



LEARNING TO LEARN

GRADE 10 LESSON 26



Time Required: 30-45 minutes

Principles:

- Students will acquire attitudes, knowledge, and skills that contribute to effective learning in school and across the lifespan.
- Students will complete school with the academic rigor and preparation essential to choose from a wide range of substantial postsecondary options,

including college.

Objectives (Students will...):

- Apply knowledge of learning styles to positively influence school performance.
- Learn to evaluate reliability of websites and other resources that may be used to increase learning.
- Demonstrate strategies to become a self-directed, independent learner.

GOAL: Students will identify their primary learning style and plan strategies to increase success in school.

Activity Statements: Students will take a learning style assessment and identify learning strategies that enhances their learning.

Materials:

- Pencil/pen
- Handout 1 *Learning Styles Assessment* (Place in binder)
- Handout 2 *Learning Styles* - http://www.ldpride.net/learning_style_work.html (Place in binder)
- Handout 3 *Learning Strategies I Will Try* (Place in binder)
- Handout 4 *Left Brain/Right Brain*

Procedures:

1. Distribute Handout 1 *Learning Styles Assessment* and ask each student to complete and score, identifying his/her primary learning style.
2. Ask students to divide into groups according to identified learning style.
3. Ask students to discussing learning styles strategies listed on Handout 2 and identify other learning strategies group members have used to support learning.

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4. Ask students to consider which of these strategies might work for them and to record at least four new strategies they will try on handout 3.
 5. If time permits, have students complete Handout 4 *Left Brain/Right Brain* and identify their brain dominance and ways to learn that support this dominance. If not enough time, assign as homework and ask students to bring results next week.

Discussion:

Learning, like life, is unique to each individual. By learning about ourselves and how we best learn, we can create our own ART OF LEARNING.

- What is your dominate style of learning?
- What surprised you about your results?
- Name something you are really good at.
- What are some suggested techniques for each learning style? Visual , Auditory, Tactile
- What is something new you learned today?
- What are some new techniques you plan to try?

Additional Resources:

Dartmouth's website allows students to go on line and take an 80 question assessment to help them determine their learning style. **Learning and Study Strategies Inventory (LASSI)**
<http://www.dartmouth.edu/~acskills/success/selftest.html>

<http://elc.polyu.edu.hk/CILL/strategy.htm> This is a comprehensive website on learning styles, study techniques, listening tips, note taking, learning and writing strategies and more.

The **Felder's Index** provides an immediate assessment of your learning styles that requires no username or password to take the test. It is a 44 question survey that assesses your study habits.
<http://www.engr.ncsu.edu/learningstyles/ilsweb.html>

<http://www.studygs.net/metacognition.htm> **Great website for students and advisors**

Extension Activities: STUDENTS: Place your learning styles assessment and a copy of the strategies you will try in your portfolio. Try new techniques identified in class today. Compare your learning styles and strategies with those from lesson 9.8 and apply all strategies from both lessons. **Advisors:** Record you students learning styles on Teacher Resource 1 and keep for future reference.

I Like Your Style!

DIRECTIONS: To gain a better understanding of yourself as a learner, you need to evaluate the way you prefer to learn or process information. By doing so, you will be able to develop strategies which will enhance your learning potential. The following evaluation is a short, quick way of assessing your learning style(s). This 24-item survey is not timed. Answer each question as honestly as you can.

		Often	Sometimes	Seldom
1	I can remember more about a subject through the lecture method with information, explanation, and discussion.			
2	I prefer information to be written on the chalkboard, with the use of visual aids and assignment readings.			
3	I like to write things down or to take notes for visual review.			
4	I prefer to use posters, models, or actual practice and some activities in class.			
5	I require explanations of diagrams, graphs, or visual directions.			
6	I enjoy working with my hands or making things.			
7	I am skillful with and enjoy developing and making graphs and charts.			
8	I can tell if sounds match when presented with pairs of sounds.			
9	I remember best by writing things down several times.			
10	I can understand and follow directions on maps.			
11	I do better at academic subjects by listening to lectures and tapes.			
12	I play with coins or keys in pockets.			
13	I learn to spell better by repeating the words out loud than by writing the words on paper.			
14	I can better understand a news article by reading about it in the paper than by listening to the radio.			
15	I chew gum or snack during studies.			
16	I feel the best way to remember is to picture it in your head.			
17	I learn spelling by "finger spelling," (drawing the letters with a finger).			
18	I would rather listen to a good lecture or speech than read about it.			
19	I am good at working and solving jigsaw puzzles and mazes.			
20	I grip objects in my hands during learning periods.			

