

Learning styles

Learning how to study effectively is a skill. This guide should help to reaffirm techniques and knowledge you have learnt from previous study and hopefully provide new insights into learning and what is best for you as an individual. People have different learning styles and aids which help them to learn effectively. Understanding how you learn is called metacognition which means thinking about thinking. Metacognition is about understanding how you, as an individual, learn best. Understanding how you learn will enable you to learn more effectively. A learning style describes the way that you prefer to learn; you may use certain strategies or like receiving information in a particular way. Learning styles can be influenced by the way you think, feel or behave. There are various models which aim to encompass all potential learning styles. They offer ways for you to identify how you learn and also provide advice on what kinds of techniques best suit your learning style.

VARK

The VARK questionnaire was developed by Neil Fleming in the late 1980s. It is a 16 question survey which is designed to help students gain a better insight into their learning styles. Fleming identified 4 different categories for learning:

Visual: if you are a visual learner you will learn best by seeing things; you may find you work best using diagrams and plans or colour coding your notes.

Auditory: if you are an auditory learner you will prefer to learn by listening or speaking. You may find your learning is influenced by speaking out loud when you learn, discussing ideas with friends, or you are affected by background noise when you study.

Read/Write: if you are a read/write learner you will prefer paper based activities. You will be more attracted to reading for research and writing extensive notes than other learning activities. You may prefer working alone in a quiet environment or find it helpful to convert content from diagrams and images into text.

Kinaesthetic: if you are a kinaesthetic or physical learner you will learn best by touching, doing or moving. You could try talking to friends, separating arguments out into lists or moving around your study space to help you think or concentrate.

Multimodal learners

Most people use a combination of these styles when they learn. This is called a multimodal learning style which means you learn in a number of different ways. Multimodal learners may have preferences from any of the four areas previously listed. The VARK website contains detailed information on the best strategies and approaches for each of the four

main learning styles, and also for multimodal learners. Go to www.vark-learn.com for more information.

Multiple Intelligences

The Multiple Intelligences Inventory was devised by Howard Gardner who believed that intelligence took many different forms. He believed that individuals have strengths that are associated with particular types of intelligence. He believed that there was a close relationship between each intelligence and specific approaches to learning. By gaining an insight into your particular areas of intelligence, you should be able to identify learning approaches and strategies that suit your skills and abilities. Individual intelligences are identified by taking a questionnaire which generates results based on your responses. A copy of the questionnaire can be found here:

www.businessballs.com/howardgardnermultipleintelligences.htm

Gardner initially described seven key areas of intelligence; however, after further research, he recognised a further three – naturalist, spiritual/existential and moral. Whilst these are just as valuable as the others, they do not lend themselves as easily to particular learning preferences. The seven original intelligences are listed in the following table alongside their associated learning preferences.

Intelligence type	Learning preferences
Linguistic	Words, reading, writing
Logical-mathematical	Numbers, puzzles, logic
Musical	Music, sounds, rhythms
Bodily-kinaesthetic	Doing, touching, feeling
Spatial-visual	Images, shapes, pictures
Interpersonal	Group work, communication, cooperation
Intrapersonal	Reflection, goal-based, self-discovery

A word of caution

A learning style is much more complex than simply how you take in or put out the information you have learned. The way you learn is flexible and can be influenced by a number of different factors, such as your environment, who you are working with, even whether you have eaten recently or not. This means that the categories identified in models such as VARK and Multiple Intelligences should be used as a broad guideline of how you might approach your learning. It is important to ensure that you consider any other factors that influence how you learn in a particular situation. Most people will use a combination of different styles and adapt their approaches to suit each learning experience. By using the

models discussed in this guide you can gain some insight into your personal learning preferences and adopt strategies that are appropriate for you.

Study Skills

Through gaining an understanding of how you learn best you will be well equipped to develop the skills you need to study. Whilst at college you will be expected to undertake a lot of independent study to prepare for your assignments. This may include understanding how to research effectively, how to use your findings well or ensuring you have good working practices. The rest of this guide will provide advice on how to develop these strategies.

The question

For any piece of college work you will need a place to start, and that place will almost always be a specific research topic or question. Knowing how to answer the question you have been set is the key to passing your assignments. It is not enough to include information that is generally related to your topic of study, you have to use the information in a meaningful way. Your start point may be a question you set yourself, a question your lecturer set, one set by the awarding body or a general topic. You need to use that information to decide how you are going to get from the beginning of your preparation and research to producing an end product. Read any questions set carefully to make sure you understand exactly what you need to do. There may be some direction words in the question and these will tell you what type of answer you should provide. However, they may not be words you have come across before so always check if you are unsure what they mean.

