



SHELL  
EDUCATION

# Understanding Learning Styles

Making a Difference  
for Diverse Learners

Kelli Allen  
Jeanna Scheve  
Vicki Nieter  
Foreword by  
Gregory J. Kaiser



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# Introduction

If you are reading this, you are most likely in the education field at some level, whether it be in teaching, mentoring, or administration. Try to remember when you were sitting where your students are now. Were there times that you felt anxious, ill-prepared, or confused by content that just didn't make sense to you? Maybe you went to another teacher or a peer who explained the content differently, drew a picture, or used props, and finally, you got it! It was probably not that you were incapable of grasping the content, but possibly that the approach used to provide the necessary information was ineffective. In this time of outcomes-based and high-stakes assessments, it is crucial that the most efficient approaches be used in every classroom and with every student. This book offers multiple ways you can rise to the challenge and enhance your classroom with innovative and research-based techniques that will appeal to each learner's strengths.

Every classroom consists of individuals with diverse strengths, backgrounds, and approaches to learning. Understanding and responding to each student's individual learning style can be challenging for teachers. This book will introduce various learning styles, the research behind each style, and how to use this information to engage students in learning activities that are best suited for them. We will discuss numerous types of learning styles and provide practical strategies that enhance learning according to each style.

## *Learning styles and today's student*

What is meant by *learning styles*? A variety of different answers exists, but a formal response is that a learning style is a preferred way of thinking, processing, and understanding information. Each person prefers a pattern of thought and behavior that influences his or her learning process. In other words, we all learn in different ways. You might ask, "If that's *learning style*, then what is *teaching style*?" The *teaching style*



is the way instructors teach. Most teachers are chronological, systematic presenters, but the majority of their students do not learn this way. Knowing this information, it is essential to alter teaching strategies to meet the needs of all students. In other words, if students cannot learn the way we teach them, then we must teach them the way they learn best.

Current educational reform involves changing the classroom from a teacher-centered to a student-centered environment. It is old-fashioned and archaic to see the teacher as the provider of all knowledge, with students simply learning the information in whichever way the teacher chooses to present it. For many years, educators have known that students learn by different means. But, we are finally beginning to change the way that we teach to encompass these different learning styles.

This generation of students has more resources available to them at their fingertips than any previous generation. As a society, we revel in the freedom of choice to have just about anything tailored to our exact needs and wants, from fast food restaurants to customized cell phone plans. To meet the demanding needs of today's extremely diverse learners, teachers need activities that utilize current technological applications and are tailored to each individual's personal learning styles.

Every child is born with the capability to learn. Yet children (and adults) generally have a preferred style in which they learn best. A student may learn through a combination of styles, but usually he or she favors one learning style over others.

For example:

- You may be able to spell by visualizing a word, but your students may not be able to memorize spelling words unless they write them down first.
- Your students may prefer making a model to demonstrate a concept rather than writing a description of the concept.

There is no right or wrong learning style. A teacher's primary learning style may be different from his or her student's learning style(s). For a teacher to work effectively with a student, the teacher needs to understand his or her own learning style, as well as that of the student.

As a parent, when you identify how your child learns best, you can help the child have more positive learning experiences in school. Understanding your child's learning style can help you communicate more effectively with him or her and assist in guiding the child through academic challenges. In addition to being aware of your child's strengths, it's equally important to help your child strengthen his or her weaker areas. The more you learn about your student's learning style, the easier it is to understand why some aspects of school are easy for them and other aspects are not.


### *The changing role of the classroom teacher*

Today's classrooms are extremely diverse. Students possess a wide range of backgrounds, interests, experiences, abilities, and learning styles. Accommodating all of these differences is possibly the single greatest challenge for today's teachers.

To meet this challenge, teachers need a deep understanding and a strong desire to make content approachable for the diverse groups of students. Besides understanding the content, teachers must also have a solid understanding of their students. They must recognize and respect the importance of building strong relationships with each student.

Understanding learning styles means educators have a better understanding of how to offer students different options so learning activities can be tailored to each individual's preferred learning style(s). To be successful leaders, teachers must provide a variety of learning approaches for their students so these individual differences can be recognized and accommodated. Understanding the various ways in which children learn, as well





as how they interact with and process information, can help educators modify their lessons so that all students have an equal opportunity for success. This knowledge is also beneficial for parents so they can be more supportive at home.

It is imperative that today's teachers be able to describe and identify learning styles. Students do not have a single learning style. The brain works in many different ways. We use many styles to learn, depending on the circumstances. Once teachers are able to identify various learning styles, they can use that information to develop instruction tailored to the particular styles represented in their classrooms and to manage their classroom according to these styles.

