

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

Marking ‘on the fly’ in interactive oral assessments in Business

Adrian Norman, Stephanie Wilson, Joanne Nash, Alison Casey

University of Sydney Business School

Interactive orals (IOs) are described as a pedagogically rigorous and authentic form of assessment. However, there is little research to-date on the assessor experience of facilitating a conversation and marking ‘on the fly’, nor the student experience of thinking ‘on the spot’. This paper investigates assessor and student experiences of IOs in the context of a large Australian business school where IOs were implemented in five courses from several sub-disciplines. Participant interviews confirmed what is already known about IOs and their place as an assured assessment of learning in the Artificial Intelligence (AI) age. This study contributes to new knowledge on the assessor experience and suggests that academics will need a distinct skillset to ensure reliable and valid ‘conversational’ assessments.

Keywords: Interactive oral, business education, live marking, authentic assessment, qualitative

Background and context

The Interactive Oral (IO) assessment is an “authentic, industry-aligned conversation that extends and synthesises the student's knowledge to demonstrate and apply course concepts in a scenario-based interaction” (Logan et al., 2023). Though the origins of learning through verbal discourse can be traced back to the Socratic method, the recent interest in IOs in higher education began during the COVID-19 lockdowns, as an alternative to on-campus exams (Logan & Sotiriadou, 2020).

IO assessment makes the learning process visible, as it requires students to verbally express their understanding (Newell, 2023) on the spot, and promotes creative and critical thinking (Hillier, 2023). The professional framing makes it authentic by providing students with practice in a simulated real-world scenario, which enhances their employability prospects (Ward et al., 2023). IO assessments, flexible (see Karlton & Karlton, 2014; Logan & Sotiriadou, 2020; Ward et al., 2023 for examples) and scalable, having been run in courses as large as 800 students (Logan et al., 2023). Most assessment types only satisfy two dimensions of the *Assessment Iron Triangle* (Integrity, Authenticity, & Scalability) (Hillier & Fluck, 2017), but the IO excels on all three dimensions as well as being a sustainable method, with no special equipment required (Hillier, 2023).

With the advent of ChatGPT, educators are turning to IO assessments to assure learning (Lodge et al., 2023; Newell, 2023). Despite their growing popularity however, research is limited. Scholars have considered how IOs can improve assessment equity (Krautloher, 2024), and demonstrated how IOs develop higher-order thinking skills such as critical thinking and professional communication (Shaeri et al., 2022; Tan et al., 2022). Research also demonstrates the applicability of IO assessments in different disciplinary contexts, and the value of Communities of Practice to support design and implementation (Ward et al., 2021). The IO has also been recognised as providing an opportunity for assessors to identify how the teaching and learning experience can be improved (Karlton & Karlton, 2014). There is little research however on how assessors and students experience this ‘live’ dynamic assessment. To address this gap, the present study asks: How do assessors and students experience interactive oral assessments?

Co-designing interactive oral assessments

The authors (educational developers) worked with academics to design, implement and evaluate IO assessments across five courses. This paper reports on the trial of this new form of assessment which aligns with the conference theme of implementing new pedagogies enabled by technology. The design, implementation and

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

evaluation of IOs involved a combination of digital and non-digital elements that worked together to support learning for educational developers, assessors, and students. As such, we take a socio-material and post-digital perspective on the relationships between digital and non-digital elements of the IO assessment process (Fawns, 2022). Guided by a nine-step IO design method (Logan-Fleming et al., 2024), IO assessments were piloted in 5 courses (Table 1) across the School in the areas of *building organisational customer experiences* (A), *management and organisations* (B), *global management and culture* (C) and *digital transformation* (D, E).

Table 1

Courses and IO assessment parameters

ID	Students	Extra assessor	Weight	Total IO session time (marking)	Mode
A	20	No	25%	20 minutes (5)	In room
B	25	No	35%	25 minutes (10)	Zoom
C	61	Yes (1)	30%	30 minutes (15)	In room
D	38	Yes (1)	25%	30 minutes (15)	In room
E	39	Yes (2)	35%	30 minutes (10)	In room/Zoom

Framed in a professional context, each IO replaced final written exams in each course. For example, in one course, the partner in a management consultant firm specialising in digital transformation (assessor) invited a job candidate (student) for an interview to become a partner and asks about their previous experience of working on a digital transformation project. Marking rubrics were designed to be open and visible to the assessor, to guide the conversation and provide a schema for making judgements 'on the fly'.

