

Teaching Styles and Learning Styles

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Objectives

- ▶ At the conclusion of this presentation, the participant should be able to:
- ▶ Define learning styles, and list three learning styles
- ▶ Discuss other learning style influences
- ▶ Define teaching styles, and list the four teaching styles
- ▶ Discuss at least 2 aspects of the four teaching styles
- ▶ Explain the characteristics of adult learners

Our Goal: The success of our students



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3

Learning Style

- ▶ Our preferred manner of acquiring, using and thinking about knowledge
- ▶ We generally use more than one method of learning, as fits the situation or content
- ▶ Does not define our ability to learn, just how we learn
- ▶ Educational research has defined several aspects of learning....

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4

Learning style refers to the **WAY** we receive information.

Learning style refers to **HOW** we learn **WELL**.

Learning style does **NOT** indicate whether we are capable of learning or not.

Learning Styles

- ▶ Visual
- ▶ Auditory/verbal
- ▶ Tactile/kinesthetic



V.A.K.

Also known as V.A.R.K. (See next slide.)

Visual Learners



▶ (and) Verbal:

- ▶ Read text only, thinking about words and explanations
- ▶ Write out summaries, highlight or underline, write formulas in words

▶ (and) Non-verbal:

- ▶ Diagrams and/or pictures
- ▶ Devise charts and diagrams from information



NOTE: In classic VARK learning style philosophy,

The Visual + Verbal = "R" = Reader (Reading text; write summaries, highlight or underline, etc.)

Auditory/Verbal Learners

► Listen to explanations

- Like classroom lectures
- Recite materials out loud, work with group to talk through materials, record lectures



Students need to re-hear lecture. May ask if they can tape lectures

Student works better with on-line learning if there is a voice over the text

Tactile/Kinesthetic Learners

- ▶ Learn by doing, manipulating

- ▶ Like lab work, hands-on
- ▶ Stay active, take notes, engage, draw charts



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8

Coloring in things = good learning tool.

Re-writing or re-typing notes = tactile way to learn.

Environmental Learner

- ▶ Information is processed best when learners can control their own learning environment
 - ▶ Lighting, seating, temperature
- ▶ Online learners can control their environment more than on-campus students can



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Another influence on learning that is newly being recognized: the Environment.

Where learning takes place and what the learner is wearing influences their ease of learning. Popular with on-line learners.

NOTE: Due to taking classes all our lives, we have had to learn by all methods just discussed (and other to be discussed), but we have a PREFERENCE for learning style(s).

Other Learning Style influences

- ▶ **Personality styles** (based on MBTI preferences)
 - ▶ Introverts vs Extraverts:
 - ▶ Learn and study alone vs in groups
 - ▶ Intuitors vs Sensors:
 - ▶ Solve problems and be creative vs use details and analyze facts

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MBTI = Myers-Briggs Type Indicator test

Introvert = likes to study alone, likes to read by themselves

Extrovert = prefers studying in groups, and talking through problems

Intuitors = tends to be creative, like to problem-solve

Sensors = prefers dealing with details, numbers, colors, texture

Other Learning Style influences

- ▶ **Personality styles** (based on MBTI preferences)
- ▶ **Feelers vs Thinkers:**
 - ▶ Rely on emotional response, personal values vs logic and analyzing situation
- ▶ **Perceivers and Judgers:**
 - ▶ Gather lots of information, appreciate all sides, difficulty with completion vs quick and decisive, complete tasks

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11

Feelers = tends towards harmony, dealing with emotions, concerned about how something will effect other people

Thinkers = like dealing with logic, cause and effect, analyzing

Perceivers = Like to look at all options, so may have a harder time completing a task, as there may be “one more thing” to think about

Judgers = like to make a decision quickly, and move on to the next situation

Other Learning Style influences

▶ Brain Processing Styles

- ▶ Left-brain processing: verbal competence
 - ▶ Organization, logic, patterns, details, tables of information
- ▶ Right-brain processing: nonverbal domains
 - ▶ Spatial relationships, patterns, music, emotional expression

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12

Left brain people like math and science.

Right brain people usually become artists, musicians, etc.

What is unique about this group of my graduates?



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13

This group had male and female, all ages, some with families, some just starting (pregnant), different nationalities, backgrounds, etc.

But all are **ADULT LEARNERS**.

