

## Chapter 5. Teaching Methods and Techniques in APN Education

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### Introduction

Modern learning-centred methods in higher education represent an innovative approach to teaching and learning that aims to actively engage learners and develop practical skills and knowledge. Teaching methods should support and encourage the understanding that learning can occur in many different ways; traditional lectures and seminars may be only one part of the learning process. Active learning must include various learning activities that engage learners in learning beyond listening and memorising. Effective methods support learners' active participation. Standard active learning methods include problem-based learning, simulation-based learning and integrating technology into learning. These methods promote learner engagement, critical thinking, problem-solving and decision-making, preparing learners for future academic and professional challenges.

### Key definitions

**Learner-centredness** is a teaching approach focused on keeping learners' needs, interests and experiences central, and ensuring learners are active participants in the learning process. Learner-centred methods include interactive activities that allow learners to independently discover, construct and synthesise knowledge. The role of the teacher is to find ways to enable students to take responsibility for their own learning, support independent learning and assess learning outcomes. This approach encourages active participation, deeper understanding

and meaningful and tailored learning that is relevant to the individual needs of learners. (Weimer, 2013; Oyelana et al., 2018.)

**Active learning** is a learning process in which learners take an active role and responsibility in shaping their own learning and acquiring knowledge. Rather than passively listening to lectures or reading materials, learners engage in interactive activities such as group discussions, problem-based tasks and practical projects. Active learning aims to foster deeper understanding, critical thinking, creativity and the development of practical skills by enabling learners to apply what they have learned in different contexts. Active learning helps learners to make connections and evaluate, understand and use what they have learned. (Biggs & Tang, 2011.)

### **A selection of evidence-based methods to promote active learning and the development of practical skills in APN education**

**Simulation-Based Learning (SBL)** offers opportunities to develop clinical skills and knowledge. The method involves replicating real-world clinical situations, allowing students to apply theoretical knowledge practically. It can enhance students' confidence, improve their clinical skills and enrich their knowledge. The role of the teacher is to find ways to enable students to take responsibility for their own learning, support independent learning and assess learning outcomes. Historically, simulation-based learning has predominantly emulated acute care settings. However, its scope can extend to various contexts, including primary and mental healthcare/psychiatric settings. High-Fidelity Simulation (HFS) has long been recommended to enhance patient safety in healthcare. HFS involves replicating clinical experiences using computer-driven, full-bodied mannequin simulators with physiologic responses to interventions. Simulation can be seamlessly integrated into teaching methodologies and curricula in various ways, serving as a valuable tool to facilitate learning. Optimising SBL, incorporating realistic scenarios, ensuring equipment fidelity and integrating debriefing sessions are recommended. These practices encourage reflection and contribute to a more comprehensive educational experience. (Onello & Regan, 2013; Warren et al., 2016; Hussein & Favell, 2022.) Simulation-based learning can be combined with OSCE (Objective Structured Clinical Examination) assessment.

Practical example of combining simulation-based learning and OSCE to teach and assess physical assessment and clinical decision-making skills.

- ✓ Educators determine the essential assessment and decision-making skills and craft scenarios. E.g., "The Advanced Practice Nurse (APN) is conducting a home visit and discovers an unconscious patient with a minor head wound, breathing but emitting a strong scent of alcohol. The accompanying nursing assistant suggests leaving the patient to recover independently, asserting that the situation is typical of a drunk patient."
- ✓ Educators construct assessment checklists grounded in literature known to students, emphasising the physical assessment and general professional skills needed, e.g., leadership, teamwork and pedagogical aspects of relevance.
- ✓ Students receive the defined assessment checklists in advance for preparation, along with literature.
- ✓ Prior to the Objective Structured Clinical Examination (OSCE), students are allowed to practice predefined physical assessments at a simulation centre.
- ✓ During the OSCE, educators present the scenario to the APN student, allowing a specific amount of time (e.g., 10 minutes) for reading and reflection. Subsequently, the student articulates their clinical decisions and assessments to the educator.
- ✓ Students enter the simulation room, where they perform the assessments for the educator, who uses the pre-established protocol to check the procedure and skills demonstrated.
- ✓ When the allocated time is up, the teacher carries out a debriefing session with the student. The student conducts a comprehensive self-assessment, evaluating both their clinical decisions and the assessments performed. The reflection extends to aspects of decision-making, leadership and team communication.
- ✓ The teacher provides an overall assessment, highlighting commendable aspects and areas where the student could have acted differently or fell short of the requirements. The feedback is given in a constructive manner.
- ✓ If a student does not meet the passing criteria, specific feedback is provided, emphasising areas for improvement. A follow-up Objective Structured Clinical Examination (OSCE) is offered within a reasonable timeframe for re-evaluation.

