

Self Study Programs: Learning Styles



This module covers:

- Identifying and classifying learning styles
- Identifying your personal learning style
- Improving learning and communication



The Learning Centre

UNLOCK YOUR POTENTIAL

Learning Styles

Knowledge of your own and others' preferred learning styles can be of great benefit to your study at university as well as any aspect of your life that involves teaching and learning. Now that just about covers everything!

This workshop explains a common way of classifying learning styles, making use of an *Index of Learning Styles* (ILS) developed by Richard Felder and Barbara Soloman. The ILS is a questionnaire designed to assess your learning style preferences. For further information on this method of classifying learning styles, search “Felder-Soloman” online.

Learning Style Preferences

The following three steps will help to determine your learning style preferences:



1. Answer the ILS – the 44 questions.

Enter your answers on the ILS scoring sheet on page 4;

2. Transfer your scores to the ILS report form, also on page 4;

3. Interpret your results, referring to the description provided of each learning style.

Note: It would be better to follow these steps in order (ie. don't read the description of each learning style until *after* you have completed the 44 questions, otherwise you may unknowingly influence your results).

Index of Learning Styles (ILS)

Enter your answers to every question on the ILS scoring sheet. Please choose only one answer for each question. If both “a” and “b” seem to apply to you, choose the one that applies more frequently.

1. I understand something better after I
 - a) try it out
 - b) think it through
2. I would rather be considered
 - a) realistic
 - b) innovative
3. When I think about what I did yesterday, I am most likely to get
 - a) a picture
 - b) words
4. I tend to
 - a) understand details of a subject but may be fuzzy about its overall structure
 - b) understand the overall structure but may be fuzzy about details
5. When I am learning something new, it helps me to
 - a) talk about it
 - b) think about it
6. If I were a teacher, I would rather teach a course
 - a) that deals with facts and real life situations
 - b) that deals with ideas and theories
7. I prefer to get new information in
 - a) pictures, diagrams, graphs, or maps
 - b) written directions or verbal information
8. Once I understand
 - a) all the parts, I understand the whole thing
 - b) the whole thing, I see how the parts fit
9. In a study group working on difficult material, I am more likely to
 - a) jump in and contribute ideas
 - b) sit back and listen

10. I find it easier
- to learn facts
 - to learn concepts
11. In a book with lots of pictures and charts, I am likely to
- look over the pictures and charts carefully
 - focus on the written text
12. When I solve math problems
- I usually work my way to the solutions one step at a time
 - I often just see the solutions but then have to struggle to figure out the steps to get to them
13. In classes I have taken
- I have usually gotten to know many of the students
 - I have rarely gotten to know many of the students
14. In reading nonfiction, I prefer
- something that teaches me new facts or tells me how to do something
 - something that gives me new ideas to think about
15. I like teachers
- who put a lot of diagrams on the board
 - who spend a lot of time explaining
16. When I'm analyzing a story or a novel
- I think of the incidents and try to put them together to figure out the themes
 - I just know what the themes are when I finish reading and then I have to go back and find the incidents that demonstrate them
17. When I start a homework problem, I am more likely to
- start working on the solution immediately
 - try to fully understand the problem first
18. I prefer the idea of
- certainty
 - theory
19. I remember best
- what I see
 - what I hear
20. It is more important to me that an instructor
- lay out the material in clear sequential steps
 - give me an overall picture and relate the material to other subjects
21. I prefer to study
- in a study group
 - alone
22. I am more likely to be considered
- careful about the details of my work
 - creative about how to do my work
23. When I get directions to a new place, I prefer
- a map
 - written instructions
24. I learn
- at a fairly regular pace. If I study hard, I'll "get it"
 - in fits and starts. I'll be totally confused and then suddenly it all "clicks"
25. I would rather first
- try things out
 - think about how I'm going to do it
26. When I am reading for enjoyment, I like writers to
- clearly say what they mean
 - say things in creative, interesting ways
27. When I see a diagram or sketch in class, I am most likely to remember
- the picture
 - what the instructor said about it
28. When considering a body of information, I am more likely to
- focus on details and miss the big picture
 - try to understand the big picture before getting into the details
29. I more easily remember
- something I have done
 - something I have thought a lot about
30. When I have to perform a task, I prefer to
- master one way of doing it
 - come up with new ways of doing it