21	I prefer listening to the news on the radio rather than reading about it in the newspaper.			
22	I obtain information on an interesting subject by reading relevant materials.			
23	I feel very comfortable touching others, hugging, handshaking, etc.			
24	I follow spoken directions better than written ones.			

I Like Your Style!

LEARNING STYLES INVENTORY/SCORING PROCEDURES

Place the point value on the line next to the corresponding item.

OFTEN = 5 / SOMETIMES = 3 / SELDOM = 1

NUMBER	POINTS
2	
3	
7	
10	
14	
16	
19	
22	
Total Visual	

NUMBER	POINTS
1	
5	
8	
11	
13	
18	
21	
24	
Total Auditory	

NUMBER	POINTS
4	
6	
9	
12	
15	
17	
20	
23	
Total Tactile	

VISUAL LEARNINGS: Visual learners relate most effectively to written information, notes, diagrams and pictures. Typically they will be unhappy with a presentation where they are unable to take detailed notes – to an extent, information does not exist for a visual learner unless it has been seen written down. This is why some visual learners take notes even when they have printed course notes on the desk in front of them. Visual learners will tend to be most effective in written communication, symbol manipulation, etc. Visual learners should look at all study materials. They should use charts, maps, filmstrips, notes, and flashcards. Visual learners should practice visualizing or picturing words / concepts in their heads. Visual learners should write down everything for frequent and quick visual reference. **Visual learners make up around 65% of the population.**

AUDITORY LEARNERS: Auditory learners relate most effectively to the spoken word. They will tend to listen to a lecture, and then take notes afterwards, or rely on printed notes. Often information written down will have little meaning until it has been heard – it may help auditory learners to read written information aloud. Auditory learners may be sophisticated speakers, and may specialize effectively in subjects like law or politics. Auditory learners may want to use tapes. Taped lectures may help fill in the gaps in the student's notes. Auditory learners should sit in front of the classroom where they can hear

well. Auditory learners should do reading assignments out loud, or recite summaries of written materials.
Auditory learners make up about 30% of the population.

TACTILE LEARNERS: Tactile learners learn effectively through touch, movement and space. They learn skills by imitation and practice. Tactile learners often work slowly because information is normally not presented in a style that suits their learning methods. Tactile learners may also benefit from typing notes, and/or acting out (role playing) different situations. For example, tactile learners might pretend they are different parts of the cell and actually move about the classroom when studying cell structure.
Tactile learners make up about 5% of the population.

(Place in binder)

Learning Styles

What Styles?

The Auditory Learner

Advantages

An auditory learner likes listening. If you are an auditory learner you benefit from talks and lectures. You should also be able to absorb a lot of information from radio programmers. You are very likely to have skills in sequencing and organizing information and have a methodical approach to many aspects of life. You may remember information by using a checklist. You can often be considered a reliable and independent worker

Disadvantages

It's highly likely that you are unable to multitask, having to complete one job before embarking on another. There is also a possibility that you focus on small bits of information and do not obtain a holistic and broad picture of something you are working on. You may also prefer to work on your own rather than work in groups.

The Visual Learner

Advantages

A visual learner enjoys images. As a visual learner, you will be good at visualizing events and imagining situations. You can use visual strategies for remembering information. You probably get considerable pleasure from learning involving visual and creative skills. You may also see the whole picture when discussing or working on a problem or task.

Disadvantages

You may need more time to complete tasks. You can be more interested in the appearance of something than its actual value - which may be a disadvantage in some situations, though not in all. You may not spend enough time on, or give enough attention to specific details.

The Kinaesthetic Learner

Advantages

The kinesthetic learner enjoys learning through doing. This active learning style is useful for assembling and making products. You may find it easy to demonstrate how to do something. You are likely to be able to enjoy the actual experience of learning.

Disadvantages

You may miss some instructions or information if it is presented orally. You may find it difficult to concentrate on a lengthy written task while seated. You might find it hard to pay attention to detail - especially if it is in written form.

