



## Learning Styles

Many educators theorize that learners differ in their preferences for receiving and processing information. When a student's learning style differs from an instructor's teaching style, the student's performance may suffer or the student may become bored and inattentive. Many instructors have found value in exploring the ways that students learn and diversifying their teaching methods accordingly. It is not expected that an instructor will teach to *each* student's preference but instead strike a balance that will be helpful to a variety of students. Students are more likely to remain engaged and interested and since a variety of methods are used, students will also still be exposed to different ways of learning.

How can we incorporate this understanding into our teaching? One approach is to provide students with a learning style assessment at the beginning of the semester. Instructors who do this assess the diversity that exists among their students and tailor their teaching styles to the students they have that semester. An advantage of this approach is that it allows students to consider their own styles of learning and develop learning strategies that are most beneficial for that particular style. Some students may also recognize that there are skills that they need to develop in order to become more flexible learners. Another approach is to simply assume that in any given class there will be at least one person who represents each learning style profile. The following are suggestions for applying information about learning styles to your teaching:

1. Find a conceptual model of learning styles that suits you.
2. Use that model to become familiar with the different ways that people learn.
3. Assess your teaching style. It is likely consistent with your own learning style.
4. Incorporate teaching strategies that are appropriate for the learning styles represented in the model you choose.

A variety of models exist for assessing and understanding students' learning styles. The particular model or approach taken to understand learning styles, it seems, is less important than having a framework for considering diversity among your students. The Felder-Silverman Model is highlighted below as one possible option for conceptualizing learning styles.

### The Felder-Silverman Learning Style Model

<b>Sensing versus Intuitive</b> (Perceptual preference)	
<b>Sensing learners:</b>	<b>Intuitive learners:</b>
<ul style="list-style-type: none"> <li>○ Favor information that comes through the senses.</li> <li>○ Are practical. They like facts and observations.</li> <li>○ Like to solve problems, like details, don't like unexpected twists.</li> <li>○ Are careful but may be slow.</li> <li>○ Phrases you might hear: "This has nothing to do with the real world." "You never covered that in class!"</li> </ul>	<ul style="list-style-type: none"> <li>○ Favor information that comes through intuition—that arises from memory, reflection, and imagination.</li> <li>○ Are imaginative. They like concepts and interpretations.</li> <li>○ Don't mind complexity, are bored with details, are quick but may be careless.</li> </ul>

<b>Visual versus Verbal</b> (Sensory preference)	
<b>Visual learners:</b>	<b>Verbal learners:</b>
<ul style="list-style-type: none"> <li>○ Prefer images – pictures, diagrams, graphs, schematics, or demonstrations.</li> </ul>	<ul style="list-style-type: none"> <li>○ Prefer written and spoken words and mathematical formulas.</li> </ul>
<b>Active versus Reflective</b> (Processing preference)	
<b>Active learners:</b>	<b>Reflective learners:</b>
<ul style="list-style-type: none"> <li>○ Prefer trying things out or bouncing ideas off of others.</li> <li>○ Work well in groups</li> <li>○ Phrases: “Let’s try it out and see what happens.”</li> </ul>	<ul style="list-style-type: none"> <li>○ Are introspective.</li> <li>○ Work better alone.</li> <li>○ Phrases: “Let’s think it through first.”</li> </ul>
<b>Sequential versus Global</b> (Progression to understanding)	
<b>Sequential learners:</b>	<b>Global learners:</b>
<ul style="list-style-type: none"> <li>○ Acquire understanding in connected chunks.</li> <li>○ Can solve problems without understanding the big picture.</li> </ul>	<ul style="list-style-type: none"> <li>○ Take in seemingly unconnected fragments and achieve understanding in holistic leaps.</li> <li>○ May not do well with homework until they have a grasp of the big picture; once they have it, they may see connections to other areas or disciplines that others overlook.</li> </ul>
<b>Inductive versus Deductive</b> (Organizational preference)	
<b>Inductive learners:</b>	<b>Deductive learners:</b>
<ul style="list-style-type: none"> <li>○ Prefer to learn by seeing specific cases first (observations, experimental results) and working up to governing principles and theories.</li> </ul>	<ul style="list-style-type: none"> <li>○ Prefer to begin with general principles and to deduce consequences and applications.</li> </ul>