31. When someone is showing me data, I prefer
 a) charts or graphs
 b) text summarizing the results
32. When writing a paper, I am more likely to
 a) work on (think about or write) the beginning of the paper and progress forward
 b) work on (think about or write) different parts of the paper and then order them
33. When I have to work on a group project, I first want to
 a) have “group brainstorming” where everyone contributes ideas
 b) brainstorm individually and then come together as a group to compare ideas
34. I consider it higher praise to call someone
 a) sensible
 b) imaginative
35. When I meet people at a party, I am more likely to remember
 a) what they looked like
 b) what they said about themselves
36. When I am learning a new subject, I prefer to
 a) stay focused on that subject, learning as much about it as I can
 b) try to make connections between that subject and related subjects
37. I am more likely to be considered
 a) outgoing
 b) reserved
38. I prefer courses that emphasize
 a) concrete material (facts, data)
 b) abstract material (concepts, theories)
39. For entertainment, I would rather
 a) watch television
 b) read a book
40. Some teachers start their lectures with an outline of what they will cover. Such outlines are
 a) somewhat helpful to me
 b) very helpful to me
41. The idea of doing homework in groups, with one grade for the entire group,
 a) appeals to me
 b) does not appeal to me
42. When I am doing long calculations,
 a) I tend to repeat all my steps and check my work carefully
 b) I find checking my work tiresome and have to force myself to do it
43. I tend to picture places I have been
 a) easily and fairly accurately
 b) with difficulty and without much detail
44. When solving problems in a group, I would be more likely to
 a) think of the steps in the solution process
 b) think of possible consequences or applications of the solution in a wide range of area

It may be interesting to see how this test rates your preferences but remember that the most useful thing is simply being aware of what your preferences may be and to be aware of the range of learning style preferences of those around you
 - including your lecturers!



If you do find you have a moderate or high preference for a particular style, read some suggestions on page 6 of how you may improve your learning.

ILS SCORING SHEET

1. Tick a or b for each of the 44 questions in the spaces below, then;
2. Total the columns and write the totals in the indicated spaces.
3. For each of the four scales, subtract the smaller total from the larger one. Write the difference (1 to 11) and the letter (a or b) for which the total was larger on the bottom line. *For example, if under "ACT/REF" you had 4 "a" and 7 "b" responses, you would write "3b" on the bottom line under that heading.*
4. On the ILS report form below, mark "X"s above your scores on each of the four scales.

ACT/REF			SNS/INT			VIS/VRB			SEQ/GLO		
Q	a	b	Q	a	b	Q	a	b	Q	a	b
1	___	___	2	___	___	3	___	___	4	___	___
5	___	___	6	___	___	7	___	___	8	___	___
9	___	___	10	___	___	11	___	___	12	___	___
13	___	___	14	___	___	15	___	___	16	___	___
17	___	___	18	___	___	19	___	___	20	___	___
21	___	___	22	___	___	23	___	___	24	___	___
25	___	___	26	___	___	27	___	___	28	___	___
29	___	___	30	___	___	31	___	___	32	___	___
33	___	___	34	___	___	35	___	___	36	___	___
37	___	___	38	___	___	39	___	___	40	___	___
41	___	___	42	___	___	43	___	___	44	___	___
Total (sum X's in each column)											
ACT/REF			SNS/INT			VIS/VRB			SEQ/GLO		
a	b		a	b		a	b		a	b	

(Larger – Smaller) + Letter of Larger

ILS REPORT FORM

ACT	REF
11a 9a 7a 5a 3a 1a	1b 3b 5b 7b 9b 11b
SEN	INT
11a 9a 7a 5a 3a 1a	1b 3b 5b 7b 9b 11b
VIS	VRB
11a 9a 7a 5a 3a 1a	1b 3b 5b 7b 9b 11b
SEQ	GLO
11a 9a 7a 5a 3a 1a	1b 3b 5b 7b 9b 11b

Preferences

HIGH	MODERATE	BALANCED	MODERATE	HIGH
------	----------	----------	----------	------

Preferences

Description of Learning Styles

Active learners understand new information by doing something with it. Active learners are keen to try out and experiment with the new information and often enjoy group work because this enables them to do active things. Sitting through lectures with nothing to actually get involved in can be particularly difficult for active learners.



