Learning About Learning Styles

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Learning Styles

Behavioral and cognitive psychologists have long maintained that students come to school with certain inherent learning styles, many of which are at absolutely at odds with traditional teaching methods. Before we knew about Multiple Intelligences, teachers were encouraged by researchers to be mindful that students have fixed ways of internalizing new information. They told us that not all students learned equally well with traditional teaching strategies.

The concept of four basic personality types has its roots in ancient history and philosophy. Swiss psychologist Carl Jung (1923) popularized the division of personalities into four categories; thinking, sensing, feeling, and intuition. Since that time numerous psychometric instruments have been developed that basically attribute central human tendencies to four major groups. The MBTI® (Myers-Briggs Type Indicator) distinguishes areas similar to Jung's; extroverted/ introverted, intuitive/sensing, feeling/thinking, perceiving/judging. Silver (no relation), Strong & Associates, Inc. (1980) identify areas similar to Jung's; sensing/thinking (mastery style), sensing/feeling (interpersonal style), intuitive/thinking (understanding style), intuitive/feeling (self-expressive style).

Religious writer, Florence Littauer (1986) has spoken at length on her four categories; sanguine, choleric, melancholy, and phlegmatic. A current popular testing/training program is that of True Colors®, which uses colors to indicate these personality distinctions; courageous, conventional, compassionate, conceptual. And there are many others.

The important thing to remember is that whatever the classifications, there is demonstrable evidence that different learners can best be taught through identified instructional strategies and assessments. Teachers can most effectively engage each and every learner by adapting differentiated approaches.

Most of the learning style inventories and categories I have studied have the same theoretical underpinnings as the one by Dr. Anthony Gregorc. The following classifications are the property of Dr. Anthony Gregorc. They have emerged from his extensive research on the topic of learning styles. For a full presentation of this material along with a self-scoring inventory, please visit Dr. Gregorc's website at
http://www.gregorc.com/instrume.html

Applying What We Know Student Learning Styles
From: **Dennis W. Mills Ph.D.**

The way we see the world in a way that makes the most sense to each of us is called **perception**. Our perceptions shape what we think, how we make decisions, and how we define what's important. Our individual perception also determines our natural learning strengths, or **learning style**.

There are two perceptual qualities: *concrete* and *abstract*.

Concrete: This quality enables you to register information directly through your five senses: sight, smell, touch, taste, and hearing. When you are using your concrete ability, you are dealing with the obvious, the "here and now." You are not looking for hidden meanings, or making relationships between ideas or concepts. "*It is what it is.*"

Abstract: this quality allows you to visualize, to conceive ideas, to understand or believe that which you cannot actually see. When you are using your abstract quality, you are using your intuition, your imagination, and you are looking beyond what is to the more subtle implications. "*It is not always what it seems.*"

There are two ordering abilities in Gregorc's model: *sequential* and *random*.

Sequential: Allows your mind to organize information in a *linear*, step-by-step manner. When using your sequential ability, you are following a logical train of though, a traditional approach to dealing with information. You may also prefer to have a plan and to follow it, rather than relying on impulse.

Random: Lets your mind organize information by *chunks*, and in no particular order. When you are using your random ability, you may often be able to skip steps in a procedure and still produce the desired result. You may even start in the middle, or at the end, and work backwards. You may also prefer your life to be more impulsive, or spur of the moment, than planned.

There are four combinations of the strongest perceptual and ordering ability in each individual:
1. **Concrete Sequential (CS)**
2. **Abstract Random (AR)**
3. **Abstract Sequential (AS)**
4. **Concrete Random (CR)**

No one is a "pure" style. Each of us have a unique combination of natural strengths and abilities. By learning some of the common characteristics of each of the four combinations used by Gregorc, we can recognize and value what our students do best. We can help them to improve in areas that are least used and understood.

