**Seminar 2 Preparation**

**Peer review of existing literature**

For the purpose of the peer review on existing literature, I have selected two papers, namely Kumi-Yeboah (2020) titled ‘Exploring the use of digital technologies from the perspective of diverse learners in online learning environments’ and Higgins (2012) titled ‘The Impact of Digital Technology on Learning: A Summary for the Education Endowment Foundation’.

In regards to Kumi-Yeboah (2020), the researchers follows an inductive reasoning method and employed qualitative research techniques to investigate the utilisation of digital technologies among diverse learners in online educational settings. They conducted comprehensive semi-structured interviews with the participants, gathering valuable insights. The qualitative research methodology enabled them to gather and scrutinise data concerning how digital technologies enhance the educational journeys and accomplishments of varied learners in online learning environments. The subsequent sections present participant profiles, details of data collection and analysis methods, as well as the research findings. The researchers implemented stratified random sampling, ensuring the selection of participants from various academic programs.

Research Questions:

The study addressed the following research questions:

1. How do culturally diverse learners describe how the use and application of digital technologies impact on their educational experiences and achievements in online learning environments?

(2) How do culturally diverse learners describe the use and application of multimedia presentations in online learning?

(3) How do culturally diverse learners describe the challenges they encounter in online learning environments regarding the use and application of digital technologies in online learning?

* Are they in line with your experience or thoughts on the topic, contributing to the collective body of knowledge in this area?

**YES**

* Is the research methodology utilised in each paper appropriate for the stated purpose or question?

**YES**

* In terms of data collection and analysis, is this also appropriate for the stated purpose or question? (We will discuss this further in upcoming units.)

**YES**

* Does each paper support its claims and conclusions with explicit arguments or evidence?

**YES**

* How would you enhance the work/paper?

Their conclusions were drawn from the experiences of 46 diverse learners who used digital technologies in online courses at a specific university. It is crucial to note that technologies evolve rapidly; hence, the research findings are specific to a particular context and period. They may not be universally applicable across different settings and times. Considering the diverse student population in online learning, future research could focus on quantitative studies to explore how digital technologies facilitate the educational achievements of varied online learners. These findings would provide valuable insights for online instructors, enabling them to better understand and address the cultural differences and knowledge brought by these learners to the online environment. Consequently, this understanding could aid in the development of tailored learning strategies to meet the specific needs of diverse learners.

With regards to Higgins (2012), This quantitative research condenses research findings from various meta-analyses to discern recurring impact patterns in the evolving research on technology's effects on learning. The objective is to gauge the potential influence of technology on education. This paper aims to synthesize evidence from meta-analyses regarding the use of digital technology in schools and its effects on children's academic performance. The paper examines data from meta-analyses and other quantitative research syntheses related to the impact of digital technology.

* Are they in line with your experience or thoughts on the topic, contributing to the collective body of knowledge in this area?

**YES**

* Is the research methodology utilised in each paper appropriate for the stated purpose or question?

**YES**

* In terms of data collection and analysis, is this also appropriate for the stated purpose or question? (We will discuss this further in upcoming units.)

**YES**

* Does each paper support its claims and conclusions with explicit arguments or evidence?

**YES**

* How would you enhance the work/paper?

Research findings derived from experimental and quasi-experimental studies, compiled in meta-analyses, suggest that technology-based interventions typically yield slightly lower improvements compared to other researched methods. The varying impact observed in these studies indicates that the difference lies not in the mere use (or non-use) of technology but in how effectively it is employed to enhance teaching and learning. While technology undeniably captures the interest and motivation of young learners, its effectiveness for learning depends on how well the activity aligns with the educational goals. Hence, the crucial factor lies in the pedagogical approach to integrating technology into the classroom, the method rather than the content. This is the key insight gleaned from the research.

When considering both correlational and experimental evidence, there isn't a compelling argument for the overall impact of digital technology on learning outcomes. This doesn't negate the value of investing in technology for educational improvement. However, it underscores the importance of approaching technological solutions to educational challenges with caution and critical evaluation.

**References**

Higgins, S., Xiao, Z. & Katsipataki, M. (2012) The Impact of Digital Technology on Learning: A Summary for the Education Endowment Foundation. School of Education. Durham University Available from: <https://eric.ed.gov/?id=ED612174> [Accessed 14 October 2023].

Kumi-Yeboah, A., Sallar, A., Kiramba, L., & Kim, Y. (2020) Exploring the use of digital

technologies from the perspective of diverse learners in online learning environments. *Online Learning Journal* 24(4):42-63. Available from: <https://doi.org/10.24059/olj.v24i4.2323> [Accessed 14 October 2023].