by creating the recall column.

☐ **Add More Structure to Your Notes:** If your notes lack a clear structure or appear disorganized, insert headings or number the individual details. Highlight specific concepts or key words or use a colored pen to circle terminology to create more structure for your notes.

☐ **Supplement Your Notes:** As you work with your notes, you may want to make lists of information, brief outlines of main ideas, or clarifying questions that you would like to ask in class. Each type of notetaking system recommends that you write only on the front side of your notebook paper. Use the back sides for adding supplementary notes or questions.

☐ **Rewrite Your Notes When Justified:** Do not spend valuable time rewriting lecture (or textbook) notes simply for the sake of producing a neater set of notes. Students who are kinesthetic or highly visual learners may find value in rewriting or typing their notes on a computer. The physical process of rewriting boosts memory and encodes information in a form that is easier to recall. In such cases, rewriting notes, which may include reorganizing information, is a meaningful and effective use of time.

☐ **Recite, Reflect, and Review Your Notes:** The true value of your notes involves using them after the lecture. Spend time digesting the information, reciting the information, reworking problems, rehearsing, and reflecting. At the beginning of your next study block for the class, you can use your notes as a warm-up activity. Schedule time each week for ongoing review.