

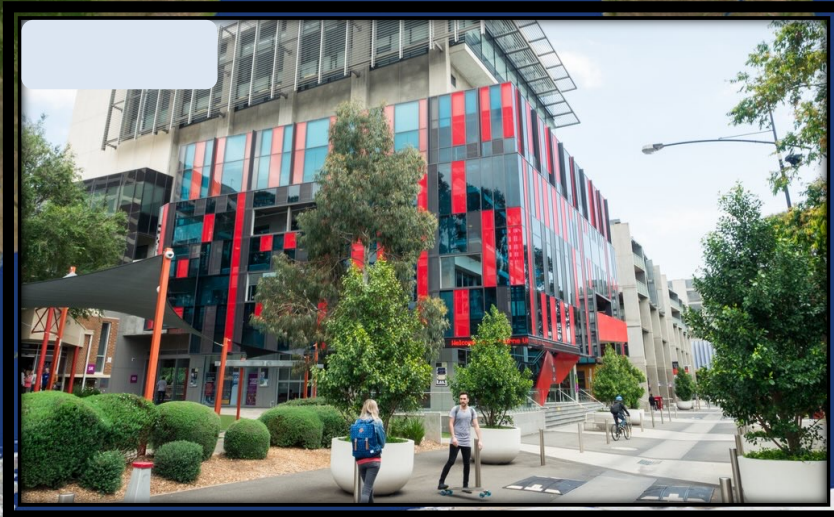
# Beyond AI-generated responses: Fostering critical skills with authentic interactive oral assessments

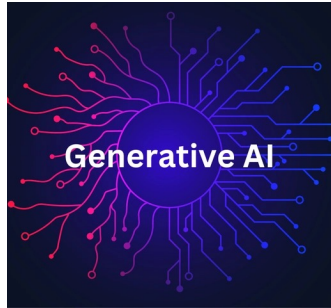
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Dr Dora Howes and Mr Rendell K. W. Tan  
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## RISE OF GENERATIVE AI

- Generative AI tools can produce **highly convincing written responses**, challenging traditional text based assessment modes.<sup>1</sup>
- Ensuring academic integrity now requires assessment designs that allow students to **demonstrate learning** in ways that GenAI cannot easily replicate.<sup>2</sup>



## CAPABILITIES FOR WORK IN AN AI-ENABLED WORLD

- Contemporary employability requires capabilities that are different from what GenAI can do, e.g. higher value problem solving, emotional, interpersonal and contextual reasoning and ethical judgement.<sup>3,4</sup>
- These skills involve human interaction and cannot be authentically performed through AI-generated responses.<sup>4,5</sup>

WHY  
INTERACTIVE  
ORALS NOW?

## AUTHENTIC INTERACTIVE ORAL ASSESSMENT



- Contributes to the development of critical thinking and communication skills.<sup>6,7,8</sup>
- Assessors involve students in **authentic and unscripted** interactions to simulate what students encounter in real-life, professional workplaces.<sup>9,10</sup>
- Students must think quickly, justify decisions, interpret cues, and communicate clearly, not easily replicated by GenAI.<sup>6</sup>

## INTENTIONAL DESIGN REQUIRED



- Questions are **not rigidly standardized**.
- Role-playing workplace scenarios allowing students to respond dynamically to the conversational flow.
- Unpredictability and variability require careful design and implementation to address concerns related to validity, reliability, and fairness.<sup>9,11</sup>

WHAT MAKES  
INTERACTIVE  
ORALS  
EFFECTIVE?



## FIGURE 1. DESIGN STEPS FOR AUTHENTIC ASSESSMENT

[Tan et al., 2021, p.4<sup>8</sup>; Adapted From Villarroel et al, 2018, p.847<sup>12</sup>]

# DESIGN

### 01 Considering the workplace context

- Identify key graduate attributes students will need in typical workplace scenarios

01

02

### 02 Designing authentic assessment

- Draft a rich context based on key scenario
- Create a worthwhile task (something that is likely to happen to students)
- Require higher order skills where students need to apply learning to the situation

04

### 04 Giving feedback

- Support students to clarify the quality criteria and make evaluative judgements

03

### 03 Learning and applying standards

- Help students understand the expected quality standard



# FIGURE 1. DESIGN STEPS FOR AUTHENTIC ASSESSMENT

[Tan et al., 2021, p.4<sup>8</sup>; Adapted From Villarroel et al, 2018, p.847<sup>12</sup>]