Reflective learners prefer to think about new information first before acting on it. They often prefer to think through problems first on their own rather than discussing it in groups. Sitting through lectures can be difficult for reflective learners who often like to have some time out to think through new information.

Sensing learners like learning facts and solving problems by using well-established methods. They are generally careful, practical and patient and like new knowledge to have some connection to the real world.



Intuitive learners prefer discovering new relationships and can be innovative in their approach to problem solving. Intuitive learners tend to work faster and dislike repetition and work which involves a lot of memorisation and routine.

Visual learners understand new information best by seeing it in such forms as pictures, demonstrations, diagrams, charts and films.



Verbal learners understand new information best through written and spoken words.

Sequential learners understand new information in linear steps where each step follows logically from the previous one.



Global learners tend to learn in large jumps by absorbing material in a random order without necessarily seeing any connections until they have grasped the whole concept.

Description of Learning Styles continued

How can active learners help themselves?

If you are an active learner in a class that allows little or no class time for discussion or problem-solving activities, you should try to compensate for these lacks when you study. Study in a group in which the members take turns explaining different topics to each other. Work with others to guess what you will be asked on the next test and figure out how you will answer. You will always retain information better if you find ways to do something with it.

How can reflective learners help themselves?

If you are a reflective learner in a class that allows little or no time for thinking about new information, you should try to compensate for this lack when you study. Don't simply read or memorise the material. Stop periodically to review what you have read and to think of possible questions or applications. You might find it helpful to write short summaries of readings or class notes in your own words. Doing so may take extra time but will enable you to retain the material more effectively.

How can sensing learners help themselves?

Sensors remember and understand information best if they can see how it connects to the real world. If you are in a class where most of the material is abstract and theoretical, you may have difficulty. Ask your lecturer for specific examples of concepts and procedures, and find out how the concepts apply in practice. If the teacher does not provide enough specifics, try to find some in your course text or other references or by brainstorming with friends or classmates.

How can intuitive learners help themselves?

Many university lecture classes are aimed at intuitors. However, if you are an intuitor and you happen to be in a class that deals primarily with memorisation and rote substitution in formulas, you may have trouble with boredom. Ask your lecturer for interpretations or theories that link the facts, or try to find the connections yourself. You may also be prone to careless mistakes on tests because you are impatient with details and don't like repetition (as in checking your completed solutions). Take time to read the entire question before you start answering and be sure to check your results.

How can visual learners help themselves?

If you are a visual learner, try to find diagrams, sketches, schematics, photographs, flow charts, or any other visual representation of course material that is predominately verbal. Ask your lecturer, consult reference books, and see if any visual displays of the course material are available. Prepare a concept map by listing key points, enclosing them in boxes or circles, and drawing lines with arrows between concepts to show connections. You could also colour-code your notes with a highlighter so that everything relating to one topic is the same colour.

How can verbal learners help themselves?

Write summaries or outlines of course material in your own words. Working in groups can be particularly effective: you gain understanding of material by hearing classmates' explanations and you learn even more when you do the explaining.

How can sequential learners help themselves?

Most university courses are taught in a sequential manner. However, if you are a sequential learner and you have an instructor who jumps around from topic to topic or skips steps, you may have difficulty following and remembering. Ask the lecturer to fill in the skipped steps, or fill them in yourself by consulting references. When you are studying take the time to outline the lecture material for yourself in logical order. In the long run doing so will save you time. You might also try to strengthen your global thinking skills by relating each new topic you study to things you already know. The more you can do so, the deeper your understanding of the topic is likely to be.

How can global learners help themselves?

If you are a global learner, it can be helpful for you to realise that you need the big picture of a subject before you can master details. If your lecturer plunges directly into new topics without bothering to explain how they relate to what you already know, it can cause problems for you. Fortunately, there are steps you can take that may help you get the big picture more rapidly. Before you begin to study the first section of a chapter in a text, skim through the entire chapter to get an overview. Instead of spending a short time on every subject every night, you might find it more productive to immerse yourself in individual subjects for large blocks. Try to relate the subject to things you already know, either by asking the lecturer to help you see connections or by consulting references.