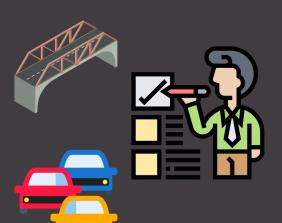## CASE SCENARIO 1: ENGINEERING

Students have limited time to assess each station. There are several stations, including one for structural engineering, where students are given blueprints for a bridge experiencing high load stresses; they must identify possible structural weaknesses and suggest potential modifications to improve stability. Another station is for transport engineering, where students are given a case study of a city with traffic congestion issues. They must apply traffic flow theory to design a better road system or propose alternative transportation solutions.

CASE SCENARIO 2: LAW

Students have limited time to assess each station. There are several stations, including one for legal research, where students are given a complex case and must conduct quick research to find relevant cases and laws. They may be given a laptop and may be allowed to use GenAI tools. Another station is for addressing ethics and ethical dilemmas, where students must identify the issue, discuss relevant ethical rules, and decide on an appropriate course of action.

TALiC Teaching and Learning Innovation Centre

Redesigning Assessment with Generative AI:

Action Speaks Louder: Using OSCE to assess in Engineering and Law

香港大學
THE UNIVERSITY OF HONG KONG

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Assessment Resources

INTRODUCTION

Objective Structured Clinical Examinations (OSCEs) are a style of examination often used in health sciences to test clinical and a range of other skills. It involves specific tasks that mimic real-world scenarios where students must demonstrate their practical skills and decision-making abilities in the given scenario. This technique can be adapted for Engineering and Law.

RATIONALE

Implementing OSCEs in Engineering and Law studies can help bridge the current disconnect between theoretical knowledge and real-world application. They are authentic assessments that place students in simulated real-world situations, closely mimicking those that students might face in their professional life, promoting understanding, critical thinking, adaptability, problem-solving, and practical applications of knowledge to a complex context.

HOW DOES IT WORK?

OSCEs usually consist of multiple 'stations' that students rotate through, with each station testing different skills or knowledge areas. A station's task might involve resolving a complex situation, interacting with an actor playing a specific role, or demonstrating a practical skill.

Assessment criteria can include:
- Ability to identify the problem, and appropriateness and effectiveness of solution
- Demonstration of practical skills, decision-making abilities, and communication skills
- Application of theoretical knowledge, professionalism

Rubrics will vary based on the specific skill or knowledge area being tested at each station.

BENEFITS & CHALLENGES

Benefits

- Encourages critical thinking and problem-solving
- Enhances the practical application of theoretical knowledge
- Simulates real-world scenarios, improving the readiness of students for their professional careers

Challenges

- Requires significant resources (time, materials, personnel) to create realistic scenarios
- Not all real-world aspects can be simulated, some elements of authenticity may be lost
- Students' performance may be influenced by stress and performance anxiety