EXAMPLE FROM  
OCCUPATIONAL  
THERAPY

## 01 Key skills for the workplace

Professional communication

- Articulation of ideas
- Listen and build on arguments
- Critical and adaptable thinking
- Responding in real-time

01

02

## Scenario

- 6 students and 2 faculty (supervisors)
- Case based supervisory discussion
- Suggest recommendations
- Offer opinions
- Listen and professionally respond to feedback from peers and supervisors

## 04 Feedback

- Feedback during 3 practice cases during the module
- Verbal feedback to each group immediately after the assessment
- Release of marks and class written feedback 1-2 weeks following the assessment

04

03

## Criteria for expected standards

- Relevance of the response and support for arguments
- Logical coherence of response
- Team communication
- Overall presentation



## PARTICIPANTS

- 158 students from Occupational Therapy, Nursing and Engineering (66% response rate)
- 5 (out of 7) assessors and all 3 module leads

## METHODS


- Online questionnaire (students & assessors), recorded reflective discussion (module leads).
- Ethical approval: Singapore Institute of Technology Institutional Review Board (approval number: 2020174).

## KEY FINDINGS

- Fidelity of the assessment was reported as “somewhat” to “clearly evident”, specifically:
  - (i) whether students could express their individualised responses
  - (ii) if they perceived the assessment to be authentic
  - (iii) if it helped them gain professional knowledge and skills.
- Qualitative findings suggested the interactive oral assessments reflected real-world expectations, promoted deep learning and offered a quality learning experience.



EVALUATION




**SUMMARY:**  
**FOUR KEY QUESTIONS WHEN  
INTRODUCING AUTHENTIC  
INTERACTIVE ORAL  
ASSESSMENTS**

**1. Do I have enough information about the workplace to design an authentic interactive oral assessment?<sup>8,12</sup>**

- Draft a rich context
- Seen as a worthwhile task
- Requires higher order thinking skills

**2. How confident am I to facilitate a dynamic interactive oral assessment?<sup>8,12</sup>**

- Set the tone for the discussion
- Strategically guiding discussions
- Grading for oral assessments<sup>13</sup>:
  - First impression – based on student responses
  - Provisional grade – tested through exploratory questions
  - Final grade – decided by confirming questions and moderated through discussion with other assessors



**SUMMARY:**  
**FOUR KEY QUESTIONS WHEN  
INTRODUCING AUTHENTIC  
INTERACTIVE ORAL  
ASSESSMENTS**

**3. Do I have enough flexibility in the module to design an authentic interactive oral assessment?** <sup>8,12</sup>

- Embedded in the course and not an add-on
- Learning objectives align with this form of assessment

**4. How can I prepare and support students for the interactive oral assessment?** <sup>8,12</sup>

- Repeated opportunities for practice and feedback
- Preparing students for an assessment that goes beyond knowledge testing
- Unpredictability which reflects real world experiences
- Potential emotional reactions

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# Thank you!

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## Developing interactive oral assessments to foster graduate attributes in higher education

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### ABSTRACT

Interactive oral assessments demonstrate potential to develop graduate attributes such as critical thinking, professional communication and collaborative skills in students through authentic simulation of workplace scenarios. This study captured the design, delivery and evaluation of interactive oral assessments across three programmes – occupational therapy, nursing and air transport management – in one university. A four-step Model to Build Authentic Assessment was used to design the assessments. Quantitative and qualitative data collected from 158 students, five assessors and three module leaders were analysed for a basic evaluation of the fidelity of interactive oral assessment implementation across different contexts and to explore the experiences of faculty and students undertaking the assessments. Fidelity was considered in terms of: (i) whether students could express their individualised responses, (ii) if they perceived the assessment to be authentic, and (iii) if it helped them gain professional knowledge and skills. In all the developed assessments, each of the three aspects were somewhat evident, evident or clearly evident. Qualitative findings suggested the interactive oral assessments reflected real-world expectations, promoted deep learning and offered a quality learning experience. From these results, practical suggestions for how faculty can self-assess their readiness for implementing interactive oral assessments are offered.

### KEYWORDS

Interactive oral assessment; professional communication; graduate attributes; curriculum development; authentic assessment