

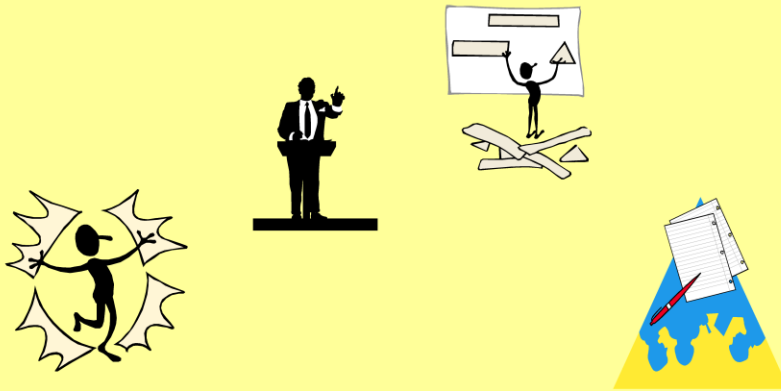
Learning & Teaching Styles

FCS Field Faculty Orientation

Dr. Sandy Wiggins
FCS NFFO Coordinator

sandy_wiggins@ncsu.edu

Learning and Teaching Styles



And You Are A.. CS, AS, AR, CR

Dr. Anthony F. Gregorc is the developer of the Gregorc Style Delineator. Using this tool will give you an insight to your learning style and how best to utilize this information as an educator. The goal of this program is to help you to identify the learning style(s) in the way that is the most effective for you and most effective teaching strategies for each of the learning styles associated with Gregorc.

A learning style is defined as an individual's preferred way of learning. When an instructor's style matches a student's learning style, that student typically experiences greater satisfaction and a more positive attitude toward the learning experience. However, there is not consensus as to what degree learning styles actually affect a student's ability to do well.

There are three basic approaches to learning styles and instruction:

- The **first approach** is to identify a person's individual learning style and then adapt instruction toward that person's strengths and preferences.
- The **second approach** is to identify a person's preferred style and then design instruction aimed toward the opposite preference in order to strengthen less preferred style(s). There is considerable controversy involving this method. Use it with caution!
- The **third approach** does not even attempt to identify an individual's style, but rather uses different teaching strategies and media in the overall learning experience. This approach represents an attempt to reach all learners and assumes that every student will find something in the learning

LEARNING STYLES INVENTORY

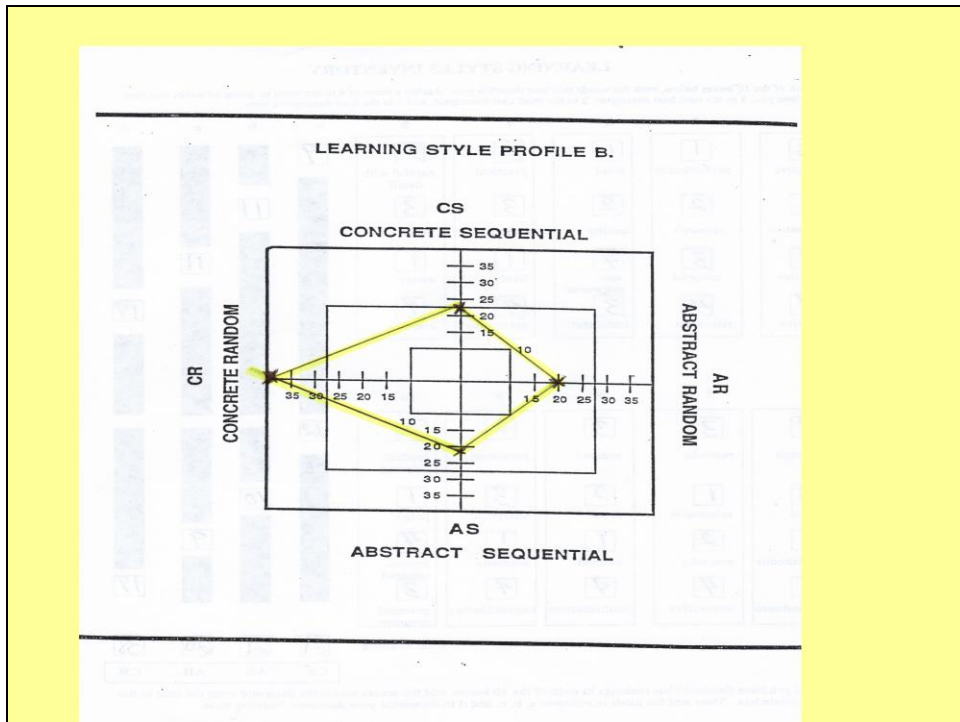
In each of the 10 boxes below, rank the words that best describe you. Assign a score of 4 to the word or group of words that best describes you, 3 to the next best descriptor, 2 to the third best descriptor, and 1 to the least descriptive term.

