# Understanding your Learning Style

#### **Description of this Guide**

This is a brief overview of learning styles, their importance in Higher Education, and tips for making best use of your natural style.

#### Learning Outcomes

- 1. Realise that there are many different learning styles
- 2. Discover resources where you can assess your learning style
- 3. Realise there are strategies you can use to make best use of your natural learning style

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# Understanding your Learning Style

To begin, try a couple of mental exercises.



Actvity 1 It is unlikely that your style of learning will be the same as anyone else on your programme. Try this out with a friend. Ask your friend to memorise these groups of letters:

## aaysa smjptc

Now ask them how they went about the task:

- did they make the letters into words, and memorise the sounds 'aysir' and 'smidge-ptk'?
- did they memorise the visual pattern made by the letters?
- did they make a mnemonic, like 'anarchists annoy your sour aunt' or 'smart mice jump past the cat'?
- did they use some other strategy?

Each of us has our own strategies for such mental tasks. Would you have done it differently from your friend? Does it tell you anything about ways of approaching learning?

Now we can reveal that if you read the two groups of letters (starting with the bottom right letter and zig-zagging as you read towards the left) it spells 'cats pyjamas'. Once you understand that, you will find you do not need anything else to help you remember the arrangement of letters.

In fact, the better you understand something, the easier it is to remember.



#### Activity 2

Cover up the solution, and ask your friend to try and spot the pattern in another group of letters:

## acegijInprtvxz

Every second letter has been omitted until 'i' which is immediately followed by 'j', then the pattern resumes from there. How did your friend go about spotting this pattern?

This next pattern is visual rather than based on letters:



Answer: the round blob is missing from the third appearance of the pattern. Which of these patterns did your friend find it easier to spot — with letters or with shapes? How about you?

This exercise is important because of the volume of information you will be faced with in higher education. The better you are at identifying and remembering patterns in the information you study, the more successful you will be.

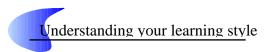
You are likely to have a preference for one of these types of mental activity — but we can all develop strategies for dealing with both of them, which is what we will take up now.

### 1.0 Why Tell me Now?

Studying at university makes very different demands on you compared with school and college.

Scope	The scope of study at university is much wider than at school. You will not find it possible to read everything there is to read on your subject.
Focus	In higher education the focus is on you; you will be expected to study on your own much more than you may have been used to.
Schedule	At university you are given much more responsibility for organising your own schedule.
Reading	You are expected to do much more reading at university than you have been used to — it is not called 'reading for a degree' for nothing.
Lectures	A lot of university teaching happens in lectures where you may be one of a relatively large number of students. Often it is up to you whether you attend — and whether you learn anything there.
Essays	Essays at university are longer; you need to write in an objective academic style and give references.
Time scale	Essays and assignments are often set weeks before you have to hand them in. And you will not necessarily be reminded of the submission date.
100%	There are many subjects in which it is impossible to get 100%. First Class Honours Degrees are awarded for a 'high level of critical and analytical ability' and 'originality of thought' rather than for just getting the answers right.

All of this means that the ways of studying which helped you get to university may not be enough now that you are here. So, although it probably seems perverse to offer



advice about learning styles at this point in your academic career, that is just what we are going to do. You might also want to have a look at Guide *Being an Independent Learner*, which deals in more detail with some of the features of studying at university.

## 2.0 What are Learning Styles?

There are several competing theories about how people learn, and websites where you can assess your natural learning style. If you want to follow this up further, there are references at the end of this section. To give a highly simplified overview, the theories cover three main aspects of how people study:

- perceiving information
- processing information
- organising and presenting information.

### 2.1 Perceiving information

When we gather information about the world around us (including the information we need in order to study), we employ all our senses. But some of us employ one sense more than others. The VARK system (described by Fleming, 2001) assesses how much people rely on:

Visual (sight) Auditory (hearing), Reading and Kinaesthetic (other sensations which includes touch and temperature as well as movement).

People say things like 'I'm an auditory learner' (meaning that they are comfortable absorbing information which they have heard or discussed); or 'I'm a kinaesthetic learner' (if they prefer to learn through practical classes and hands-on activities, rather than by reading books and listening to lectures). In fact, we use all of our senses to absorb information. But you may find it helpful to confirm what your strengths are with regard to perception. If you want to do this, click on one of these web addresses, fill in the test, and check your results.



http://www.chaminade.org/inspire/learnstl.htm

http://www.ncsu.edu/felder-public/ILSdir/ilsweb.html

http://www.mxctc.commnet.edu/clc/learnstl.htm

#### 2.2 Processing information

Once you have acquired the information (by listening, reading, etc.), you then process it mentally, as you think about it and memorize it. You will have a natural preference for how you:

(a) grasp information

do you prefer to deal with:

- abstract concepts and generalisations, or
- concrete, practical examples?
- (b) order information

would you rather receive facts:

- in a logical, sequential way (to build up a picture one step at a time), or

- with an overview straight away (to show the big picture first, then the details)? (c) *engage with information* 

- do you prefer:
  - active experimentation or
  - reflective observation?