Adult Learners and Learning Styles (we aren't teaching children)

- ▶ Problem-centered
- ▶ Results-oriented
- ▶ Self-directed
- ▶ Education should relate to needs
- ▶ May be skeptical of new information
- ▶ Willing to accept responsibility for learning

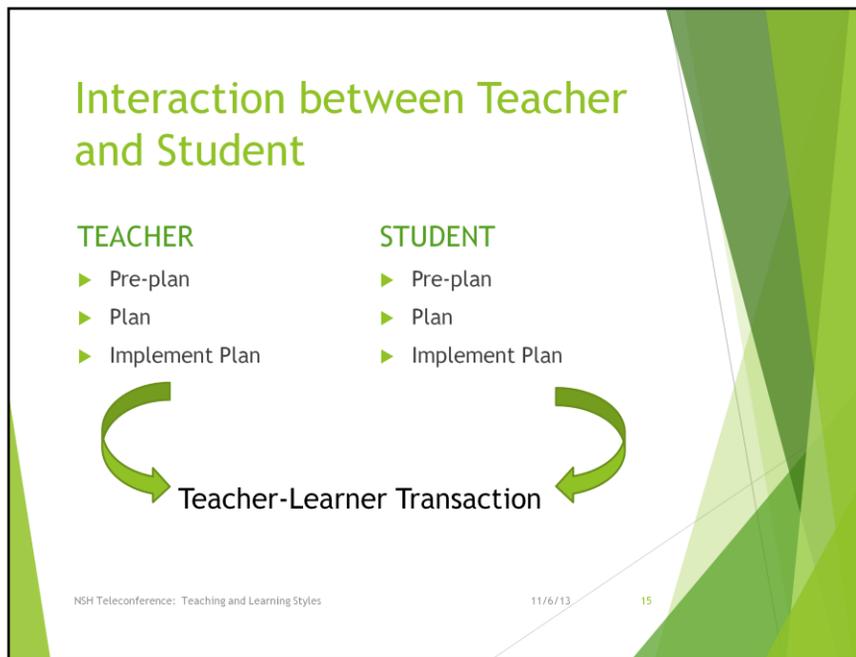
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14

Adult learners are focused on CAREER, so they want everything to relate to their future profession.

Do not want material they think will not be useful to them for finding a job.



Both students and teacher have to go through their own pre-planning, planning and implementing (teach/learn).

But then they need to meet together for the teacher-learner transaction = exchange of information.

Teaching Styles



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16

Teaching Styles

- ▶ Instructors have a dominant and preferred teaching style

Often based on their preferred learning style

Or

How they were taught

- ▶ Generally use a mix of styles

Two models: Teacher-Centered and Learner-Centered

Four Teaching Styles

- ▶ Formal
- ▶ Demonstrator
- ▶ Facilitator
- ▶ Delegator

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18

Formal should read “Formal Authority”

Formal Teaching Style

- ▶ Content-driven
- ▶ Teacher-centered
- ▶ Not relationship oriented

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Header should read “Formal Authority Teaching Style”

Teacher feels responsible about the flow of information.

Student just receives the information. Student does not have a lot of input into the teaching/learning process.

Demonstrator or Personal Teaching Style

- ▶ Teacher-centered
- ▶ Instructor demonstrates or models activities
- ▶ Then provides coaching and guidance to students
- ▶ Builds problem-solving skills by working through scenarios
- ▶ Instructor gives encouragement, but students are expected to take responsibility for continued learning

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20

Instructor: Demo and Coach

Students are expected to take responsibility for their own learning.

Facilitator Teaching Style

- ▶ Student-centered
- ▶ Instructor introduces activities for student learning
- ▶ Students take initiative to complete
- ▶ Encourages independent learning, participation and collaboration
- ▶ Through group activities, students process and apply learning

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21

Goal is to use the content to problem-solve.

The teaching is not content driven.

Delegator Teaching Style

- ▶ Learning is controlled by students or student groups
- ▶ Students choose design of project and implement the process
- ▶ Students learn to work independently or in groups, must remain motivated and focus
- ▶ Students learn to work through complex projects and to manage interpersonal roles

Instructor = consultant

Teaching Styles: Instructor-Centered

- ▶ Transfer of knowledge, information or skills from instructor to student
- ▶ Instructor has primary control over content and pace of course
- ▶ Purpose of learning is to acquire and memorize new information and skills

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23

Typically involves lots of lectures.

Advantages:

- Cover a lot of material in a short amount of time
- Teach a large number of students
- Testing on exams can be quick and easy (written exams)

Disadvantages:

- Students are not actively involved = passive learning
- Also known as one-way

Teaching Styles: Student-Centered

Students receive knowledge but ALSO:

- ▶ Interpret it
- ▶ Learn through discovery
- ▶ Set the pace for learning, with instructors as coach or mentor; instructor designs experiences through which students gain knowledge and develop skills

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24

Advantages:

- Engages students of all different learning styles in learning process
- Students take ownership of knowledge
- Active learning, with critical thinking; Assessment by various methods

Disadvantages:

- More difficult to do with large number of students
- More time consuming for teacher

Teaching Styles

- ▶ Instructor-Centered and Student-Centered can be combined
 - ▶ Depends on topic and institutional constraints
 - ▶ Depends on student's level of understanding (and maturity)
- ▶ Both have pros and cons