Social/Emotional Learners

Advantages

The social/emotional learner tends to enjoy working with others or in a team. You tend to encourage others to be involved in a task and therefore you could be seen as quite motivational. You probably enjoy working in groups and will have a prime concern for the wellbeing of colleagues and friends. You thrive on discussion and this can be very stimulating for you.

Disadvantages

You may become too dependent on assistance from others. You may find it difficult to structure a task if you are completely on your own. It is possible that you are greatly influenced by your feelings and this might affect your judgment.

The Metacognitive Learner

Advantages

The metacognitive learner wants to gain an overview. You tend to be good at reflecting and problem solving. You should be able to use previous learning effectively, when learning new information. You may need time to consider all possibilities and this can be appreciated by others; they may seek out and trust your advice.

Disadvantages

Your style of learning may be frustrating to others if you are working in a group. You may take a long time to carry out a task, and could appear to be pedantic because of this.

Learning for Life

Learning styles are important not only for learning, but for helping us through our everyday lives. Learning styles relate to a person's preferences for absorbing information, for solving problems and for success in social and personal situations. They can have implications for learning, family life, marriage, leisure and work.

It is important that people are aware of their learning styles so they can relate them to personality type and life preferences, leading to greater self-knowledge; knowing more about yourself helps you gain maximum success and benefit from both leisure and work.

Dimensions of Learning Style

There are many different dimensions of learning style - including environmental preferences such as time of day, the place where the learning activity is taking place, the background sound and type of lighting. Matching your learning style with the best learning environment can make a big difference to the outcome.

The way information is presented is another aspect to be considered, for example, a visual learner having to read lengthy manuals at work, without any visual support, may struggle. If, however, sketches and diagrams are used to compliment the text, the visual learner becomes a more effective learner.

In the learning styles questionnaire used in 'Take the Test' we have focused on five dimensions - each refers to a different learning style as follows:

- 1) listening/reading - auditory learners
- 2) seeing/visualizing - visual learners
- 3) experiencing/hands on - kinesthetic learners
- 4) feeling/belonging - social/emotional learners
- 5) reflecting/evaluating - metacognitive learners

There is no hierarchy of style, no style is better than another, as learning style is very individual. What can determine success, or otherwise, is the matching of style to the task. People who have difficulty in work and in learning may do so because of the mismatch between their work tasks and their own specific style. Change the way a task is presented and the difficulties can disappear.

The Role of the Task

When you set out to tackle a task, the best results may be achieved by matching what has to be done with your actual preference for learning. What we have to do in our lives and our jobs is important, but it's often best to tailor the task to the learner, rather than the other way around. Tasks can usually be changed to accommodate the learner's preference. This can be done by first assessing an individual's preferred learning style and then working out the skills required to complete the task, as well as identifying the learning resources that are available.

The Role of the Environment

The learning environment will affect an individual's learning experience. Some of us are more sensitive to certain environmental factors than others. These factors can include lighting - some prefer bright lights, while others prefer dim lights; color, the use of music and seating arrangements. Some learners prefer to listen to music while working, others like totally quiet surroundings. Some prefer to sit on a sofa while reading or writing, while others may be more comfortable sitting at a desk. Everyone should try to recognize his/her own environmental preferences and as far as possible incorporate them into the learning or work activity.

My Plan

My dominant learning style is _____.

My secondary learning style is _____.

My intellectual strengths are _____

Techniques that fit my style I'm willing to try are:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

(Place in binder)

**Learning Strategies I Will Try
Based on My Learning Style(s)**

Name: _____

Learning style(s): _____

Instructions:

After reading about your learning style(s), write several strategies you will do to improve your learning.

1. _____

2. _____

3. _____

4. _____

(Place in binder)

LEFT BRAIN/RIGHT BRAIN

On your Learning Profile Response Sheet, circle the number of the statements that best describe you at this time in your life.

