What is critical thinking?

Critical thinking is a deeper form of thinking, it is a key skill used in everyday tasks (Monash University, 2020). Furthermore, there are different approaches to critical thinking, one of which is an educational approach. The educational approach suggests that questioning, analyzing and evaluating information plays a key part in critical thinking (University of Leeds Library, 2021). The information being analyzed could be material that has been read, written, seen or heard. The University of Essex (2016) suggests that students should ensure the research gathered is originated from a reliable source, and that it does not contain biased information.

Therefore, in general, critical thinking is a process of decision making and creating an argument, where the argument can be supported with evidence gathered (Hanscomb, 2017). Using critical thinking skills can become part of decision making for some learners, where a critical thinker seeks reliable information to create a strong argument by considering all different perspectives and is therefore unbiased. There are ways critical thinking skills can be improved, including practicing necessary skills (McMillan and Weyers, 2013).

Critical thinking is not about being criticizing; however, it does involve questioning every piece of information gathered (Deane and Borg, 2012). Therefore, it requires reflecting on an opinion one may have, and acknowledging it may not be a valid or reliable point, as there would be little evidence to support the viewpoint.

Note taking

Note taking is a way of evaluating, associating and blending suggestions from lectures and reading. It is not solely taking notes on what is heard or read (University of Leeds Library, 2021a). In real time lectures it can be tempting to write down everything that is being said and discussed, which is not always advantageous. This is because key points are missed whilst trying to write too quickly, and only catching verbatim information (Burroughs, 2019).

Students should go over notes and complete independent study, where they can elaborate on the notes taking and gain more understanding. The Imperial College London (2021) suggests that experimenting with different note taking methods is a good idea, due to being able to find one that works best and easy to review.

There are many different note-taking methods, one of which includes mind maps; using mind maps are great to quickly note key points and brainstorm (Open University, 2020). There is a considerable amount of research on whether handwritten notes exceed typed notes. Whilst handwriting notes, students associate what they have heard in lectures, which strengthens the accuracy of text (Montgomery College, no date).

Time management

The Cambridge Dictionary defines time management as using time in an advantageous and valuable way. Time management involves setting feasible goals in order to achieve deadlines. Planning time and implementing changes is a key factor on making time management work and effective time management equals being more likely to achieve (Forsyth, 2019). For students to achieve their greatest potential, it is suggested that they still have time for basic tasks, such as having a social life and caring for themselves or others, as well as study time (Cottrell, 2019).

Beazely, 2019 suggests that many students do not manage their time well and put off their tasks, which is procrastination. There are many reasons why people procrastinate, one being a lack of confidence. As a result of having low confidence, there is a fear of making mistakes and is therefore easier not to try rather than fail. It is a thought to create a plan to avoid procrastination, for example breaking down and prioritizing tasks can help, as well as being organized and knowing a person's distractions are.

Furthermore, the National Health Service (NHS) (2018) share a small number of time-management tips, which include working out goals and what is wanting to be achieved, along with making a list to help stay organized, and to focus on the results that could be achieved from managing time well.

Research

Research is a term that is generally used meaning to find out more information on a specific subject, and often answers questions and solves problems (Allison et al. 2016). Being strategic is key as the research must relate to the topic as much as possible, and once the question is defined clearly, the time spent researching is worthwhile.

Saunders, Thornhill, and Lewis (2019) state that the term research is often wrongly used in the idea that research is simply " just collecting facts or information with no clear purpose". To research, there must be a purpose for doing so, this could be to have more of an understanding on a specific topic, for a project or to analyze, and there may also be a deadline that research is due by.

There are different methods of research; qualitative research, quantitative research and mixed methods research. Mixed methods research combines qualitative and quantitative together and implements the data gathered in more thought (The University of Newcastle Australia, 2019).

Conclusion

To conclude, all these skills play a key role in being a critical thinker. When combined, note taking, time management and research skills will strengthen a students critical thinking skills. By being open minded and putting these skills into practice, students will establish a positive attitude towards studying. The skills above may help develop a student's confidence as they will be aware of their strengths and weaknesses and know where improvements and changes are necessary.