Teaching adult learners:

Teachers generally:

- ▶ Establish control by giving some of it up
- ▶ Provide opportunities for dialogue; sharing experiences
- ▶ Allow discussions and debate but protect minority opinions
- ▶ Allow students to disagree; treat questions and comments with respect
- ▶ Engage students in learning process; be flexible to schedule changes driven by learners' needs
- ▶ Focus on theories and concepts; orient content toward applications
- ▶ Use variety of teaching materials and methods

YOUR Teaching Style

- ▶ Discover your current teaching style - or combinations of several styles.
- ▶ Develop your teaching style by using what works now and introducing new components.
- ▶ Consider students' learning styles and diversify your approach.
- ▶ A student-centered approach does not undermine the teacher's authority in the classroom.
- ▶ Consider using technology to diversify teaching approaches.
- ▶ Try new things, even if they are not high-tech.

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27

Bullet 2: Develop a better ~~your~~ teaching style by using what works now and introducing new components.

Some teaching strategies

- ▶ Use various teaching methods to present information
- ▶ Lecture
- ▶ Discussion
- ▶ Questioning
- ▶ Projects
- ▶ Teach-back
- ▶ Demonstrations

INVOLVE STUDENTS!!

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Teach-back: Turn their questions around by questioning them for understanding

Eg.

Student: What is this cell?

Teacher: Well....how would you describe the cell's size? chromatin pattern? Cytoplasm? What does this most describe?

Teaching Strategies

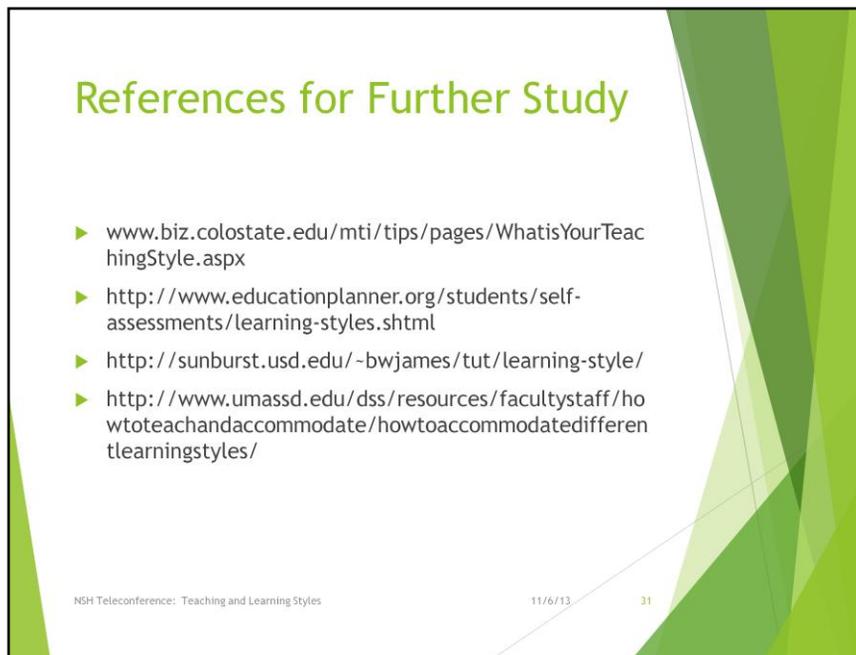
Use what works best for the topic you're covering....

- ▶ Microtomy skills are not taught the same as laboratory math formulae
- ▶ Staining terminology will be taught differently from staining techniques
- ▶ Use visual aids often

Bottom line:

- ▶ Teachers are responsible for teaching all the students all the course content





2 on self-assessment for teaching styles; 2 on self-assessment for learning styles

Can Google: Power Learning; Peak Performance; Cornell University

VARK inventory site for students and teachers = www.VARK-learn.com

Cornell U also has a website for active learning

Questions?



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32

From Clinical Laboratory Science Education and Management

by Wallace and Klosinski

- ▶ “Students are the most important persons in the lecture room or laboratory
- ▶ They are there to acquire the knowledge and skills necessary to be hired and work in a histopathology laboratory
- ▶ Instructors facilitate learning by using various motivational skills
- ▶ Respect for students should always be uppermost in mind
- ▶ Diversity should be recognized, appreciated and celebrated”

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33

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- ▶ 2014 brochure available soon at www.nsh.org
- ▶ February 5, 2014 = **What Competency Really Is**, Linda McDonald, HT(ASCP), Cleveland Clinic, OH
- ▶ March 5, 2014 = **Making the Case for Case Study Presentations in the Histology Laboratory or Histotech Program**, Nancy Ramirez, MT(ASCP), William Beaumont Hospital, MI
- ▶ November 5, 2014 = **The Magical Science of Rubrics**, Joyce Sohrabian, HT(ASCP), Argosy University, MN

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34