Knowing his or her learning style helps that student recognize his or her preferred method for taking in information. Furthermore, as multiple intelligence theory tells us, students will know how to express his or her "smartness" to the outside world.

### *Summary of learning styles discussed throughout the book*

There has been a great deal of research on learning styles over the last 50 years. This book summarizes that research and provides applications for your classroom.

**Chapter 1** describes the work of Anthony Gregorc. Gregorc's learning style research has helped teachers recognize how personality differences can either enhance or impede communication between individuals.

**Chapter 2** focuses on the work of Dunn and Dunn. Their research identified significant stimuli that may influence learning and manipulate the school environment.

**Chapter 3** discusses the work of Howard Gardner, who identified individual talents or aptitudes in his Multiple Intelligences theories.



**Chapter 4** includes the work of Neil D. Fleming, who developed the VARK questionnaire to assess an individual's preferred means of receiving information and delivering communication.

This book discusses the work and research done by each of these leading researchers and the impact his or her work has had on classrooms around the world. In **Chapter 5**, we offer a description of how to use your knowledge of learning styles to design effective, individualized assessments based on the theories of each researcher.

Relationships exist among the researchers discussed throughout this book. Fleming and Gregorc both focus on perceptual modes of giving and receiving information. Dunn and Dunn focus on the effects of environmental stimuli on the efficiency of the perceptual mode, and Gardner's work reflects both the aspects of perceived preferences for gathering and processing information along with aspects of psychological partialities. Because the theories often overlap, **Chapter 6** shows how we were able to integrate all the research into an Individual Learning Plan (ILP) system called The Yes I Can! Model. Sample ILPs are discussed, and blank templates are provided in the Appendix so you can start designing your own Yes I Can! Model portfolios and assessments.

The **Appendix** also offers sample student surveys and feedback forms designed as tools for the teacher to use to reflect upon his or her own practice as to whether the strategies used in class were actually effective. A complete reference list is also provided, along with additional resources such as links to useful websites.

## *Gregorc's Mind Style characteristics*

<p><b>Concrete Sequential individuals</b></p> <ul style="list-style-type: none"> <li>• are natural organizers and closely follow directions.</li> <li>• prefer carrying out tasks step-by-step.</li> <li>• enjoy hands-on projects.</li> <li>• favor things to be ordered and arranged in specific ways.</li> <li>• have difficulty sitting still for long periods of time.</li> <li>• look for constructive activities to do.</li> <li>• need and enjoy structured situations.</li> <li>• prefer clear and definite directions.</li> <li>• have a fear of being wrong.</li> </ul>	<p><b>Concrete Random individuals</b></p> <ul style="list-style-type: none"> <li>• are extremely independent and competitive.</li> <li>• enjoy taking risks.</li> <li>• often skip details and steps.</li> <li>• are extremely curious.</li> <li>• seek innovation.</li> <li>• prefer investigation and experimentation.</li> <li>• exhibit originality and creativity.</li> <li>• dislike structure.</li> <li>• often fail to read instructions or directions.</li> </ul>
<p><b>Abstract Sequential individuals</b></p> <ul style="list-style-type: none"> <li>• think in structured, logical, and organized ways.</li> <li>• avidly read for new information and ideas presented in logical ways.</li> <li>• prefer quiet environments in which to think and work.</li> <li>• fear appearing foolish or uninformed.</li> <li>• seek intellectual recognition.</li> <li>• gather information and analyze ideas.</li> <li>• are lifelong learners.</li> <li>• enjoy debating controversial ideas.</li> </ul>	<p><b>Abstract Random individuals</b></p> <ul style="list-style-type: none"> <li>• have a fear of not being liked or approved of.</li> <li>• are highly imaginative.</li> <li>• tend to personalize information.</li> <li>• focuses on relationships and friendships.</li> <li>• tend to take on multiple projects or tasks at the same time.</li> <li>• enjoy learning through discussions and sharing of ideas.</li> <li>• dislike routines and order.</li> <li>• are very sensitive to feelings.</li> <li>• are flexible and respond to change easily.</li> </ul>

The following tables include characteristics of each type of learner. Information on what each type of learner does best, the difficulties associated with each type of learner, tips for the instructional focus, the preferred learning focus, and details about the ideal learning environment are included in the table. This information can assist teachers in meeting the diverse needs of each type of learner.