1	2	3	4	5	a	b	c	d
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3 objective</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 evaluative</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 sensitive</div> <div style="border: 1px solid black; padding: 2px;">4 intuitive</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 perfectionist</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 research</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3 colorful</div> <div style="border: 1px solid black; padding: 2px;">4 risk-taker</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 solid</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 quality</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">4 non-judgmental</div> <div style="border: 1px solid black; padding: 2px;">3 insightful</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 practical</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3 rational</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 lively</div> <div style="border: 1px solid black; padding: 2px;">4 perceptive</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 careful with detail</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3 ideas</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 aware</div> <div style="border: 1px solid black; padding: 2px;">4 creative</div>	9	11	11	19
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 thorough</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3 logical</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 spontaneous</div> <div style="border: 1px solid black; padding: 2px;">4 troubleshooter</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3 realistic</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 referential</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 empathy</div> <div style="border: 1px solid black; padding: 2px;">4 innovative</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3 ordered</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 proof</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 attuned</div> <div style="border: 1px solid black; padding: 2px;">4 multisolution</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 persistent</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3 analytical</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 aesthetic</div> <div style="border: 1px solid black; padding: 2px;">4 experimenting</div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2 product oriented</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1 judge</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">4 person-oriented</div> <div style="border: 1px solid black; padding: 2px;">3 practical dreamer</div>	12	10	9	19
Total of above					21	21	20	38
					CS	AS	AR	CR

When you have finished your rankings in each of the 10 boxes, add the scores across the page and enter the total in the appropriate box. Then add the totals in columns a, b, c, and d to determine your dominant learning style.

This is the Gregorc Style Delineator Learning Styles Inventory. Once you complete the assessment, your primary learning style(s) will be identified.

The Gregorc Style Delineator Learning Styles Inventory is available online:
<http://iweb.tntech.edu/rclougherty/workshop/page8/page8.html>



There are four learning styles:

Abstract sequential

Concrete sequential

Abstract random

Concrete random

On the grid, locate the score for each of the four learning styles and place a dot on the scores. Connect the four dots with straight lines. This is a visual showing the strengths of your learning styles. The more skewed, the stronger the learning style. In this example, concrete random is the primary learning style and is very strong.



Abstract Sequential

- Want substance and sequence (even a dull lecturer is OK if information is good)
- Prefer authority figure in the teacher
- Voracious readers
- Long term memory
- Use logic to “grasp situations”
- Sees conceptual pictures (logical parts)
- Sees situations as “black and white” – no gray areas
- Cannot be distracted when learning (need quiet environment)
- Proceed with activities one at a time
- Will clean off desk before beginning work

This slide describes the characteristics of the abstract sequential learning style.

Concrete Sequential



- Learn with hands-on experiences. Must practice an activity.
- Need order and sequence in activities.
- Want specific directions (Read directions first before assembling something)
- See situations as “black and white” – no gray areas
- Cannot be distracted when learning (need quiet environment)
- Proceed with activities one at a time.
- Will clean off desk before beginning work.
- Sees everything in discrete parts (example of a small engine).

This slide describes the characteristics of the concrete sequential learning style.



Abstract Random

- Pay a great deal of attention to human behavior
- Prefer to receive instruction in an unstructured manner
- Learn best when the experience is innovative or “different”
- Need time to reflect or assimilate information
- Prefer a busy environment (and work area)
- Holistic in nature (focus on the big picture)

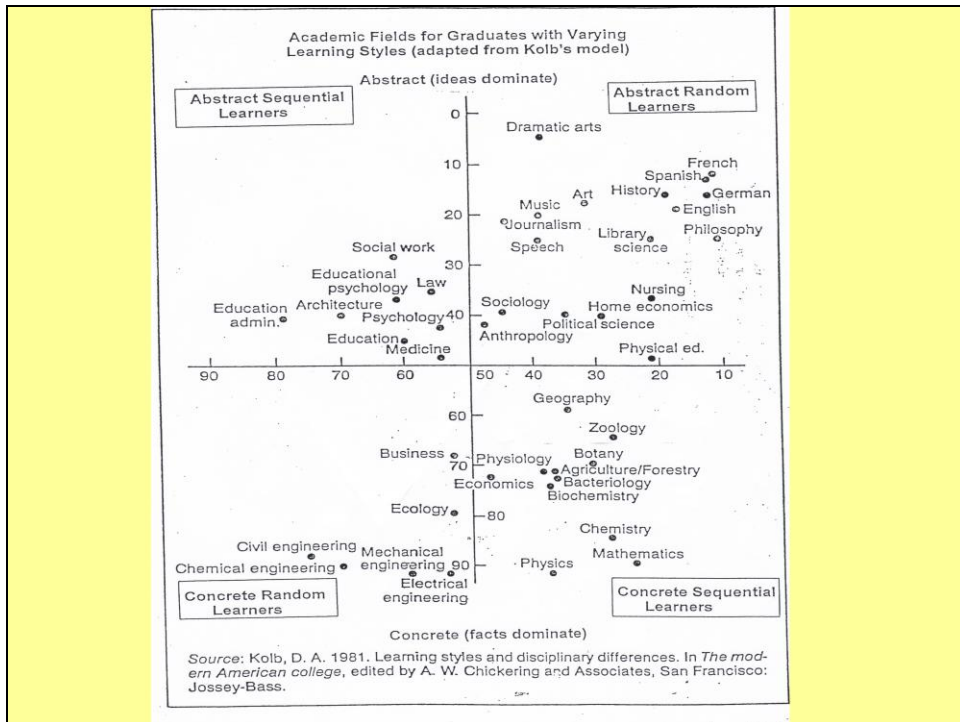
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Concrete Random

- Get the gist of ideas quickly
- Ability to make intuitive leaps
(skip steps in problem solving)
- Prefers a trial and error approach
(very little structure)
- Learns well in problem solving or
creative situations
- Sees the whole picture with overlapping parts
- Prefers a busy environment (and work area)

This slide describes the characteristics of the concrete random learning style.