1. I remember names best.
2. I remember faces best.
3. I prefer to have things explained to me with words.
4. I prefer to have things explained by showing them to me.
5. I prefer classes with one assignment at a time.
6. I prefer classes where I work on many things at once.
7. I prefer multiple choice tests.
8. I prefer essay tests.
9. I am not good at body language; I prefer to listen to what people say.
10. I am good at body language.
11. I am not good at thinking of funny things to say and do.
12. I am good at thinking of funny things to say and do.
13. I prefer classes where I listen to experts.
14. I prefer classes where I move around and try things.
15. I decide what I think about things by looking at the facts.
16. I decide what I think about things based on my experience.
17. I tend to solve problems with a serious, business-like approach.
18. I tend to solve problems with a playful approach.
19. I like to use proper materials to get jobs accomplished.
20. I like to use whatever is available to get jobs accomplished.
21. I like my classes to be planned so I know exactly what to do.
22. I like my classes to be open with opportunities for changes as I go along.
23. I am neither imaginative nor inventive.
24. I am very imaginative and inventive.
25. I prefer classes when I am expected to learn about things I can use in the future.
26. I prefer classes when I am expected to learn things I can use right away.
27. I would rather not guess or play hunches.
28. I like to play hunches and guess.
29. I like to express feelings and ideas in plain language.
30. I like to express feelings and ideas in poetry, song, dance, and/or art.
31. I rarely get insights from poetry or symbols.
32. I usually get insights from poetry or symbols.
33. I prefer solving one problem at a time.
34. I prefer solving more than one problem at a time.
35. I respond more to people when they appeal to my logical side or my intellect.
36. I respond more to people when they appeal to my emotional side or my feelings.
37. I prefer to learn the well-established parts of a subject.
38. I prefer to learn about the unclear parts of a subject.
39. I prefer analytical reading, taking ideas apart and thinking about them separately.
40. I prefer creative reading, putting a lot of ideas together.
41. I prefer to use logic in solving problems.
42. I prefer to use intuition in solving problems.
43. I prefer to analyze problems by reading and listening to experts.
44. I prefer to see and imagine things when I solve problems.
45. I am very good at explaining things with words.

46. I am very good at explaining things with hand movements and actions.
47. I learn best from teachers who explain with words.
48. I learn best from teachers who explain with movements and actions.
49. When I remember or think about things, I do best with words.
50. When I remember or think about things, I do best with pictures and images.
51. I prefer to examine something that is finished and complete.
52. I prefer to organize and complete something that is unfinished.
53. I enjoy talking and writing.
54. I enjoy drawing and manipulating things.
55. I am easily lost in finding directions.
56. I am good at finding directions.
57. I am intellectual.
58. I am intuitive.
59. I prefer to learn details and specific facts.
60. I prefer to learn from a general overview and look at the whole picture.
61. I read for specific details and facts.
62. I read for main ideas.
63. I learn and remember only those things specifically studied.
64. I learn and remember details and facts in the environment, not specifically studied.
65. I like to read realistic stories.
66. I like to read fantasy stories.
67. It is more fun to plan realistically.
68. It is more fun to dream.
69. I prefer total quiet when reading and studying.
70. I prefer music while reading and studying.
71. I would like to write nonfiction books.
72. I would like to write fiction books.
73. I prefer individual counseling.
74. I prefer group counseling.
75. I enjoy copying and filling in details.
76. I enjoy drawing my own images and ideas.
77. It is exciting to improve things.
78. It is exciting to invent things.
79. I prefer to learn by examining.
80. I prefer to learn by exploring.
81. I am skilled in sequencing ideas.
82. I am skilled in showing relationships among ideas.
83. I prefer dogs.
84. I prefer cats.
85. I use time to organize my personal activities and myself.
86. I have difficulty in pacing my personal activities and myself.
87. I am strong in recalling names and dates.
88. I am strong in recalling spatial material.
89. I am skilled in the statistical, scientific prediction of outcomes.
90. I am skilled in the intuitive prediction of outcomes.
91. I prefer outlining to summarizing.
92. I prefer summarizing to outlining.
93. I prefer verbal instructions.
94. I prefer demonstrations.