Reference List

Allison, B. et al. (2016) *Research Skills for Students.* 1st edn. London: Routledge.

Australian Christian College (2021) *Critical thinking: an essential skill for every student*. Available at: https://www.acc.edu.au/blog/critical-thinking-essential-skill/ (Accessed: 6 October 2021).

Baarda, B. (2019) *Research: This is it!: Guide to quantitative and qualitative research.* 1st edn. London: Routledge.

Beazely, J. (2019) *How to End Procrastination*. 1st edn. England: Abbott Properties.

Burroughs, C. (2019) *The Return to Study Handbook.* 1st edn. London: Kogan Page.

Cambridge Dictionary Press (2021) *Meaning of time management.* Available at: https://dictionary.cambridge.org/dictionary/english/time-management (Accessed: 9 October 2021).

Cottrell, S. (2019). *The study skills handbook.* 5th edn. London: Macmillan Education UK.

Deane, M. and Borg, E. (2012) *Inside Track to Critical Thinking and Analysis.* Essex: Pearson.

Forsyth, P. (2019) *Successful Time Management*. 5th edn. London: Kogan Page.

Hanscomb. S (2017) *Critical Thinking: The Basics.* London: Routledge.

Imperial College London (2021) *Effective note-taking skills*. Available at: https://www.imperial.ac.uk/admin-services/library/learning-support/assignment-tips/prepare-it/notetaking/ (Accessed: 13 October).

Jolley, J. (2014) *Research Skills*. 1st edn. London: Routledge.

McMillan, K. and Weyers, J (2013) *How to Improve your Critical Thinking & Reflective Skills*. Essex: Pearson.

Monash University (2020) *Critical Thinking*. Available at: https://www.monash.edu/rlo/research-writing-assignments/critical-thinking (Accessed: 6 October 2021).

Montgomery College (no date) *Digital downside? Effects of digital technology on learning.* Available at https://www.montgomerycollege.edu/_documents/offices/elite/pdc-2018-digital-downside-01.pdf (Accessed: 13 October 2021).

National Health Service (NHS) (2018). *Easy time-management tips*. Available at https://www.nhs.uk/mental-health/self-help/tips-and-support/time-management-tips/ (Accessed: 10 October).

Norwich University of the Arts (2021) *Time Management.* Available at: https://library.nua.ac.uk/welcome-to-study-skills/time-management/ (Accessed: 9 October 2021).

Open University (2020) *Note-taking techniques*. Available at: https://help.open.ac.uk/mind-maps (Accessed: 13 October 2021).

Open University OpenLearn (2020) *What is reflection?* Available at: https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=51386&section=1 (Accessed: 13 October 2021).

Saunders, M., Thornhill, A. and Lewis, P. (2019) *Research Methods for Business Students.* 8th edn. Essex: Pearson.

The University of Leeds Library (2021) *Critical thinking.* Available at: https://library.leeds.ac.uk/info/1401/academic_skills/105/critical_thinking (Accessed: 6 October 2021).

The University of Leeds Library (2021a) *Note making.* Available at: https://library.leeds.ac.uk/info/1401/academic_skills/85/note_making (Accessed: 10 October 2021).

The University of Manchester Careers Service (2021) *What is time management?*. Available at: https://www.careers.manchester.ac.uk/findjobs/skills/timemanagement/ (Accessed: 9 October 2021).

The University of Newcastle Australia Library Guides (2019). *Research Methods: What are research methods?.* Available at: https://libguides.newcastle.edu.au/researchmethods (Accessed: 13 October 2021).

Britland, S (2021) *Reading and making notes*. Available at: https://libguides.reading.ac.uk/reading/notemaking#s-lg-box-11008600 (Accessed: 13 October 2021).

University of Essex Online (2016) *The importance of critical thinking* [blog]. 19 April. Available at: https://online.essex.ac.uk/blog/the-importance-of-critical-thinking/ (Accessed: 6 October 2021).