

Digital Tools in Problem-Based Learning for Nursing Students

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“Innovation can help Kingfisher conserve energy while maintaining a sense of tranquility, which is suitable for an increasingly advanced age with diminishing physical strength.”

—In “Innovation”; [The Kingfisher Story Collection](#) [1]

## [SCIENCE COMMUNICATION]

Nurses form the largest workforce in healthcare, so nursing students, the future nurses, are encouraged to embrace digital technology and develop digital skills to become leaders in digital health implementation [1].

Nursing education consists of three main learning methods: classroom sessions, lab practices, and clinical internships. In classroom sessions, various student-centered learning approaches, such as collaborative and problem-based learning, are used. Today, incorporating Information and Communication Technologies (ICT) into nursing education promotes self-directed and personalized learning among students.



**Illustration.** Generated by OpenArt AI (<https://openart.ai/>)

A recent study analyzed data from 476 Thai and 179 Indonesian nursing students using the Bayesian Mindsponge Framework (BMF) to look for factors that can be associated with digital problem-solving skills. It found that digital problem-solving in the digital space was the most challenging skill for students to master. Skills in processing and exchanging information in digital spaces were discovered to be positively linked to digital problem-solving abilities. Overall, while most students were proficient in using ICT for their learning activities, they needed more support in problem-based learning [2].

In a digital learning environment, digital collaborative learning can enhance nursing students' digital problem-solving skills [4]. From the mindsponge perspective, digital collaborative learning involves online information exchange, increasing exposure to relevant health-related content, and promoting personalized information processing [5]. This process helps develop a problem-solving mindset that can be applied in problem-based learning activities.

Therefore, collaborative learning is highly recommended to create a supportive environment for knowledge processing and exchange among nursing students using digital technology [3].

## References

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