CECS report writing: paragraphs

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The body of the report

- Provides the justification for your key message

- Organised by your reasons for your key message

Paragraph structure

- A paragraph addresses one main idea

- 150 – 200 words

- Contains
    1. Topic sentence: main idea and argument
    2. Analysis and evidence
    3. Concluding and linking sentence

Sample paragraph (results section)

Fig 1 illustrates how the second-order neighbour could help increase the consensus speed. The two-hop graph (Fig 1a) consists of the second order neighbours' connections for each node. For instance, node 1 has a second order neighbour of node 6 through node 5, and node 4 through node 2. A consensus protocol including the information of both first and second order neighbours would add a virtual two-hop graph to the original graph, and give the joint graph topology as shown in Fig 1c. As it can be seen, this graph has more connections and therefore a higher algebraic connectivity, which leads to a faster consensus speed. Note that one node can be both a first order neighbour and a second order neighbour; the information on that node will be used twice during consensus if this is the case.

Topic sentence: main idea and argument

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Evidence and analysis

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Tip: organise your writing around your topic sentences – they are your outline
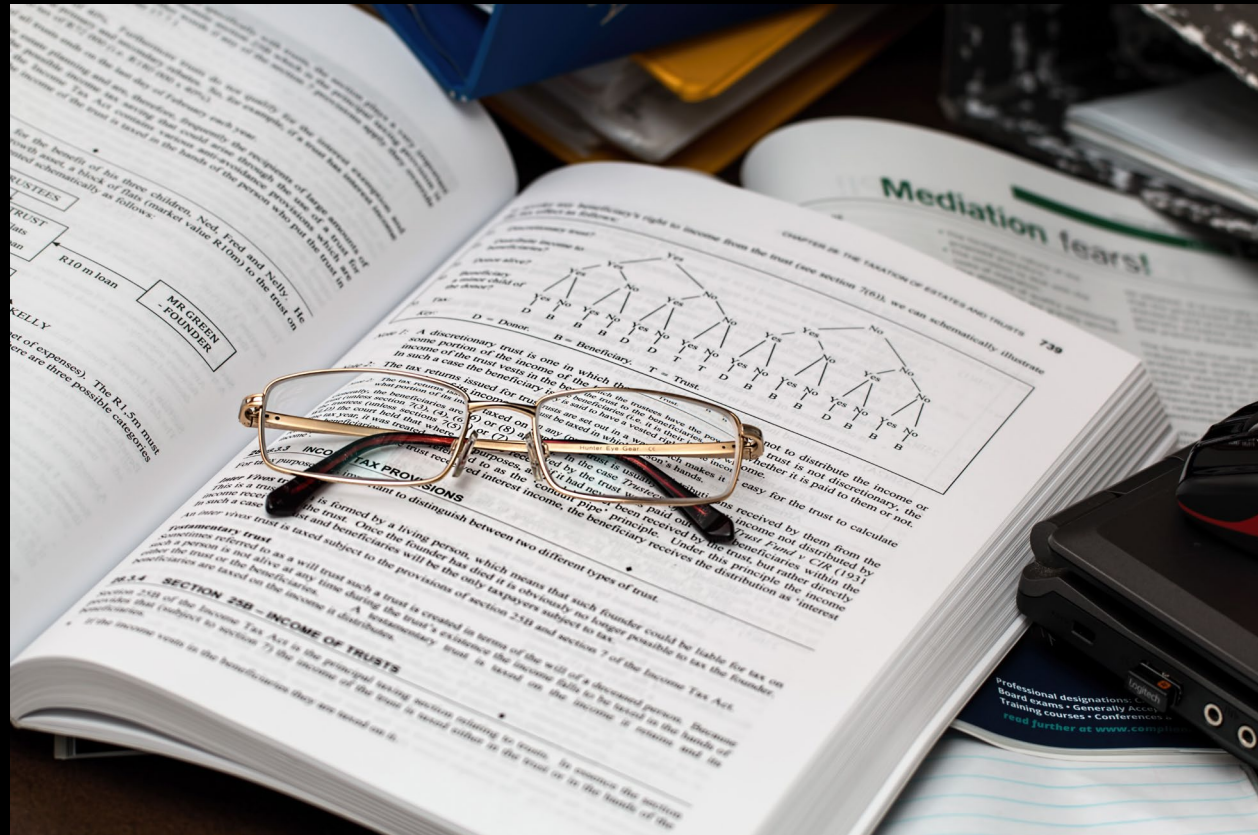
Analysis will include...