Gregorc's 4 Basic Learning Styles

Abstract Random

Their Traits
• Sensitive
• Compassionate
• Idealistic
• Empathetic
• Imaginative
• Sentimental
• Spontaneous
• Flexible

What They Do Best
• Listen to others
• Understand feelings and emotions
• Focus on themes and ideas
• Bring harmony to group situations
• Establish positive relationships with everybody
• Recognize and meet the emotional needs of others

What's Hard For Them?
• Having to explain or justify feelings
• Working with dictatorial/authoritarian personalities
• Working in a restrictive environment
• Working with people who are not friendly
• Concentration on one thing at a time
• Giving exact details
• Working under exact time restrictions
• Accepting even positive criticism

Appropriate Instructional Strategies:
• Role playing
• Team games
• Short reading assignments
• Discussions
• Videos
• Peer tutoring
• Group investigations
• Active, busy environments

NOTES:

Gregorc's 4 Basic Learning Styles

Concrete Sequential

Their Traits
- Factual
- Organized
- Dependable
- Stable
- Hardworking
- Conventional
- Consistent
- Accurate

What They Do Best
- Apply ideas in a practical way
- Organize
- Fine-tune ideas to make them more efficient
- Produce concrete products from abstract ideas
- Work well within time limits

What's Hard For Them?
- Working in groups
- Discussions that seem to have no point
- Working in an unorganized environment
- Following incomplete or unclear directions
- Working with unpredictable people
- Dealing with abstract ideas
- Demands to "use your imagination"
- Questions with no right or wrong answers

Appropriate Instructional Strategies:
- Step-by-step directions
- Workbooks
- Drill and practice
- Lectures with PowerPoint Demonstrations
- Labeling drawings and models
- Well-structured field trips
- Color-coded study organizers
- Logical sequencing
- Focused, quiet environments

NOTES:

Gregorc's 4 Basic Learning Styles
Abstract Sequential

Their Traits:
• Knowledgeable
• Thorough
• Analytical
• Objective
• Structured
• Systematic
• Deliberate
• Logical

What They Do Best:
• Gather lots of information before making a decision
• Analyze ideas
• Research
• Provide logical sequence
• Use facts to prove or disprove theories
• Figure out what needs to be done

What's Hard For Them?
• Being forced to work with those of differing views
• Too little time to deal with a subject thoroughly
• Repeating the same tasks over and over
• Lots of specific rules and regulations
• "Sentimental" thinking
• Expressing their emotions
• Being diplomatic when convincing others
• Not monopolizing the conversation

Appropriate Instructional Strategies:
• Extensive reading assignments
• Lecture with time for reflection
• Debate. Essays. Journaling
• Logic Problems. Research-based lessons
• Finding information on the World Wide Web
• Individual projects
• Inquiry-based activities
• Quiet, well-controlled environments

NOTES:

Gregorc's 4 Basic Learning Styles
Concrete Random

Their Traits:
- Curious
- Quick
- Intuitive
- Realistic
- Creative
- Innovative
- Instinctive
- Adventurous

What They Do Best:
- See many options and solutions
- Contribute unusual and creative ideas
- Visualize the future
- Offer a different way of doing things
- Accept many different types of people
- Think fast on their feet
- Take risks

What's Hard For Them?
- Restrictions and limitations
- Formal reports
- Routines
- Re-doing anything once it is done
- Keeping detailed records
- Showing how they got an answer
- Having no options

Appropriate Instructional Strategies:
- Independent study projects
- Learning games, Simulations
- Optional reading assignments
- Open-ended discussions
- Divergent thinking activities
- Unstructured exploration time
- Mini-lectures
- Activities on the Internet
- Moderately active environments

NOTES:

Questions They May Ask In Class

Abstract Random:
"What does this have to do with me?"
"How can I make a difference?"
"What was the assignment?"

Concrete Sequential:
"What are the facts I need to know?"
"How do I do it?"
"What should the result look like?"
"When is it due?"

Abstract Sequential:
"How do we know this is true?"
"Are there any possibilities we haven't considered?"
"What will we need in order to accomplish this?"
"May I work by myself?"

Concrete Random:
"How much of this is really necessary?"
"I wonder what would happen if . . ."
"May I try it another way?"
"What's next?"