Glossary of direction words

Analyse	Break up into parts; investigate
Compare	Look for similarities and differences between topics; perhaps reach a conclusion about which is preferable
Contrast	Bring out the differences between
Criticise	Assess the value of an idea or argument using informed opinions
Define	Set down the meaning of a word or phrase
Describe	Give a detailed account of
Discuss	Investigate or examine an argument; sift and debate; give reasons for and against; also examine the implications

Differentiate	Indicate the differences
Evaluate	Give your judgement about the merit of a theory or opinion; back your judgement by a discussion of evidence or reasoning
Examine	Look closely into
Explain	Make clear; interpret and give an account; give reasons for
Explore	Examine thoroughly, consider from a variety of viewpoints
Identify	Recognise or distinguish as separate
Illustrate	Make clear and explicit
Justify	Show adequate grounds for decisions or conclusions; answer the main objections likely to be made to them
List/Outline	Give the main features or general principles of a subject, omitting minor details and emphasising structure and arrangement
Relate	Show how things are connected to each other, and to what extent they are alike, or affect each other
State	Present in a brief, clear form
Summarise	Give a concise account of the chief points of a matter, omitting details and examples

Your environment

Create a comfortable space in which to learn by:

- Limiting noise and distraction, some people work best to music but try to ensure the music does not become your focus by keeping the volume low and the tempo reasonably slow
- Working in a comfortable temperature; make sure the room is not too hot or too cold
- Ensuring your seating is comfortable, but not too comfortable. If you work lying down you're likely to fall asleep!
- Making sure the light in the room is good; working in a gloomy space will strain your eyes and make you tired quickly
- Eating regularly and drink plenty of water; being hungry or thirsty will distract you from your work

- Taking regular breaks and break work down into manageable chunks

Once you have ensured your learning environment is comfortable you can move on to starting your work. The first task you will want to undertake for any assignment is background reading.

Recommended reading

When you are selecting your sources it is likely your lecturer will recommend titles to you. These should be your main points of reference but not the only sources you use. An easy way to find sources is by forward and backward chaining. When a source is written, the author will have attached a reference list or bibliography. The information in the reference list can be used to backward chain to the resources the author used which may be relevant to your assignment. You can also use your source material to find more recent work in which it has been used as a reference, this is forward chaining.

Reading for the assignment

First, you will need to work out what you do know in relation to the question and what you don't know. You will need supporting arguments to provide evidence of your knowledge and you will need to research further to fill in the gaps in your knowledge by carefully selecting your resources. To do this effectively there are two main points which must be considered:

Resources should be relevant. The content must answer the question and not stray into areas which you do not need to study. Go back to the assignment title and consider how relevant they are.

Resources should be reliable. Academic sources are best as they can be checked to make sure the information is correct. It is acceptable to use other sources, such as newspapers, provided they are widely recognised as being factual. Some sources, particularly ones found online and in tabloid media, can be less reliable. Sites such as Wikipedia can be changed by anyone, and should be avoided as the information may not be accurate. Recent sources can also be more reliable than older ones as they are likely to include the most up-to-date information.

Always check the libraries first to see if we stock a copy of the resource you're looking for. The libraries are stocked with books which have been chosen by College staff so you can be sure they are appropriate to use in your assignments. In addition, Learning Resources also have a range of online resources that are available for you to use. These resources can be accessed from home too; for more information, advice or guidance please ask the Learning Resources team.

Your Dundee and Angus College student card allows you to borrow 2 books at a time from Abertay University Library. If you would like to check to see if the books you want are available from Abertay, ask a member of the Learning Resources team to demonstrate the integrated search function in the library catalogue. Remember you can also join Dundee and Angus Council Libraries. (www.leisureandculturedundee.com/library)

They have a range of ebooks, audiobooks and textbooks that could help you with your studies, as well as providing free internet access and wifi. It may also be possible to borrow books from other libraries. Bring details of books you would like to find to one of the libraries for help.

After looking over the resources you should have an understanding of what is relevant to your assignment title and what is not, what you already know and what you do not. If you cannot decide whether you will need to read a text or not you need to more closely examine it, there are different ways of doing this.

Ways of reading

There are 3 main ways to read a resource:

Scanning: This means quickly looking over the resources to pick out key pieces of information. You might want to do this to check for specifics before you commit to reading a text.

Gist reading: This is reading quickly to get a general idea of the themes. You might simply read the introduction, subheadings and conclusion to decide whether to read in more detail.

Close reading: This is reading a resource carefully and making notes on the relevant points. You may do this for a number of reasons: to establish a background for your writing, to help understand the arguments more clearly or as a way into a new topic. This should be the main way in which you read the resources for your assignments. Scanning and gist reading are not a substitute for reading thoroughly, they just help you to establish the relevance of a piece of work before you read it thoroughly.

If you find yourself reading something that is not covering the main points of your assignment then stop reading it and move on. It is not as relevant as you may originally have thought it was. Don't waste time reading things which are not strictly relevant to your assignment title, remember you need to answer the question if you want a good grade and irrelevant information will not help you do that.

Another handy hint is to order your reading. Once you know what you want to read, select resources in order of relevance, starting with 1 as the most relevant. This way, if you run out of time, you can focus on the sources with the most relevant content as you get closer to your deadline.

