

## **STUDENT LEARNING STYLES**

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Being a competent instructor goes beyond simply telling your students what they need to know. You must be able to give information in a manner that students understand. Each student is a unique individual, not just one of your class, who learns and processes information in a different way. You must assess these different student learning styles and deliver your information accordingly.

Student learning styles are theories based upon research that assesses how learning is influenced by such things as heredity, environment, and previous learning experiences. There is a vast amount of information on student learning styles, just do a web search on: student learning styles, learning styles assessment, learning styles surveys, or learning styles inventory. The research tells us that learning styles are simply different approaches or ways to learn. There are four basic styles which we will address:

### 1. Visual Learners

These students learn through seeing or reading. They tend to sit in the front of the classroom to avoid any visual obstructions, such as the heads of other students or the instructor's podium. They 'see' the information and retain it best by using pictures. They will visualize the text book's material and are able to tell you where specific information can be found. Such as, "...the sentence which describes the autoclave is found in the second column on the page right under the picture of the flash sterilizer." They may also use "post-it" notes to write out key words or concepts in the text book and stick it in those pages for emphasis. These students like drawings, illustrations, overheads, flip charts, flash cards and hand outs with wide margins. They may take detailed notes and rewrite them on colored index cards, or use different colored pens and markers to organize and emphasize the information. They will want to limit the amount of material on each card as this makes it easier for them to "picture" the information.

To help these students, use visual aids to deliver your information: powerpoint which is colorful yet easy to view; overhead transparencies, show-and-tell with objects, instruments, and supplies to pass around which emphasize information; outlines and key points written on the of your lessons; hand out calendars of class syllabi and important events such as lab and clinical days, test and quiz dates, guest speakers, and when important assignments are due; and if you use classroom discussion, be sure to write the key concepts or questions/answers on the board or overhead as the discussion progresses.

### 2. Auditory Learners

These students learn through hearing. They learn best from verbal lectures, class discussions, 'talking things through' or reciting information to others as with a 'study-buddy', and listening to others. They should sit in an area of the classroom away from distracting noises, such as by the doors, windows, or vents. They listen for voice tone, pitch, and speed. They may bring recorders to the classroom so they can replay lessons.

They may take poor notes as they concentrate on what you are saying during class. Auditory learners may read the text book out loud and talk out loud to themselves when studying.

To help these students: recite stories of your surgical experiences to reinforce the material with situations which help them relate; speak slowly and distinctly with nuances to your voice to make your points; allow students to tape your lectures with the warning that this material should not be shared with anyone outside the program (as your stories may include hospitals, doctors, and situations for learning purposes only); suggest students set the counters on their recorders to 000 then note at which point specific topics were covered; describe overheads, pictures, and powerpoints as they are presented; and encourage classroom discussions and group projects.

### 3. Reading/Writing Learners

These students learn through reading the information then writing it. They make lists, write in the margins of their text books and workbooks, use dictionaries and definitions, like handouts and write information on them. They may take good lecture notes and may rewrite them, or write key concepts or work over and over to study. They organize information as found in diagrams and tables into statements.

To help these students: assign writing projects where they can read and write the information; try the 'one minute paper' where you have them answer two questions about your lecture using one or two sentences (such as "What was the most meaningful/useful thing you learned during this session?" and "What questions do you have concerning this material as we end this session?"); try the 'muddiest point' assignment where you have the students answer in a few short sentences the what they thought was the muddiest point in that day's session; put students into groups for discussions and have this student be the recorder for the group to write down the key points.

### 4. Tactile/Kinesthetic Learners

These students learn through doing and the majority of those seen in surgical technology programs favor this method. They use all of their senses to actively explore their environment. They do best with 'hands-on' activities such as return demonstrations in the laboratory check-offs. They may take poor notes but should be active in taking them as that is activity and they tend to have trouble sitting for long periods of time without doing something. (They love the clinical setting and grow bored with lecture) They do well with demonstrations, trial and error practices, and may construct their own models or scenarios to learn concepts. They learn with pictures and photos of activities and may recite notes or study better with other students. They may study by walking back and forth with their notes and text books and enjoy being up and active in the classroom.

To help these students: demonstrate tasks and have the students practice, then do return demonstrations; set up role playing activities for students in mock surgeries as scrubs, circulators, surgeons and assistants while you monitor and direct them; use pictures and

diagrams to illustrate concepts, especially ones which show activity and action; break down tasks into practice 'how-to' steps; and have frequent breaks during long lectures, even if that is only to allow students to get up and view or handle supplies, equipment, and instruments.

Keep in mind that many students need a combination of these approaches to learn. Most have experienced teachers who primarily stand at the desk or podium and lecture with few visual aids: the 'talking head' scenario. As educators, we must emphasize teaching methods which address as many learning styles as possible. This allows students to experience different methods of learning and perhaps find some very useful strategies which they had not implemented before. Utilizing different learning styles will make your classroom more dynamic and involve your students.

To research your students' individual learning styles, you may wish to administer a learning styles inventory or survey at the beginning of your course. There are many surveys which can be obtained free on the web, in educational literature, or you may want to develop your own. This will require that you as an instructor step out of your comfort zone and learn some new teaching strategies. By doing this, you will lead your students out of their comfort zones and into a world where learning is enjoyable.