### *Concrete Sequential learners*

<p><b>Characteristics</b></p> <ul style="list-style-type: none"> <li>• practical</li> <li>• organize</li> <li>• detailed</li> <li>• efficient</li> </ul>	<p><b>Preferred learning environments</b></p> <ul style="list-style-type: none"> <li>• orderly</li> <li>• quiet</li> <li>• routines to follow</li> <li>• highly structured</li> </ul>
<p><b>What is difficult for these learners?</b></p> <ul style="list-style-type: none"> <li>• working in groups</li> <li>• use of imagination</li> <li>• abstract ideas</li> <li>• incomplete or unclear directions</li> <li>• dealing with unpredictable people</li> <li>• working in unorganized environments</li> <li>• making choices</li> <li>• answering “what if” questions</li> <li>• dealing with opposing views</li> </ul>	<p><b>Instructional focus</b></p> <ul style="list-style-type: none"> <li>• working systematically, step-by-step</li> <li>• having a schedule to follow</li> <li>• a structured environment</li> <li>• routines, directions, and details</li> <li>• knowing what’s expected of them</li> <li>• realistic situations</li> </ul>
<p><b>Preferred learning strategies</b></p> <ul style="list-style-type: none"> <li>• hands-on approaches</li> <li>• use of computers</li> <li>• projects</li> <li>• workbooks</li> <li>• gathering data</li> <li>• guided practice</li> <li>• whole-group instruction</li> </ul>	<p><b>What do these learners do best?</b></p> <ul style="list-style-type: none"> <li>• apply ideas in a practical way</li> <li>• fine-tune ideas to increase proficiency</li> <li>• follow directions</li> <li>• gather facts</li> <li>• work well within time limits</li> </ul>
<p><b>Student profile:</b> Katie is a typical concrete sequential learner. She follows directions very well and is adept in following the routines and procedures the teacher has established. She isn’t afraid to keep other students in line. Katie is attentive to details and is the go-to gal if you want to know what is going on in her classroom. She likes choices to be black or white and struggles with the gray areas. She is the “planner.”</p>	

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## Activity #1: Raft Model

**Learning style preference:** Concrete Sequential

**Description:** The students design, research, and use appropriate materials to create a model of the raft used by Jim and Huck to float down the Mississippi River. Then, each student must type a short description of how the model was made, including why the materials used were chosen. Students work individually. The teacher provides a schedule for completion of tasks that also serves as a checklist for progress.

### **Accommodations for special needs populations:**

**English language learners:** These students thrive when they are working independently on hands-on projects while receiving personal attention from the teacher. Producing a physical model of the raft will eliminate common language barriers, as well.

**Above-level learners:** Students' descriptions should include illustrations and at least three research sources used to help them design their rafts.

**Below-level learners:** Allow them more time to design their model with fewer requirements for the length of the description. The teacher should provide a schedule for students to follow that includes daily expectations for progress.

### **Varying instructional methods according to grade level:**

**Elementary level:** Teachers may read this book or a similar book to their students. A suggested project is to build rafts out of craft sticks. Students follow step-by-step instructions to create the raft, which also serves as a good lesson in reading directions.

**Intermediate level:** For middle school students, hold a competition to determine which raft floats the best.

**Secondary level:** Students research practical designs for their rafts and incorporate knowledge from other disciplines, such as physics principles of buoyancy and density, into their descriptions. Students present their models and justify the design and the materials they selected.

## *How to offer home support*

<p><b>Concrete Sequential learners</b></p> <ul style="list-style-type: none"><li>• Arrange a study corner at home. This area needs to be quiet and free from the television, radio, and other people.</li><li>• Let the child study for several short periods of time, rather than one long period of time.</li><li>• Show the child how to make outlines of information prior to writing essays.</li><li>• Offer lots of specific and positive feedback.</li></ul>	<p><b>Abstract Sequential learners</b></p> <ul style="list-style-type: none"><li>• Provide a study corner for a consistent work area.</li><li>• Provide a relatively quiet area, with possibly the addition of soft background music.</li><li>• Have students use highlighters to mark important parts of their notes to encourage them to reread information.</li><li>• Provide constructive feedback.</li></ul>
<p><b>Concrete Random learners</b></p> <ul style="list-style-type: none"><li>• Allow students to work in atmospheres that are lively, noisy, and interesting.</li><li>• Encourage these learners to make webs of key ideas, along with visual and verbal associations.</li><li>• Because they enjoy solving problems their own way, allow them to use hands-on explanations.</li><li>• Challenge these learners to meet time goals as additional incentives to learning.</li></ul>	<p><b>Abstract Random learners</b></p> <ul style="list-style-type: none"><li>• Resolve emotional dilemmas before homework time.</li><li>• Provide a means for creating illustrations of concepts to enhance learning.</li><li>• Let them work with a study-buddy or be surrounded by others at a library.</li><li>• Ask leading questions to help them discover where they can improve instead of criticizing their work (e.g., “What are some examples you could give?” versus “You didn’t give enough details.”)</li></ul>