**Virtual reflection groups (VRGs) in clinical practice** are a form of collaborative learning in which students meet their educator and clinical supervisors to reflect on their clinical experiences with different patient cases and connect them to theory and research (Solberg et al., 2022; 2023). VRGs are an effective way to stimulate critical thinking (Høybak

et al., 2022). In VRGs, students, supervisors and educators thoroughly discuss selected patient cases from clinical practice. A learning outcome of clinical practice on the master's programme is the integration of theory and practice and the development of students' competence in assessing and analysing complex patient situations. VRGs can be ideal for discussing and analysing such complex situations (Solberg et al., 2022). Therefore, this pedagogical method is helpful on the APN programme. The practical training included on the programme also focuses on exercising the role of advanced clinical nurse, including professional leadership, coordination of healthcare, health education and health services development. These topics are very suitable for reflection groups.

According to Solberg et al. (2022; 2023), the objectives of VRGs are:

- To ensure active participation by all students
- To strengthen cooperation between students and supervisors
- To facilitate focused reflection and discussion
- To prepare students to take responsibility for leading professional discussions and reflecting on the relationship between theory and practice
- To prepare students to take on professional leadership roles as advanced clinical nurses

In addition, a key objective of reflection groups is to contribute to creating and maintaining a safe learning environment where everybody can express their professional reflections. The activity steps include:

- Before the reflection group, one responsible student and one respondent are appointed for each meeting.
- The responsible student chooses a clinical case with the clinical supervisor and presents it to the group. The data must be anonymised.
- The student then formulates a problem as a starting point for critical analysis and reflects on the handling of the complex patient situation.
- In addition, the student searches for a relevant research article to shed light on the problem and presents the article and its findings to the group.
- The appointed respondent gives constructive feedback, asks questions and critically examines the research article. However, the other students are also expected to contribute to the discussion.

The flow of reflection group:

- ✓ *Students are given increasing responsibility with regard to leading the reflection group, and the learning design addresses the learning outcomes for each clinical period.*

- ✓ *In the first practice period, the educator actively leads the group meeting, and students volunteer to share a clinical case they want to reflect on. The student who shares a case is responsible for summarising suggestions about the clinical case. All students are encouraged to participate actively in the clinical reflection, and are given the chance to share their reflections in turn.*
- ✓ *In the second practice period, the responsible students lead the reflection and share experiences by leading the discussion from the perspective of their professional role. Again, all students are encouraged to participate actively in the clinical reflection.*
- ✓ *In the third practice period, the learning outcomes are achieved when students lead the clinical reflection based on their professional role, and reflect on their collaboration with colleagues and the development of the profession.*

Solberg et al. (2022; 2023) have demonstrated how well-structured teaching methods generate positive consequences. In their study, the VRG design inspired well-prepared participants. Students took more initiative and responsibility for diverse learning activities and learning environments and perceived increased competencies related to interpersonal and professional skills. Clinical supervisors found that the VRG collaboration provided new insight into how the students actually studied.

APN educators who adopt self-reflection as a teaching method with students should consider the following points:

- Emery et al. (2022) argue that reflection is a novel idea for many graduates, with the majority defining their previous studies as more science-oriented. Not all graduates have had the opportunity to reflect throughout their prior education, which may cause issues. As a result, APN educators should be aware of students' experiences with various learning techniques and consider students' history with new teaching methods and individual requirements to the greatest extent feasible. Only in this way can self-reflection be considered a realistic and justifiable teaching approach.
- Lim et al. (2022) observed that most higher education students do not think deeply. They further state that while there are many good results for different reflection styles, there are few recorded negative consequences, particularly for the portfolio format. As a result, APN educators should seek out types of self-reflection with solid research evidence which will enhance students' life-long learning attitudes and, ultimately, increase their employability.



Overall, students require educators who value reflection and are ready to share their experiences with various forms of self-reflection and their benefits in APN education with colleagues. (Lim et al., 2022).

**Peer assessment** is a self-reflection strategy that can help students stimulate the development of their critical thinking (Høybakk et al., 2022), and can be seen as both a learning method and a formative assessment method.

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