

The slide features a white central area with a black border. On the left and right sides, there are abstract, overlapping green geometric shapes in various shades of green, creating a modern, angular design.

Teaching Styles and Learning Styles

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www.nsh.org

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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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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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



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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



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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



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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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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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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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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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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

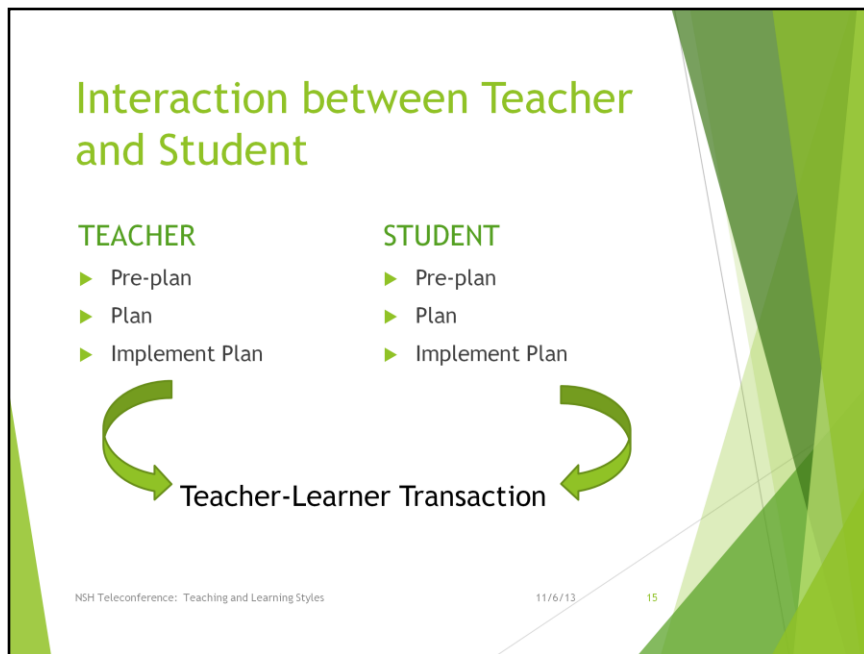
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Adult learners are focused on CAREER, so they want everything to relate to their future profession.

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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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

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Two models: Teacher-Centered and Learner-Centered

Four Teaching Styles

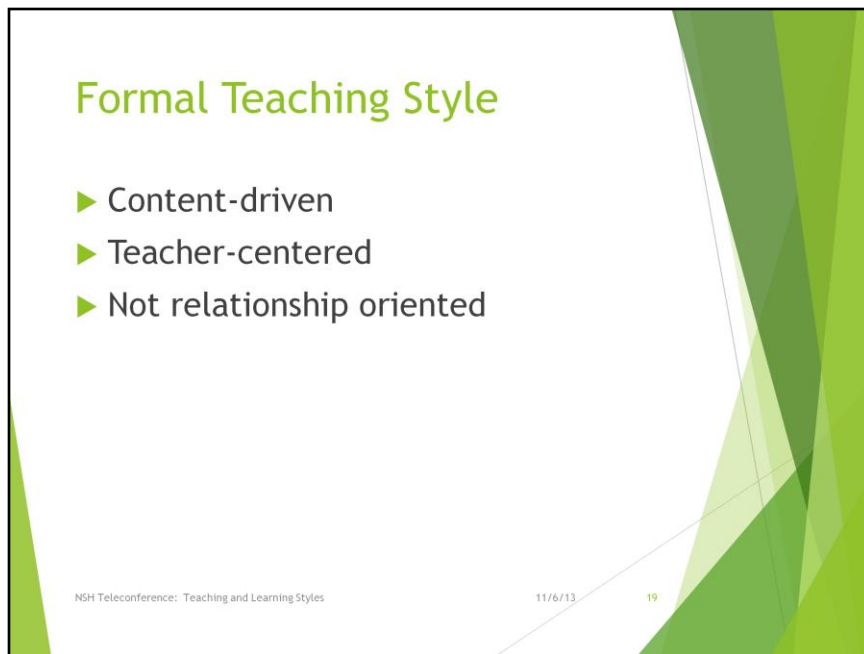
- ▶ Formal
- ▶ Demonstrator
- ▶ Facilitator
- ▶ Delegator

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Formal should read “Formal Authority”



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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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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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

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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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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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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

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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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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



References for Further Study

- ▶ www.biz.colostate.edu/mti/tips/pages/WhatIsYourTeachingStyle.aspx
- ▶ <http://www.educationplanner.org/students/self-assessments/learning-styles.shtml>
- ▶ <http://sunburst.usd.edu/~bwjames/tut/learning-style/>
- ▶ <http://www.umassd.edu/dss/resources/facultystaff/howtoteachandaccommodate/howtoaccommodatedifferentlearningstyles/>

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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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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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- ▶ 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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