

Teaching & Learning Styles

Direct & Indirect Instruction

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Presentation Objectives

By the end of this presentation attendees will be able to:

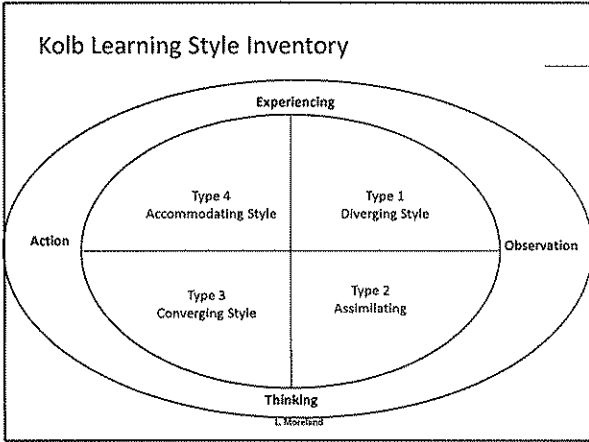
- Define the four adult learning styles according to Kolb, to include descriptions of each
- Identify their own learning style by completing the learning style inventory
- Discuss characteristics and traits of each learning style
- Identify the strengths and challenges of each learning style
- Analyze the impact of their learning style on instruction to ascertain teaching style
- Differentiate between direct and indirect instruction to evaluate their effect on learning
- Develop and design instructional strategies beneficial to all learning styles

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Experiential Learning Theory

- David A. Kolb, PhD
 - Social Psychology
 - Educational theorist
 - Experiential learning
- Learning style inventory (1971)
 - The Hay Group
 - Learning process
 - Experiencing
 - Observation
 - Thinking
 - Action

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Style 1 Diverging: Innovator - Creator

- Learner
 - See information concretely and process it reflectively
 - Brainstorming and observing
 - Learn by listening and sharing ideas, open minded
 - Excel in viewing direct experience from many perspectives
 - Are interested in people and culture
 - Need to be personally involved
 - Seek commitment and clarification
 - Likes working in groups
- Favorite question
 - Why?

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Style 1 Diverging: Innovator - Creator

- Instructor
 - Facilitates individual growth
 - Helps students become more self aware
 - Curricula should enhance one's ability to be authentic
 - Aware of social forces that affect human development
 - Focuses on meaningful goals
 - Engages students in cooperative efforts
 - Likes discussions, group work, and realistic feedback

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Style 2 Assimilating: Thinker - Planner

- Learner
 - Systematic planner, goal setter
 - Inductive reasoning and creating of theories and models
 - Need to know what the experts think
 - Learn by thinking through ideas (sequential thinker)
 - Attention to details, very thorough, fascinated by ideas
 - Critiques information and collects data
 - Will re-examine facts if situation perplexes them
 - Enjoys traditional classrooms
- Favorite question
 - What?

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Style 2 Assimilating: Thinker - Planner

- Instructor
 - Transmitters of knowledge
 - Creates concepts and models
 - Curricula should further understanding of significant information and should be presented systematically
 - Encourages outstanding students
 - Are as accurate and knowledgeable as possible
 - Likes facts and details, organizational and sequential thinking
 - Traditional teachers who seek to instill a love of precise knowledge

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Style 3 Converging: Decision maker - applier

- **Learner**
 - See information abstractly and process it into something concrete
 - Learn by testing theories and applying common sense
 - Pragmatists; if it works use it...
 - Skills oriented; experimenter and tinkerer
 - Down to earth problem solvers who resent being given answers
 - Limited tolerance for ambiguous ideas
- **Favorite question**
 - How does this work?

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Style 3 Converging: Decision maker - applier

- **Instructor**
 - Interested in productivity, quality and competence
 - Encourages practical applications
 - Gives students the skills they will need in life
 - Curricula should be geared towards competencies and economic usefulness
 - Likes technical skills and hands-on activities
 - Uses measured rewards
 - Uses hypothetical, deductive reasoning

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Style 4 Accommodating: Doer - achiever

- **Learner**
 - See information concretely and transform it
 - Learn by trial and error
 - Adaptable, even to changing circumstances
 - Risk takers, flexible, enthusiastic about new things
 - Often reach accurate conclusions in the absence of logical justification
 - Self discovery
 - Seek to influence
- **Favorite question**
 - What if?

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Style 4 Accommodating: Doer - achiever

- **Instructor**
 - Try to help people act on their own visions
 - Encourages learning through experience
 - Curricula should be geared to learner's interests and inclinations
 - Believes knowledge necessary for improving the larger society
 - Variety in instructional methods
 - Dramatic teachers who seek to energize their students
 - Creates new forms to stimulate lively interactions

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| Learning Style strengths & Challenges | |
|--|---|
| <p>Strengths: Getting things done, draws new boundaries, creating concepts and models</p> <p>Excess: Trivial importance of the wrong things</p> <p>Challenge: Follow-up, focusing on details, manipulative and pushy.</p> <p style="text-align: right;">4</p> | <p>Strengths: Offer ideas, alternatives, examples, focuses on meaningful goals</p> <p>Excess: Paralyzed by alternatives; all over the map</p> <p>Challenge: Focusing in, tend to become fearful under pressure, sometimes lack daring</p> <p style="text-align: right;">1</p> |
| <p>Strengths: Practical application of ideas</p> <p>Excess: Premature closure, solving the wrong problem</p> <p>Challenge: Slowing down following steps, inflexible and self contained, lack teamwork skills</p> <p style="text-align: right;">3</p> | <p>Strengths: Creating concepts and models</p> <p>Excess: Castles in the air, no practical application</p> <p>Challenge: Connecting theory and real situations, incompatible with subjective judgments, dominating attitude tends to discourage creativity</p> <p style="text-align: right;">2</p> |