There is a website where you can assess your style of information processing, and get tips on making best use of your strengths, at: <a href="http://www.surrey.ac.uk/Skills/Pack/iolp.html">http://www.surrey.ac.uk/Skills/Pack/iolp.html</a>

#### 2.3 Organising and presenting information

Finally, there is how you choose to share information with others. You will have a preference for how you:

(a) organise information — with a holistic overview, or with detailed and logical analysis
(b) present information — verbally or using images.

We have not found a website where you can match yourself against these criteria, but you are probably getting the idea.

## 3.0 Your Learning Style

Honey and Mumford (1982) devised an influential self-test, which indicates whether you are predominantly an activist, a reflector, a theorist, or a pragmatist. There are websites where you can take a test — but you will probably get just as good an idea about your learning style (and those of your colleagues) by reading what each type likes and loathes.

#### 3.1 Activists

Activists learn best from activities in which there are:

- new experiences and challenges from which to learn
- short 'here and now' tasks involving competitive teamwork and problem-solving
- excitement, change and variety
- 'high visibility' tasks such as chairing meetings, leading discussions and presentations
- situations in which new ideas can be developed without constraints of policy and structure
- opportunities for just 'having a go'.

Activists learn least from, and may react against, activities where:

- they have a passive role (lectures, instructions, reading)
- they are observers
- they are required to assimilate, analyse and interpret lots of 'messy' data
- they must work in a solitary way (reading and writing alone)
- statements are 'theoretical' an explanation of cause
- there is considerable repetition (practising the same skill)
- there are precise instructions with little room for manoeuvre
- they must be thorough, and tie up loose ends.

#### 3.2 Reflectors

Reflectors learn best from activities where they:

• are allowed or encouraged to watch / think / ponder on activities

- have time to think before acting, to assimilate before commenting
- can carry out careful, detailed research
- have time to review their learning
- need to produce carefully considered analyses and reports
- are helped to exchange views with other people without danger, by prior agreement, within a structured learning experience
- can reach a decision without pressure and tight deadlines.

Reflectors learn least from, and may react against, activities where:

- they feel 'forced' into the limelight
- they must act without time for planning
- they are asked for an instant reaction, or 'off the cuff' thoughts
- they are given insufficient data on which to base a conclusion
- in the interests of expediency, they have to make short cuts or do a superficial job.

#### 3.3 Theorists

Theorists learn best from activities where:

- what is being offered is part of a system, model, concept or theory
- they can explore methodically the associations and interrelationships between ideas, events and situations
- they can question and probe the basic methodology, assumptions or logic
- they are intellectually stretched, e.g. by being asked to analyse and evaluate, then generalise
- they are in structured situations with a clear purpose
- they see interesting ideas and concepts, whether or not they are immediately relevant.

Theorists learn least from, and may react against, activities where they:

- have no apparent context or purpose
- have to participate in situations emphasising emotions and feelings
- are involved in unstructured activities where ambiguity and uncertainty are high
- are asked to act or decide without a basis in policy, principle or concept
- are faced with a hotchpotch of alternative or contradictory techniques or methods without exploring any in depth
- doubt that the subject matter is methodologically sound
- feel out of tune with other participants, for example when they are with lots of activists.

#### 3.4 Pragmatists

Pragmatists learn best from activities where:

- there is an obvious link between the subject matter and a 'real life' problem
- they are shown techniques for doing things with obvious practical advantages
- they have the chance to try out and practise techniques with coaching or feedback from a credible expert
- they see a model they can emulate, or examples / anecdotes
- they are given techniques currently applicable to their own work
- they are given immediate opportunities to implement what they have learned
- they can concentrate on practical issues, such as drawing up action plans or giving tips to others.

Pragmatists learn least from, and may react against, activities where:

- the learning is not related to an immediate need they recognise
- organisers of the learning seem distant from reality
- there are no clear guidelines
- they feel people are going round in circles rather than getting to the point

- there are political, organisational, managerial or personal obstacles to implementation
- there is no apparent reward from the learning activity, for example higher grades!

## 4.0 What Should I do Now?

Learning styles are not just a matter of intellectual curiosity; they affect every student at university. Most academics have stayed in higher education because they possess these characteristics, with respect to:

perceiving information (see Section 2.1) processing information (see Section 2.2) organising/presenting info (see Section 2.3) auditory, reading abstract, logical, sequential, reflective analytic, verbal.

