MONASH University

FIT4005/FIT5125/FIT5143
Research Methods in IT

Week 3 Assessment – Literature Reviews
Assessment Template

Student Name: Ziqi Pei
Student Number: 33429472
Tutor Name: Pranita Shrestha

Based on a variety of factors including article citations, academic rankings, abstract relevance, and Altmetric Attention Score, I propose the inclusion of the subsequent article as a crucial point of reference for research inquiry. The following list presents these five works in accordance with the APA citation format, arranged by their presumed relevance. The subsequent concise rationale accompanies each article recommendation.

	Paper	Justification
1	Jaramillo-Morillo, D., Ruipérez-Valiente, J., Sarasty, M. F., & Ramírez-Gonzalez, G. (2020). Identifying and characterizing students suspected of academic dishonesty in SPOCs for credit through learning analytics. *International Journal of Educational Technology in Higher Education*, 17(1). doi:10.1186/s41239-020-00221-2	Citations and Academic Influence: With 16 citations and an H-INDEX of 49, the article exhibits strong academic impact and recognition. Comprehensive Influence: Leveraging Altmetric Attention Score for holistic assessment, the article's influence across social media and news is evident, enhancing its academic and societal impact evaluation. The article delves into using learning analytics to identify academic dishonesty, specifically in credit-oriented SPOCs. It employs a learning analytics algorithm, analyzing submission times and exam responses, to detect dishonest students. Results from two SPOCs reveal that 17% of dishonest students passed, compared to 62% of honest ones. Dishonest students display active engagement, potentially jeopardizing online degrees by collaboratively tackling exams. The article's alignment with research question, its case-based approach, and algorithmic analysis make it a relevant choice. Supported by citations, academic ranking, and Altmetric Attention Score, it's a highly recommended resource.

2	Ruipérez-Valiente, J. A., Jaramillo-Morillo, D., Joksimović, S., Kovanović, V., Muñoz-Merino, P. J., & Gašević, D. (2021). Data-driven detection and characterization of communities of accounts collaborating in MOOCs. Future Generation Computer Systems, 125, 590–603. doi:10.1016/j.future.2021.07.003	Authors' relevance is evident through team affiliation, 2021 research publication. An H-index of 151 signifies substantial academic influence. Comprehensively ranked via citations, academic standing, Altmetric Attention Score, the paper wields notable impact in academia and beyond. The study employs data-driven tactics to identify collaborative communities in MOOCs. Algorithm-based synchronous link detection unveils unique account clusters, revealing intricate collaboration dynamics. Addressing gaps in forum-based research, this data-driven study analyzes MOOC account collaborations. Supported by actual cases, algorithmic insights, and relevant to your malicious student activity focus, its robust impact metrics make it the top recommendation. It widens understanding of online collaboration complexities, aligning with challenges and solutions around student conduct.
3	Ruiperez-Valiente, J. A., Munoz-Merino, P. J., Alexandron, G., & Pritchard, D. E. (2017). Using Machine Learning to Detect "Multiple-Account" Cheating and Analyze the Influence of Student and Problem Features. *IEEE Transactions on Learning Technologies*, 1–1. doi:10.1109/tlt.2017.2784420	Article in IEEE Transactions on Learning Technologies provides crucial insights into academic dishonesty in online learning. The authors' related work and a high H-index of 201 underline its academic significance. Evaluated through citations, rankings, and journal impact, the paper wields substantial influence in academia and the field. The study addresses multi-account cheating detection via machine learning, analyzing its links to student and question traits. Introducing "CAMEO" (Copying Answers using Multiple Existences Online), the article illuminates this cheating form, where students employ multiple accounts for credit. The paper's classifier boasts a 0.966 sensitivity and 0.996 specificity. Published in IEEE Transactions on Learning Technologies, the paper is a valuable reference for detecting malicious student activity. José A. Ruipérez-Valiente's leadership

		and co-authorship signify expertise. The study aligns with your focus, tackling multi-account cheating using machine learning, akin to your research on detecting malicious activity. Insights into student-question dynamics add depth. The innovative approach can inspire research work, and Ruipérez-Valiente's prior research lends further credibility.
4	Manika, Garg., & Anita, Goel. (2022). A systematic literature review on online assessment security: Current challenges and integrity strategies. *Computers & Security*,113,102544. doi:10.1016/j.cose.2021.102544	The paper titled in "Computers & Security" holds 16 citations and a hi-index of 112, signifying its influence. Comprehensively ranked through citations, academic status, and journal impact, the study's significance is underscored. Authored by Manika Garg and Anita Goel, it explores academic dishonesty in online assessment environments, from 2016 to 2021. The review delves into dishonesty causes, mechanisms, strategies, and machine learning's role. This paper serves as a reference for your malicious student activity detection research. Focusing on academic dishonesty aligns with your goal. Insights span behavioral motivations to machine learning application, enriched by environmental analysis. Its strategies align with your research, enhancing academic integrity analysis. Citing the paper bolsters your efforts to address dishonesty.
5	Alexandron, G., Yoo, L. Y., Ruipérez-Valiente, J. A., Lee, S., & Pritchard, D. E. (2019). Are MOOC Learning Analytics Results Trustworthy? With Fake Learners, They Might Not Be! *International Journal of Artificial Intelligence in Education*. doi:10.1007/s40593-019-00183-1	The paper in the "International Journal of Artificial Intelligence in Education" garnered 23 citations and a high impact factor of 56, underlining its academic recognition and frequency of references. Taking into account multi-dimensional indicators such as citations, rankings, and impact factors, the study's comprehensive significance is evident. It probes the credibility of learning analytics results in MOOCs, particularly the impact of fake learners, which raises concerns. The article highlights technology's pivotal role in addressing the issue and delves into means to ensure authenticity and precision in online learning analysis results. The paper aligns well with Article focus on malicious student behavior and tackles

		credibility in MOOC learning analysis. Its insights on fake learners provide crucial perspectives on maintaining integrity. By referencing, summarizing its academic dishonesty detection method, and exploring technology's application, you can enrich your research. The false learner issue is intricately tied to academic dishonesty, deepening understanding. Drawing from its technical insights can offer both theoretical foundation and practical direction for research study.