

Introduction:

As students of higher education there is a far greater onus on the student to be independent in their learning (Cottrell, 2013). Students can achieve this by attending lectures, seminars and learning opportunities, listening to podcasts and other audio files and reading texts, journals and online content independently to broaden knowledge and understanding of their subject. Whilst doing so, students will need to decide whether the information they find is valid using critical thinking skills.

The definition of critical thinking is:

The process of thinking carefully about a subject or idea, without allowing feelings or opinions to affect you.
(Cambridge dictionary <https://dictionary.cambridge.org>)

Within this poster I will discuss key skills to becoming a good critical thinker.

Analysis and attention to detail:

It is important that students pay attention to the details of their reading, research and study sessions to get a greater understanding of their subject and to develop critical thinking skills. Policing professional development uses a Competency and Values Framework. Within its critical thinking competency it implies that analysing details enables individuals to understand complicated situations, consider all possibilities and to have cognitive flexibility (College of Policing, 2016) which is also supported by Brookfield (2012) who states that analysis allows students to fully reason within their study and that analysis must be non-bias and look at subjects from all angles, breaking down assumptions. This is so students have an open minded approach in order that a true and accurate conclusion can be drawn.

To illustrate this point, one might refer to Cottrell (2013) whereby it is noted that students should analyse the evidence for inaccurate and misleading assumptions looking for facts which are supported by evidence and not opinions.

Students should also decide whether the information they have found is suitable for example from a reputable source and that the source is non-bias (Aveyard, H., Sharp, P. and Woolliams, M. 2015).

Critical Thinking in Education.

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Note taking and storage:

The University Of Sheffield (2002) explains that as students of higher education there is an expectation to be refining research and learning to enable them reach their own conclusions.

As such students will take in a wealth of information from multiple sources. These will need to be stored in a logical fashion so that they are able to access information to support assignments and reference accurately. With particular reference to Critical Thinking, access to previous findings may be required unexpectedly and so concise and accurate notes, recorded and stored systematically, is key.

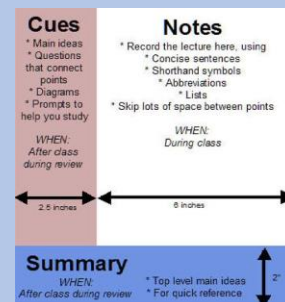
An effective note taking strategy will help students to retain information by picking out key information while also taking notes in their own words so as to avoid plagiarism. Furthermore Cottrell (2013, pp171-186) supports this by suggesting that the more effectively you apply good note taking skills the more you will improve your time management and quality of work.

According to Jenkins and Sweeney (2017), it is also important to understand that note taking strategies are a personal choice. They continue to say that each student will have a personal preference for note taking that suits them and will likely need to adopt different strategies depending on the area and subject of study.

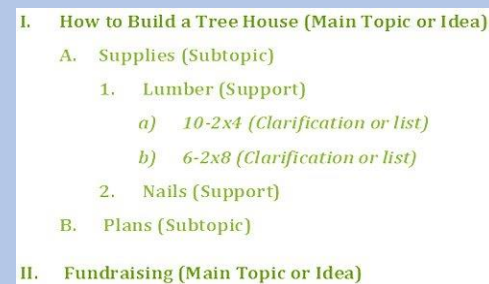
Image Source: Burkholder, A. (2020) *5 methods of note-taking* [Image] Available at: <http://www.blog.cuw.edu/5-methods-of-note-taking-2163/> (Accessed: 19th September 2022)

Two possible methods of recording notes can be seen in the following diagrams.

The Cornell Method:



The Outline Method:



Reflection and conclusions:

To enable students to draw their own conclusions and think critically they will need to look for supporting evidence and conduct research to find any information that may be contradictory to their findings. Whilst note taking and analysis are important skills, drawing conclusions are equally of importance.

Cottrell (2013) states that it is essential that students bring their work to a strong conclusion; these should not be weak or lacklustre. It is vital that students practice and improve their ability to reflect upon their learning and come to their own conclusions.

Students will need to think about whether there is sufficient evidence to support their findings and reflect upon how this will inform their practice going forward (Aveyard, H., Sharp, P. and Woolliams, M. 2015)

Students will also need to use their analysis skills here. As stated on the University of Waterloo (no date) critical reflection website, students may wish to adopt the "three stage model, What? So what? Now what?" to reflect on their learning and understanding. They go on to say that a conclusion should sum up your understanding, thus supporting the views of Cottrell and Aveyard, Sharp and Woolliams.

Image Source: Pearson (No date) [Image] Available at: https://www.pinterest.co.uk/pin/313703930269548849/?nic_v3=1aP9IF4Ly (Accessed: 19th September 2022).

To Think Critically, Think RED



Conclusion:

Note taking and storage, analysis and reflection are vital to being a critical thinker and are skills which are interwoven. It is evident that students will be required to use note taking and analytical skills in order to look for and record evidence from many sources while making judgements about the viability of the information. It is essential that students also reflect and conclude their findings and record them to draw on for assignments.

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