Reading hints and tips

- Plan the time to read
- Be clear and realistic about how much time you need to read something
- Find your ideal concentration time, long enough to be meaningful but not so long that you lose concentration. For example 30 minutes reading, 10 minute break, 30 minutes reading. That would give you enough time to read a substantial amount without losing focus
- Do not rush yourself! There is no 'correct' speed for reading so take your time and make sure you understand it properly
- Try to highlight notes as you go along to help you pick out the key points at a later date
- Make a note of all the information you need for a citation, bibliography or reference list as you go along. This will make it easier when you come to this stage and it will also help you locate a specific point when you need it
- Remember, you do not need to read a resource from start to finish to use it in your work. You simply need to read the sections that are relevant to the question you are trying to answer or assignment you are trying to write

Once you have read your text/s you need to think about making notes. The most important aspect of reading and note making is that you understand the work well enough to write it in your own words. If you do not you could end up plagiarising. For information on plagiarism see our Referencing guide. In most instances plagiarism is unintentional and simply results from poor referencing practices which is why referencing is so important. Good referencing not only tells the reader where to find your sources, but also demonstrates your academic integrity.

What is academic integrity?

When you are writing an assignment for college you must ensure your work is truthful and ethical. You demonstrate this by providing well-sourced and appropriately referenced assignments.

Why is academic integrity important?

Academic integrity helps to protect you from claims of plagiarism. It is important to note that plagiarism does not simply refer to the use of words in a piece of work, it also refers to the use of ideas. You may be able to use quotes and to paraphrase work but this does not demonstrate the learning process involved in producing the work. What you write must clearly be your own interpretation and understanding of what you have read.

How can you demonstrate the learning process in your assignments?

In order to demonstrate the learning process, you must be able to produce a coherent and well thought out piece of work. If you have learnt and understood the work you are using you should be able to reference quite easily as you will be able to distinguish your own ideas from those of others. At this stage in your academic career you will not be expected to produce original ideas, but your work is expected to be unique insofar as it demonstrates that you have read, researched and selected your resources and explained them using your own words. It helps by showing that you have read around the subject area, assessed the available information for its relevance and validity, and used this information according to academic convention demonstrating how your own work has developed from reading that of others. Being able to demonstrate the learning process is one example of good working practices.

What are good working practices?

There are certain things you can do to protect yourself from claims of plagiarism. These are known as good working practices and demonstrate your academic integrity. It is very important that your sources are well selected. If you use evidence that comes from well-known, reliable sources, your reader can be sure that the work you have produced is suitably referenced and is unlikely to have been plagiarised. Websites tend to be less reliable sources of information than books or journals even if they are well known. For instance, Wikipedia is a very well-known website but it can be constantly modified by members of the public. This means that none of the content has to be verified making it an unsuitable source for academic work. The information is not necessarily credible and the sources of information are often untraceable, this means that if you use information from Wikipedia your work could be subject to claims of plagiarism. If you are going to use internet resources you must ensure you have all of the necessary information to reference them in the same way that you would a book or journal. For further information please see our Referencing guide.

Another good working practice is to be very careful when working in a group. Collusion, or using the same work as another student, is briefly discussed in the Referencing guide but there are a few other things it is worthwhile knowing in relation to this. If your lecturer has given you permission to work in a group and write your assignment collectively then it is fine

to do this. However, if you have not explicitly been given permission to do so then you must ensure that you do not write your work together, or even share notes, as this can result in your work being too similar in content. It is fine to discuss your ideas but not to tell one another what to write as this would not be your own work.

A further example of good practice is to make notes well. This does not mean simply taking extensive notes. It means putting what you have read into your own words as you go along, to ensure that you understand the ideas. Detailed guidance on note making can be found in our Note Making guide. Part of having good note making practices is making sure you take a note of where the information came from, including all of the details you would need for referencing. If you follow these guidelines you should produce a well written piece of work which is unlikely to be suspected of plagiarism. Plagiarism is very easy to spot as there are usually stylistic changes in the language and your lecturers will be able to see this very easily. To learn more about plagiarism please see the Referencing guide available on the Learning Resources Help page on My Learning.

Producing your assignment

If you take the time to develop the skills discussed in this guide, you will not only be better equipped to study but you will also have the right strategies in place to begin planning how to produce your assignments. You will be asked to demonstrate your knowledge in a variety of different ways at college. By testing your understanding in different contexts your tutors will be able to gauge how well you are meeting the requirements of the course and, also, identify how they can help you to develop your soft or transferable skills. These are the skills you need to go on to further study or employment, and study skills are a core part of your transferable skills set. As part of a job or course, you may well be expected to give presentations or write reports. These are skills you learn at college through producing assignments. Different skills are required to use your knowledge in an exam than in a presentation or an essay. The Learning Resources team have developed a wide range of guides to help support you in producing assignments. By combining the information found in this guide with one that fits your particular assignment format, you should gain the insights you need to develop effective study skills.

And finally...

This guide should have provided you with information you need to prepare for your assignments. The points covered should help you to improve upon and better understand the purpose of your work. However, you can always take the time to improve what you already know and this will reflect in your grades. If you need any further information on study skills or support on study skills please feel free to speak to any member of the Learning Resources team – just ask, we're here to help!