Using your scores, locate the academic field(s) that correlate with those scores.

IN-SERVICE TRAINING PLANNING TOOL

Topic _____
Audience _____

Directions: Using the principles and ideas provided in this session, plan a three-hour workshop for your audience.

Time Needed	Subject Matter	Objectives	Methods or Strategies	Materials Needed

When using this planning tool, refer to the four learning styles when identifying teaching methods or strategies.

Characteristics of Students With Each of the Four Major Learning Styles

Distinguishing Characteristics

Natural Abilities

Concrete Sequential

Practical
Predictable
To-the-point
Organized
Structured

Hands-on activities
Following directions
Learning factual information
Using workbooks, lab manual

Abstract Sequential

Intellectual
Logical
Conceptual
Rational
Studious

Reflective thinking
Researchers
Developing ideas
Reading/visual skills

Abstract Random

Emotional
Interpretative
Sensitive
Holistic
Thematic

Developing relationships
Sharing experiences
Aesthetic environments
Describing the "meanings"

Concrete Random

Original
Experimental
Investigative
Option oriented
Risk taking

Exploring things (or people)
Creative activities
Troubleshooting
Problem solving

Learning Styles Characteristics

Concrete Sequential

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TEACHING FOR DIFFERENT LEARNING STYLES

Teaching Techniques for the Four Learning Styles

Concrete Sequential Teachers

- Practical, specific, and concrete examples
- Opportunities to practice teacher-demonstrated techniques
- Problem solving using specific rules
- Step-by-step learning procedures
- Immediate and correction-oriented feedback
- Memorization
- Reinforcement homework
- Worksheets (drills)
- Behavior modification

Abstract Sequential Teachers

- Extensive reading (gather facts, compare theories)
- Extensive research (collect "hard" evidence, avoid speculation, build on knowledge)
- Expert information (gain breadth and depth; to know specialists opinions)
- Intellectual processing (conceptualize, analyze, hypothesize, synthesize, draw conclusions)
- Memorization and comprehension (use facts to prove a point, conclusions from facts)

Abstract Random Teachers

- Group discussion
- Values clarification
- Group problem solving
- Media: movies, CDs, TV
- Role play, games
- Cooperative learning
- Personalized interpretations (take the viewpoint of...how would you feel if...)
- Aesthetic connections (visuals that illustrate the mood or force of a topic)

Concrete Random Teachers

- Brainstorming
- Creative problem solving
- Developing and testing alternative solutions
- Investigative activities
- Inquirv approaches

TEACHING STRATEGIES TO MATCH STUDENT LEARNING STYLES

Concrete Sequential

- Use models, drawings, relia
- Use direction sheets
- Ordered presentations (lectures)
- Workbooks and lab manuals
- Building projects (hands-on)
- Programmed or computer assisted instruction
- Structured field trips

Abstract Sequential

- Reading assignments
- Lectures (well-organized and meaningful)
- Audiotapes, CDs
- Debates

Abstract Random

- Group discussion
- Short reading assignments followed by class activities
- Small group discussions
- Audiovisual programs
- Assignments that permit reflection and “soaking” time

Concrete Random

- Trial and error
- Games, simulations
- Independent study projects
- Optional reading assignments
- Mini-lectures that set up a problem situation

This is a very good resource to use with the planning tool's column – teaching methods and strategies. Remember to include at least one teaching strategy for each of the four learning styles.

IN-SERVICE TRAINING PLANNING TOOL

Topic Asthma
Audience ECA Club Members

Directions: Using the principles and ideas provided in this session, plan a three-hour workshop for your audience.

Time Needed	Subject Matter	Objectives	Methods or Strategies	Materials Needed
30 minutes	Over view of Asthma and Health Effects	Create awareness of who is affected by asthma and potential health effects.	Lecture Simulation	Flipchart with talking points Handouts
10 minute break				
60 minutes	Asthma triggers and allergens: sources, how to prevent and/or control techniques	Become more knowledgeable of sources and methods too prevent or control asthma triggers and allergens.	Lecture Video	VCR/TV Cleaning products
15 minute break				
30 minutes	Personal Inventory/ Management Plan	Conduct room by room inventory of potential asthma triggers and allergens	investigative activity	Room by room inventory check list
35 minutes	Questions and answer session			

Example of a completed planning tool.

For more information, or would like to have further training on the Gregorc Style Delineator, contact
sandy_wiggins@ncsu.edu