Although the University does not analyse its students, it seems likely that only a minority share these characteristics. And that means you may need to translate the style of university teaching and learning that arises from them into something that you find more congenial.

You will need to make the most of your strengths as a learner, and practise strategies that will allow you to build up the weaker areas.

#### 4.1 Advice for visual learners

- Use visual materials such as pictures, charts, and maps
- Use colour to highlight texts and own notes
- Take notes or use handouts; look carefully at headings and patterns of topics
- Brainstorm using illustrations, mind maps and models
- Use multi-media where possible (computers; mind maps)
- Study in a quiet place away from visual disturbances
- Visualise information as a picture
- Skim-read to get an overview before reading in detail.

#### 4.2 Advice for auditory learners

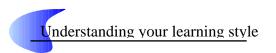
- Participate frequently in discussions and debates
- Make speeches and presentations
- Use a tape recorder if possible instead of (or as well as) making notes
- Read text aloud
- Create musical jingles and mnemonics to aid memory
- Discuss your ideas verbally
- Dictate to someone else while they write your ideas down
- Speak onto an audio-tape and listen to your own ideas played back.

#### 4.3 Advice for tactile / kinaesthetic learners

- Take frequent study breaks
- Move around to learn new things (e.g. read while you are using an exercise bike; model in clay to learn a new concept)
- Stand up to work
- Use bright colours to highlight reading material and turn it into posters or models
- Skim-read before reading in detail.

## 5.0 Am I Stuck with my Learning Style?

We all exhibit traits from each learning style, to a greater or lesser degree. Effective



learners make full use of their natural preferences, while also acquiring useful features from their less dominant styles. We are not stuck with our predispositions.

Just as with any skill (such as dancing, skiing, drawing or speaking another language), practising it builds up your confidence and competence. We all have incredible potential to acquire new skills, and to learn in new ways.

If you normally think of yourself as a visual learner, you will probably draw mind-maps and use coloured highlighters to help you analyse and memorise information. You may find it helpful to try a totally different approach, like reading some text while you walk around the room, or use an exercise bike (kinaesthetic), or read or sing it aloud (auditory).

You should not feel that you are stuck in a style of learning. You should feel free to adopt the learning strategies which are most appropriate for a particular task, or a particular stage in the learning process.

This short guide cannot cover all aspects of learning styles. If you want to explore them in more detail, then Chapter 3 of Cottrell (1999) is an excellent starting point.

## REFERENCES

Cottrell, S (1999) The Study Skills Handbook Basingstoke: Macmillan

Fleming N D (2001) Teaching *and Learning Styles: VARK Strategies* Honolulu Community College ISBN 0-473-07956-9. VARK is an extension of concept of VAK which comes from Neuro Linguistic Programming (Bandler R, Grinder J, O'Stevens J. (1981) *Frogs into Princes: Neuro Linguistic Programming* Moab, Utah: Real People Press) and the work of Dunn R, Dunn K (1978) *Teaching Students Through Their Individual Learning Styles: A Practical Approach* Virginia: Reston Publishing.

Honey P, Mumford A (1992) The Manual of Learning Styles 3rd Ed. Maidenhead: Peter Honey.

#### Short bibliography on learning styles

#### Websites:

http://oufcnt5.open.ac.uk/~Hilary\_Atkins/edmedia.htm http://www.vega.co.uk/VEGA/News/Feature%20Articles/Test.htm http://www2.ncsu.edu/unity/lockers/users/f/felder/public/ILSpage.html http://cyg.net/~jblackmo/diglib/styl\_a.html#Adult%20Learning%20Styles http://www.vaknlp.com/ (which suggests exercises for changing your VAK style)

#### Books and journals

DeBello T C (1990) Comparison of eleven major learning models: variable, appropriate populations, validity of instrumentation and the research behind them *Journal of Reading, Writing and Learning Disabilities* **6** 203 -222

Cottrell, S (1999) The Study Skills Handbook Basingstoke: Macmillan

Dunn R and Dunn K (1999) *The Complete Guide to the Learning Styles Inservice System* Boston, MA: Allyn and Bacon

Gardner H (1993) 10th edition *Frames of Mind: The Theory of Multiple Intelligences* New York: Basic Books

Gregorc A R (1982) Style Delineator Maynard MA: Gabriel Systems

Kolb D A (1984) *Experiential Learning: experience as the source of learning and development* Upper Saddle River, NJ: Prentice Hall

Pask, G (1988) Learning Strategies and Conceptual or Learning Style, in R Schmeck (ed) (1988) *Perspectives on Individual Differences, Learning Strategies and Learning Styles* New York and London: Plenum Press 83-100

Riding R, Rayner S (1998) *Cognitive styles and learning strategies: Understanding style differences in learning and behaviour* London: David Fulton.