Tip Sheet: Supervised Practical Exams

Description

Supervised practical exams assess students' ability to apply skills and knowledge in a controlled, observed setting. These tasks are designed to simulate real-world procedures or practices and allow assessors to directly observe students performing critical tasks.

Common formats include:

- **OSCE (Objective Structured Clinical Examination)**: Students complete a series of timed stations where specific clinical tasks or decisions are assessed.

- **Laboratory experiment**: Students conduct experiments following scientific protocols and may be assessed on accuracy, technique, interpretation, or safety.

- **Micro-teaching demonstration**: Education students deliver a short lesson or instructional activity to peers or assessors.

These exams may occur in-person or in specially arranged online environments using webcams or simulations.

Best Suited Learning Outcomes

Practical exams are ideal for assessing:

- Procedural knowledge and accuracy in task execution

- Safe, ethical, and compliant practice in a professional setting

- Application of theoretical knowledge to authentic or simulated tasks

- Communication of methods, reasoning, or technical results

- Professionalism under time or performance pressure

These tasks are commonly used in fields such as health, science, education, and technical skills professions.

Learning Design Considerations

Designing effective and equitable practical exams requires careful planning:

- **Validity**: Ensure the task reflects real-world skills or decisions the student is expected to perform in professional practice. Align the exam stations or tasks directly to unit and course learning outcomes.

- **Scaffolding**:
  - Integrate practice labs, rehearsal scenarios, or dry runs in the lead-up to the assessment.
  - Provide exemplars and debriefings from previous practical tasks.
  - Develop familiarity with the structure and timing of the exam.

- **Transparency**:
  - Share assessment rubrics or checklists in advance.
  - Clearly communicate the conditions of the task (e.g. time limits, required equipment or resources).

- **Equity and inclusion**:
  - Ensure access to the same equipment, materials, and practice time for all students.

- o Consider adjustments for students with disabilities or anxiety, and ensure task conditions don't unfairly disadvantage any group.
- **Reliability**:
  - o Use detailed marking rubrics or checklists.
  - o Consider multiple assessors or rotating examiners for consistency across stations or students.

Integrating Generative AI into the Task

While the focus of practical exams is often on physical performance or live reasoning, GenAI can be incorporated as part of the student's preparation or as a tool within the task where relevant to the discipline.

Examples include:

- A **science student** uses GenAI to help model experimental results or plan their experiment sequence, and is then asked during or after the task to explain and critique the AI-generated output.
- An **education student** uses GenAI to draft a lesson plan or activity idea for a micro-teaching session, then delivers the lesson and reflects on how the AI-informed elements performed.
- A **nursing student** might be presented with an AI-generated patient handover summary and required to interpret or verify its accuracy as part of a clinical scenario.

Tasks should prompt students to reflect on the AI's role in their performance — Was the AI output reliable? What judgment was required to modify it? How does this reflect ethical use in professional practice?

Resourcing Considerations

- **Staffing**:
  - o Multiple assessors may be needed to monitor different students or stations.
  - o Coordination of rooms, equipment, and timing requires administrative support.
- **Space and logistics**:
  - o Practical exams often require specialised environments (e.g. labs, simulation rooms, classrooms).
  - o Scheduling large cohorts may require multiple days or staggered delivery.
- **Technology**:
  - o Online versions may require reliable video capture, breakout rooms, or virtual lab simulations.
  - o Students and staff must be confident in the use of any required platforms or tools.
- **AI-related infrastructure**:
  - o If AI is part of the task, ensure access to appropriate tools is available, and consider training for staff on how to assess AI-informed responses.
- **Moderation and quality assurance**:
  - o Recording (where appropriate and compliant) can support moderation.
  - o Rubric calibration workshops are recommended to ensure scoring consistency.