

Please note! This is a self-archived version of the original article.

Huom! Tämä on rinnakkaistallenne.

To cite this Article / Käytä viittauksessa alkuperäistä lähdettä:

Islam Pia, N., Huuskonen, A., Kunnas, K., Rahman, R., Manzoor, F., Ylistalo, E. & Smolander, N. (2023) Pedagogical Methods. Teoksessa Smolander, N., Huuskonen, A., Kunnas, K. & Ylistalo, E. (toim.) DigiCare Model: Digitalized Healthcare and Coaching of Patients in an Asian Context. Tampereen ammattikorkeakoulun julkaisuja, Series C, Learning materials 26, s. 135-139.

URL: https://urn.fi/URN:ISBN:978-952-7266-85-4

4.2 Pedagogical Methods

Nandita Islam Pia, Annukka Huuskonen, Katariina Kunnas, Md Ridwanur Rahman, Farhana Manzoor, Essi Ylistalo and Nina Smolander

The pedagogical choices made by teachers play a crucial role in shaping the learning experience of students. Thoughtfully selected pedagogical methods have the potential to facilitate deeper learning, foster critical thinking, and promote professional growth. This chapter introduces the main pedagogical methods employed in the DigiCare Educational Program. These active learning approaches have been implemented in the DigiCare project pilots conducted in Bangladesh and Vietnam as part of healthcare professional education programs (Read more in Chapter 4.1). The chapter provides a concise overview of the following active learning approaches and their associated pedagogical methods: flipped learning, interactive lectures, simulation, world café, learning diaries, and peer review. Each method is briefly described, offering insights into their application within the DigiCare training context. Additionally, supplementary resources are provided to further explore these methods and gain a deeper understanding of how they can be effectively utilized in DigiCare training.





The term "pedagogical method" refers to the techniques, systems, and approaches employed by teachers to facilitate the learning process (Wright-Maley, 2016). Various types of pedagogical methods exist, including active learning methods and more traditional lecture-based methods. The choice of pedagogical method is influenced by variables such as the subject matter, learning objectives, student needs and abilities, and the learning environment (Chaibate et al., 2021). A lecture-based approach may be appropriate for introducing new concepts and imparting basic knowledge, while active learning methods also foster deeper critical thinking, conceptualization, and applied understanding. Traditional lectures offer a wealth of information, but it can be challenging for teachers to gauge the extent to which students grasp the subject matter. (Kozanitis & Nenciovici, 2022.)

Active learning place a strong emphasis on student participation and engagement in the learning process (Hartikainen et al., 2019). This learner-centred approach is based on constructivism, which means that students actively construct their own knowledge, while the teacher plays the role of facilitator or coach (Gagné, 2021). Various teaching methods can be employed to implement active learning (Falconer, 2016). Interactive lectures, flipped learning, world cafés, problem-based learning, and case-based learning are among the techniques that promote critical thinking and a deep understanding of the course material. When students are actively engaged in their learning, they are more likely to take ownership of their education and become fully immersed in the subject matter (Michel et al., 2009; Quinlan & Fogel, 2014). By fostering student engagement and critical thinking, active learning equip students with the skills necessary to succeed in a rapidly changing and evolving workforce.

Researchers argue that stimulation and motivation are often more crucial than intelligence for memory (Kumar, 2003). Multimedia, which combines various forms of media such as text, symbols, pictures, images, audio, video, and animations, can be utilized, typically with the aid of technology, to enhance comprehension or recall (Guan et al., 2018).



By equipping teachers with the necessary skills and support, active learning can be implemented to foster student engagement, critical thinking, and deeper learning experiences.

Active teaching methods have proven to be an effective approach for enhancing education even in resource-constrained settings. These methods offer the potential to elevate educational standards in Bangladesh and other Asian countries, and they are already gaining traction in the region. In Bangladesh, teachers have recognized that the traditional teaching style often relegates students to passive roles. To introduce active learning in higher education institutions in Bangladesh, it is essential to provide existing teachers with training and appropriate guidance on integrating active teaching methods into their teaching practices (Chowdhury, 2016).

By equipping teachers with the necessary skills and support, active learning can be implemented to foster student engagement, critical thinking, and deeper learning experiences. These methods include flipped learning, interactive lecturing, low-fidelity simulation, the World Café method, and learning diaries (Figure 16).



Figure 16. Different Active Teaching Methods used during the DigiCare Pilots

A brief description of the methods introduced to the DigiCare project is provided in Chapters 4.2.1-4.2.6 and intended to serve as a starting guide for healthcare teachers.

References

Chaibate, H., Hadek, A., Ajana, S., & Bakkali, S. (2021). Analytical Hierarchy Process Applied to Pedagogical Method Selection Problems. Education Research International, 2021, 1–13. https://doi.org/10.1155/2021/6664758

Chowdhury, F. (2016). Employment of Active Learning at HEIs in Bangladesh to Improve Education Quality. International Education Studies, 9(10), 47. https://doi.org/10.5539/ies.v9n10p47

Falconer, J. L. (2016). Why not try active learning? AIChE Journal, 62(12), 4174–4181. https://doi.org/10.1002/aic.15387

Gagné, M., Hamel, C., Lauzier, S., Penney, S.-E., Bourbeau, J., Moisan, J., & Boulet, L.-P. (2021). Comparative educational outcomes of an active versus passive learning continuing professional development activity on self-management support for respiratory educators: A non-randomized controlled mixed-methods study. Nurse Education in Practice, 57, 103256. https://doi.org/10.1016/j.nepr.2021.103256

Guan, N., Song, J., & Li, D. (2018). On the Advantages of Computer Multimedia-aided English Teaching. Procedia Computer Science, 131, 727–732. https://doi.org/10.1016/j.procs.2018.04.317

Hartikainen, S., Rintala, H., Pylväs, L., & Nokelainen, P. (2019). The Concept of Active Learning and the Measurement of Learning Outcomes: A Review of Research in Engineering Higher Education. Education Sciences, 9(4), 276. https://doi.org/10.3390/educsci9040276

Kozanitis, A., & Nenciovici, L. (2022). Effect of active learning versus traditional lecturing on the learning achievement of college students in humanities and social sciences: A meta-analysis. Higher Education. https://doi.org/10.1007/s10734-022-00977-8

Kumar, S. (2003). AN INNOVATIVE METHOD TO ENHANCE INTERACTION DURING LECTURE SESSIONS. Advances in Physiology Education, 27(1), 20–25. https://doi.org/10.1152/advan.00043.2001

Michel, N., Cater, J. J., & Varela, O. (2009). Active versus passive teaching styles: An empirical study of student learning outcomes. Human Resource Development Quarterly, 20(4), 397–418. https://doi.org/10.1002/hrdg.20025





Quinlan, A., & Fogel, C. A. (2014). Transcending Convention and Space: Strategies for Fostering Active Learning in Large Post-Secondary Classes. Higher Education Studies, 4(6), p43. https://doi.org/10.5539/hes.v4n6p43

Wright-Maley, C. (2016). "Their definition of rigor is different than ours": The promise and challenge of enactivist pedagogies in the social studies classroom. Cogent Education, 3(1), 1140557. https://doi.org/10.1080/2331186X.2016.1140557