LEFT BRAIN

Characteristics and Functions

Logical Thinking
Solves Problems by Breaking Them Apart
Sequential
Thinks Concretely
Talks to Think and Learn
Analytical
Serious Ideas/Logical Ideas
Critical Thinking
Parts/Segmented
Structured/Planned
Ordering/Sequencing
Objective Processing of Ideas
Prefers to Write and Talk
Auditory/Visual Learner
Follows Spoken Directions/Verbal Instructions
Verbal
Remembers Names
Convergent Thinking
Takes Few Risks
Looks for Differences
Math (Algebra)
Rational
Receptive

Evaluative Thinking
Thinks of One Thing at a Time
Focal Thinking
Linear
Verbal Memory
Controlled Experimenting
Abstract Math Computation
Reading/Phonics
Nonfiction
Writing
Interpreting Behavior
Verifying
Duplication and Application
Reality
Improving Known
Intellectual
Controls Feelings
Time-oriented
Prefers Objective Tests
Controls Right Side of the Body
Language Abilities
Dislikes Improvising
Little Use of Metaphors and Analogies

Implications for Learning

- Encourage logical, step-by-step problem solving.
- Break down concepts into smaller, sequential parts.
- Use concrete examples to make abstract concepts understandable.
- Discuss the role of organized concrete thinking.
- Learn various strategies to analyze problems.
- Understand solution steps in logical thinking.
- Use games, toys, materials with specific purposes.
- Break major concepts into parts and subgroups.
- Use materials that help organize (binders, planners).
- Use graphic organizers to illustrate parts of whole.
- Use manipulatives that demonstrate a process.
- Discuss or repeat orally while writing.
- Use verbal and written directions.
- Students repeat directions orally.
- Talk aloud while studying when appropriate.
- Discuss specific facts and details.
- Organize brainstorming ideas into a conclusion.
- Play games that minimize risk taking.
- Play games that encourage finding differences.
- Encourage involvement in math and science.
- Encourage talking through problems.
- Use or create humor

RIGHT BRAIN

Characteristics and Functions

- Prefers to Draw and Handle Objects
- Imaginations
- More Likely to Act on Emotions
- Self-acting
- Inventing
- Solves Problems by Looking at the Whole
- Visual/Spatial
- Spatially Oriented
- Kinesthetic Learner
- Visual Analysis
- Pictures Things to Think and Learn
- Playful/Loose Experimenting
- Random Exploration
- Follows Written or Demonstrated Directions
- Visual/Kinesthetic Instructions
- Creative Thinking/Synthesizing
- Relational Concepts
- Divergent Thinking
- Takes Risks
- Looks for Similar Qualities
- Musical Abilities
- Lets Feelings Go - Emotional
- Simultaneity
- Holistic/Gestalten
- Intuitive Thinking
- Evaluative Thinking
- Abstract
- Responsive
- Nonlinear
- Tonal Memory
- Humorous Ideas
- Math (Geometry)
- Subjective Processing of Ideas
- Simple Math Computation
- Diffuse Thinking
- Sight Reading
- Singing
- Dreaming
- Assuming
- Fantasy
- Fiction
- Affective Interaction
- Spontaneous
- Remembers Faces
- Prefers Essay Tests
- Controls Left Side of the Body
- Likes Improvising
- Use of Metaphors and Analogies

Implications for Learning

- Discuss, draw, write the concept before learning it.
- Encourage use of imaginations through creativity.
- Discuss the role of feelings in decision making.
- Use role-playing activities.
- Use creative craft materials for inventive projects.
- Use graphic organizers to illustrate whole concept.
- Use manipulatives to demonstrate spatial relationships.
- Use touch and movement activities.
- Use illustrations whenever possible.
- When in doubt, draw it out.
- Conduct experiments.
- Apply brainstorming strategies.
- Use written instructions.
- Have students create their own instructions.
- Demonstrate how to build or make something.
- Make collage pictures.
- Utilize open-ended discussions.
- Play games that encourage risk taking.
- Play games that encourage finding similarities.

- Encourage involvement in musical activities.
- Discuss acceptable outlets for emotions.
- Encourage simultaneous thinking.
- Observe completion of task before trying.
- Encourage students to create own problem solving systems.
- Use abstract materials.
- Encourage self-improvement.
- Devise methods to help with organizational skills.
- Use spelling aids and visual memory strategies.
- Use or create humor.

Directions: Using the questions you circled, find the characteristics that they are most closely aligned with. Are you RIGHT or LEFT brained? What can you do to improve your learning?

Learning Styles - Group Summary

Name of Group: _____

To help the counselors advise students, please list the members of your advisory group below and write each student's total score for each learning style as determined by the "I Like Your Style" assessment. This information will be used when helping students develop learning strategies and with academic planning (course selection).

	STUDENT NAME	VISUAL	AUDITORY	TACTILE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
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25				