Different Ways to Find Out What Students Understand

Make a chart or diagram	Do a demonstration	Create a dance
Write a letter to the editor	Make a scrapbook	Design a Web Quest
Conduct a discussion	Participate in a debate	Create a puppet show
Create an advertisement	Make an editorial video	Keep a journal log
Write an essay	Design a structure	Create a report
Participate in a simulation	Develop a collection	Make a plan
Create a poem	Write and do a rap	Make a mural
Do a photo essay	Design a game	Create a new product
Create an invention	Present a news report	Do an experiment
Teach someone else	Judge an event	Make a model
Write an analogy	Conduct an interview	Develop a rubric
Participate in a mock trial	Create cartoons	Write a book
Design and teach a class	Create a flow chart	Make a learning center
Devise a new recipe	Give a performance	Draw a blueprint
Write a monologue	Defend a theory	Do a self-assessment
Illustrate a math concept	Create a brochure	Solve a mystery
Do a multimedia presentation	Develop an exhibit	Critique a book
Write a diary from the perspective	Set up a system of checks	Do a Gallery Walk
of someone else	and balances	(Carousel Walk)

I am not suggesting that teachers must cover every concept in four different styles (or eight different intelligences or a combination of both). That would be impossible as well as counterproductive. Part of our job as educators is to prepare students for the real world, and quite frankly in most cases our learners will have to conform to the edicts of the real world rather than the other way around.

However, what I am saying is that by designing a variety of experiences for students as we plan each unit, we are more likely to appeal to their differentiated needs and re-engage them in the learning process. It is a matter of purposefully planning lessons that offer a range of ways to internalize new information. For most of us it is easy to plan activities in keeping with our own styles. The challenge is to blend activities that capitalize on each of the styles. (If you work on a team on which different styles are represented, this job becomes much easier.) The key is variety. Whether presenting new information, planning for how students will process it, or creating opportunities for them to demonstrate what they know, teachers must be diligent in giving each student a chance to use his/her own best resources.

Some people are confused by the association between learning styles and multiple intelligences. I use MI theory in regard to content matters and learning style theory to explain matters of process. It is my belief that learning styles are a fixed mode of understanding that the learner primarily uses to master new skills and concepts. I think that a person's learning style transcends all intelligence levels. Students learn in unique ways. It is to everyone's benefit if teachers vary techniques, strategies, assignments, and assessments so that all students have a reasonable chance at success.

If a doctor, lawyer, or dentist had 40 people in his office at one time, all of whom had different needs, and some of whom didn't want to be there and were causing trouble, and the doctor, lawyer, dentist, without assistance, had to treat them all with professional excellence for nine months, then he might have some conception of the classroom teacher's job.

--Donald D. Quinn

LIST OF RELATED CITATIONS

"LEARNING ABOUT LEARNING STYLES"

PRESENTED BY STAFF DEVELOPMENT FOR EDUCATORS (SDE)

DR. DEBBIE SILVER

Armstrong, T. (1998). *Awakening Genius in the Classroom*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).

Conner, M.L. (2004). *Introduction to Learning Styles*. Ageless Learner, 1997-2004. http://agelesslearner.com/intros/lstyleintro.htm/

Gregorc, A.G. (1982). *An Adult's Guide to Style*. Columbia, CT: Gregorc Associates, Inc.

Jensen, E. (1998). *Teaching with the brain in mind*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).

Jung, C. (1923). *Psychological Types*. (H.G. Baynes, Trans). New York: Harcourt, Brace & Co.

Mills, D.W. (2002). *Student Learning Styles*. Christian Web Hosting. ChristianHosting.com http://www.csrnet.org/csrnet/articles/student-learning-styles.html

Silver, D. (2005). *Drumming to the Beat of Different Marchers: Finding the Rhythm for Differentiated Learning*. Nashville, TN: Incentive Publications.

Silver, H.F., Strong, R.W., & Perini, M.J. (2000). *So Each May Learn: Integrating Learning Styles and Multiple Intelligences*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).

Sylwester, R. (1995). A Celebration of Neurons: An Educator's Guide to the Human Brain. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).