| Direct Instruction |
|--|
| <ul style="list-style-type: none"> • Teacher centered <ul style="list-style-type: none"> – Objective <ul style="list-style-type: none"> • To teach facts, rules and action sequences • Learning (Bloom’s taxonomy) <ul style="list-style-type: none"> – Knowledge, comprehension, application • Instruction <ul style="list-style-type: none"> – Lecture: explanations, practice and feedback – Interaction: questions, answers, review • Material <ul style="list-style-type: none"> – Part-whole – Sequential – Compare/Contrast <p style="text-align: right;"><small>L. Moreland</small></p> |

| Indirect Instruction |
|--|
| <ul style="list-style-type: none"> • Learner centered <ul style="list-style-type: none"> – Objective <ul style="list-style-type: none"> • To teach concepts, patterns, and theories • Learning (Bloom’s taxonomy) <ul style="list-style-type: none"> – Analysis, synthesis, evaluation • Instruction <ul style="list-style-type: none"> – Inquiry: discovery, cooperative learning, evaluation of facts – Interaction: passive teaching, small group discussion • Material <ul style="list-style-type: none"> – Problem solving – Decision making – Networking <p style="text-align: right;"><small>L. Moreland</small></p> |

| Instructional strategies |
|---|
| <ul style="list-style-type: none"> • Instructional techniques <ul style="list-style-type: none"> – Appeal to all learning styles • Learner involvement <ul style="list-style-type: none"> – Didactic <ul style="list-style-type: none"> • Low involvement, passive • External to the learner – Experiential <ul style="list-style-type: none"> • High involvement, active • Internal to the learner <p style="text-align: right;"><small>L. Moreland</small></p> |

Instructional Strategies

Didactic: Low involvement, passive, abstract

| Format | What it is | What it's for |
|--------------------------|---|---|
| Reading | Instructor assigns materials | Presenting new knowledge |
| Forum | Instructor selects panel members deliver information to group | Presenting new knowledge to large groups |
| Lecture | Instructor delivers information to group | Presenting new knowledge |
| Reflective demonstration | Instructor shows group how to do something | Showing steps, sequence, sharing experience |
| Discussion | Instructor guides group interaction towards a goal | Validating information presented with group experience |
| Case Study | Instructor assigns problem for group to solve | Applying knowledge to relevant situations |
| Role Play | Instructor assigns other identities to individuals in the group; they play out a real-life situation | Rehearsing behaviors and skills in a realistic setting |
| Instrumentation | Instructor provides instructions and analysis | Measuring individual patterns of behaviors, preferences, styles, etc. |
| Active Demonstration | Instructor includes participants in performing and analyzing the demonstration | Sharing expertise, trying it out |
| Stimulation | Instructor sets up extended role play with specific rules of varied reality | Identifying behaviors and attitudes in setting |
| Group problem solving | Instructor facilitates group selection of a real-life problem; guides group to a goal | Practicing skills already introduced; illustrating ways the group can work together |
| Coaching | Instructor guides each participant through a structured application of specific skills | Synthesizing new skills and knowledge; transferring skills and knowledge to a new situation; assessing one's own progress and potential |
| Consulting | Instructor guides participants through analysis of their own situation and building the skills needed to improve it | Synthesizing new skills and knowledge; transferring skills and knowledge to a new situation; assessing one's own progress and potential |

Experiential: High involvement, active, concrete

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KOLB LEARNING-STYLE INVENTORY

Instructions: The Learning-Style Inventory describes the way you learn. Below are 12 sentences with a choice of four endings. Rank the endings for each sentence according to how well you think each one fits with how you would go about learning something. Try to recall some recent situations where you had to learn something new, perhaps in your job. Then using the spaces provided, rank a "4" for the sentence ending that describes how you learn *best* (4 = best), down to a "1" for the sentence ending that seems *least* (1 = least) like the way you would learn. Be sure to rank all the endings for each sentence unit. Please do not make ties.

Example of completed sentence set:

| 0. When I learn: | I am happy | I am fast | I am logical | I am careful |
|------------------------|---------------------------------------|--------------------------------|---|------------------------------------|
| 1. When I learn: | I like to deal with my feelings. | I like to watch and listen. | I like to think about ideas. | I like to be doing things. |
| 2. I learn best when: | I trust my hunches and feelings. | I listen and watch carefully. | I rely on logical thinking. | I work hard to get things done. |
| 3. When I am learning: | I have strong feelings and reactions. | I am quiet and reserved. | I tend to reason things out. | I am responsible about things. |
| 4. I learn by: | feeling. | watching. | thinking. | doing. |
| 5. When I learn: | I am open to new experiences. | I look at all sides of issues. | I like to analyze things, break them down into their parts. | I like to try things out. |
| 6. When I am learning: | I am an intuitive person. | I am an observing person. | I am a logical person. | I am an active person. |
| 7. I learn best from: | personal relationships. | observation. | rational theories. | a chance to try out and practice. |
| 8. When I learn: | I feel personally involved in things. | I take my time before acting. | I like ideas and theories. | I like to see results from my work |
| 9. I learn best when: | I rely on my feelings. | I rely on my observations. | I rely on my ideas. | I can try things out for myself. |
| 10. When I am learning | I am an accepting person. | I am a reserved person. | I am a rational person. | I am a responsible person. |
| 11. When I learn: | I get involved. | I like to observe. | I evaluate things. | I like to be active. |
| 12. I learn best when: | I am receptive. | I am careful. | I analyze ideas. | I am practical. |
| | TOTAL AXIS 1 | TOTAL AXIS 2 | TOTAL AXIS 3 | TOTAL AXIS 4 |

KOLB LEARNING- STYLE INVENTORY