Ways to incorporate sources into your writing

Summarise
- Succinctly explain someone's argument using your own words
- Use to capture the essence of an argument by so focusing on the main ideas only

Paraphrase
- Explain someone's idea in detail using your own words
- Use when you need to provide specific detail/evidence of an author's argument

Quote
- Copy others' words exactly
- Use sparingly when you want to highlight a key idea or key researcher/scholar

Synthesise
- Combine multiple sources that have a similar argument
- Use to summarise multiples sources or to strengthen your argument

Summary, paraphrase, quote, your analysis

Blockchain technology offers opportunities for increasing security and privacy on the internet but there are some serious limitations. Blockchain technology has opened up a potential way of conducting transactions where less personal information needs to be shared (Bauerle 2019). Researchers such as Zyskind, Nathan and Pentland (2015) suggest that by removing third parties from the transaction, blockchain provides an opportunity for users to have better control and ownership over their own data. However, critics caution that there are some serious challenges in terms of accountability when machines control transactions (Hutton 2017). Moreover, there are a number of ways in which the security of blockchain transactions can be compromised such as code-based attacks, double spending and dust attacks (Bradbury 2013). Hasanova et al. (2019, p. 25), point out "transaction patterns can be observed, and it is possible to link a user identity to an address". Additionally, Bassina and Kasra (2017) highlight a key flaw in the security blockchain technology where privacy keys can be lost, just like real currency. It is early days but analysis so far is indicating that there may be a number of issues that need to be considered before there is wider adoption of blockchain technology.

Remember

- Present findings based on evidence
- Discuss all figures and tables in the paragraphs
- You can use appendices for raw or extra data

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In sum

- Each paragraph should relate to your report's key message

- Each paragraph presents one main idea

- Paragraphs are structured as:
  - Topic sentence
  - Evidence and analysis
  - Concluding and/or linking sentence

- Each paragraph should lead logically on to the next

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References

Bacina, M & Kassra, S 2017, 'Unlocking cryptocurrency token sales', *LSJ : Law Society of NSW Journal,* no. 37, pp. 79-81.

Bauerle, N 2019, 'What is Blockchain Technology?', *Coindesk*, viewed 14 March 2019, https://www.coindesk.com/information/what-is-blockchain-technology.

Bradbury, D 2013, 'The problem with Bitcoin', *Computer Fraud & Security*, vol. 2013, no. 11, pp. 5-8.

Hasanova, H, Baek, U, Shin, M, Cho, K & Kim, M 2019, 'A survey on blockchain cybersecurity vulnerabilities and possible countermeasures', *International Journal of Network Management,* pp. e2060.

Hutton, W 2017, 'Bitcoin is a bubble, but the technology behind it could transform the world', *The Guardian*, December 24, p. 32 (online ProQuest).

Zyskind, G, Nathan, O & Pentland, A 2015, 'Decentralizing Privacy: Using Blockchain to Protect Personal Data', *2015 IEEE Security and Privacy Workshops (SPW)*, 21-22 May, San Jose, CA, USA, pp. 180 – 184.

Wang, C 2012, 'An investigation of the adaptive coefficient setting method for the two-hop consensus protocol and the effect of network topology on power systems', *The ANU Undergraduate Research Journal*, vol. 4, pp. 87- 102