

Title:

*Enhancing Student Engagement in Higher Education: A Simulation-Based Approach Guided by Hiim and Hippe's Didactical Relationship Model*

Author:

*Jette Jørgensen Mebrouk, Assistant Professor, School of Nursing, University of Akureyri*

Introduction

In response to the rapidly evolving needs of modern students, higher education institutions are increasingly re-evaluating traditional instructional methods to foster more engaging and interactive learning environments. Nursing education, in particular, demands approaches that go beyond theoretical knowledge, emphasizing practical skills essential for patient care (Jeffries, 2021). This study examines the integration of Hiim and Hippe's didactical relationship model (Hiim and Hippe, 2018) within the School of Nursing at the University of Akureyri as a strategic approach to enhance student engagement in teaching delirium and fall risk assessment, two critical topics in nursing practice.

Initially, these topics were taught through conventional lectures and group discussions held in large, impersonal auditoriums. However, these settings posed several challenges, including high levels of student disengagement, limited participation, and insufficient opportunities for practical application. To address these challenges and limitations, this project aimed to reconfigure the learning experience to make it more interactive and relevant for students. By applying the structured framework of Hiim and Hippe's didactical model (2018), we sought to comprehensively review and redesign the educational process. This presentation will detail the transformational journey from traditional lecture-based methods to a simulation-centered approach, exploring its impact on student engagement.

Method

To address challenges identified in the traditional teaching approach, the didactical relationship model of Hiim and Hippe (2018) was utilized as a foundation for reviewing and redesigning the educational experience. This model focuses on six interconnected dimensions that influence learning: learning conditions, setting, goals, content, learning processes, and assessment. Each of these dimensions was systematically analysed to pinpoint specific factors affecting student engagement.

1. **Learning Conditions:** Also known as the prerequisite of the learner, this was an excellent starting point for the evaluation process. It became clear that most nursing students already had experience caring for patients with delirium and at risk of falling.
2. **Setting:** The existing large classroom/auditorium setting hindered personalized engagement and limited interaction between students in groups and between the groups and instructors. A shift was made to a simulation lab designed to mimic real-world clinical environments, providing a more immersive experience.
3. **Goals:** Objectives were redefined to emphasize not only knowledge acquisition but also to provide students with opportunities to share knowledge from clinical practice.
4. **Content:** The content on delirium and fall risk assessment was reviewed. As 4th-year students, the learners at this stage should focus on developing critical perspectives and evaluating the tools they use in clinical practice.
5. **Learning Processes:** To encourage active student participation, classroom discussions were transformed into simulation sessions with briefing, simulation, and debriefing.

Students assumed three roles in the simulated scenarios: (i) a patient with delirium, (ii) a relative of the patient, and (iii) a nursing student performing a delirium screening and educating the patient and relative on non-pharmacological interventions. In the fall risk assessment, the learning process transitioned from merely performing screenings to reviewing two different screening tools and developing critical questions related to each.

6. Assessment: Evaluating learning outcomes in nursing is challenging due to several factors, including the continuous clinical rotation. Students were asked to reflect on their learning and were encouraged to apply the topic in clinical settings following the learning activity.

Through this detailed application of the model, the teaching method was reoriented to provide a dynamic and student-centered learning experience.

### Results

The implementation of simulation-based learning significantly improved student engagement. Prior to this shift, students often seemed disengaged in classroom settings. Post-implementation, students appeared genuinely invested in the learning process. Immediate oral feedback after the class was positive, with several students providing spontaneous, appreciative comments on the simulation stations. However, responses in the course evaluation were mixed; some students highly valued the approach, while others did not find it suitable for their learning style.

These results highlight the potential of the simulation-based approach to transform student learning experiences by making content relevant, practical, and engaging. However, the results also indicate that simulation may not align with every student's preferred learning approach.

### Discussion

The potential impact of a simulation-based approach underscores the need for continued innovation in higher education. By applying Hiim and Hippe's didactical model, educators can systematically address and refine various elements that influence learning, creating a framework that is both adaptive and practical. This presentation will discuss how ongoing feedback from students and faculty will continue to shape and enhance this teaching method.

In addition to the nursing program, this approach is being piloted in other courses within the department, and preliminary feedback suggests that simulation-based methods can be effectively adapted across disciplines. The didactical model's six-dimension framework proves versatile, providing a comprehensive strategy for other fields to enhance practical skill development alongside theoretical knowledge.

The broader implications of this project suggest that, when institutions prioritize pedagogical frameworks that support student-centered and hands-on learning, they can foster environments that align closely with the skills demanded by contemporary professional fields. Further exploration of teaching approaches can benefit from a student-centered focus when applying Hiim and Hippe's model.

### References:

Hiim, H., & Hippe, E. (2018). *Undervisningsplanlægning for faglærere*, 3rd edition, Hans Reitzels Forlag

Jeffries, P.R. (2021) *Simulation in Nursing Education – From Conceptualization to Evaluation*. 3. Edition, Wolters Kluwer.