Method

All students in the courses were invited to participate and nine students accepted and gave their formal consent. Ethics approval to collect data from teachers and participating students was received by [name of institution] ethics committee (2019/HE000892). Two focus groups were conducted for participants from courses A and E ($n = 2$, $n = 4$) and three one-on-one interviews were conducted for the other courses (B, C, D). Student participants were a mix of International ($n = 6$) and domestic ($n = 3$) with the majority (5/9) being non-native English speakers. Five of the seven IO assessors were also interviewed. Interview recordings were auto-transcribed, using Microsoft Word for the web, and participant names were replaced with identifiers: S1–S9 for students and A1–A5 for assessors. Two research team members conducted separate thematic analyses of both assessor and student interviews using a published six-step approach (Braun & Clarke, 2006). Transcripts were printed, read, annotated and then coded manually in NVIVO on a topic-by-topic basis. The coded data was analysed, interpreted and discussed by the entire research team so as to achieve consensus.

Results

Assessor perceptions

Adjusting to different levels of student performance

One assessor (A5) noted differences in the experience of facilitating the conversations with higher and lower performing students. Sessions with the 'very interactive, talkative and keen' students were described as 'fun' because you enter 'a very natural flow the conversation... the nuggets in their learning should come out naturally'. In contrast, sessions with the lower performing students were described as increasing the 'pressure' and cognitive load associated with facilitation. For example, one assessor (A5) commented that they needed to 'quickly formulate a strategy' within a few minutes into the conversation and decide whether to 'jump in with authentic sort of conversation interaction' or start with a more 'mechanical list of questions' to allow students to 'at least give me something'. Another (A2) agreed, suggesting it was 'demotivating' and difficult to maintain

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

engagement in cases where students struggled to answer some of the simpler questions and prompts effectively. Several assessors noted the importance of being familiar with the students, cautioning against bringing in 'random assessors' who had not been involved in the course.

Managing multiple, simultaneous tasks: rewarding despite high cognitive load

A common strategy of the assessors to aid in making judgements of student performance was to write quick notes to jog the memory when finalising marks and feedback. One assessor (A1) was mindful of how his physical actions could affect the student: 'I was aware that they could probably see what I was writing down... So what I was writing down was just things that they said, not any marks'. Another (A5) noted the cognitive load, 'you have to be there 100% during that 15-minutes', comparing this with their experience of marking an essay, and another (A4) noted that they needed to allow enough time to get through all the prompts whilst giving students time to answer. While balancing these elements was considered demanding for the assessors, it was not beyond them: A5 reported 'I've figured out a like a loose formula in terms of how to approach it'. Overall, despite the significant load, the assessors found the IOs enjoyable and rewarding: 'I had so much fun... it's worthwhile' (A3), and 'it was much more rewarding for me as an educator to... delve into their knowledge' (A2).

Managing verbal and non-verbal responses and feedback

An additional challenge was associated with managing facial expressions, which is not something assessors had to consider in 'non-live' assessments. For some, this was about not wanting to show concern through facial expressions when students gave a poor response. They didn't want to give students that extra burden of feeling like they weren't doing well. Some assessors chose to give informal feedback immediately after the conversation, while others chose not to. One assessor (A1) explained to students that they shouldn't look to him 'for validation' during the session but reassured them that his lack of verbal or non-verbal feedback did not mean they hadn't performed well, but that rather, he didn't want them reporting back to their peers.

Considerations around 'open book' IO assessments

Assessors demonstrated some care in how they approached the 'open book' nature of the IO assessments. One assessor (A1) provided print outs of the students' previous group presentation for them to refer to so they 'wouldn't feel like they were under some pressure cooker that they'd forgotten, and even if somebody forgot to bring in paper and pencil, I provided them'. This assessor told students they wouldn't be marked down for looking at their notes but cautioned that if they did this often there would be less time to get through the questions. In another course, the assessor (A4) reported that allowing students to bring in notes meant some students became too dependent on them, which impacted on their ability to effectively engage fluently in the conversation.

Student perceptions

An enjoyable yet challenging experience: an agile conversation in a professional setting

News of being assessed in a new way was met with some surprise by students: 'it kind of caught me off guard like because ... we have never, never done this before' (S1). This initial alarm softened though when they realised how it compared to a written final exam – 'it's only, like, 15 minutes' (S6). When asked to reflect on their experience, students responded with comments like 'I actually really enjoyed it' (S6), 'I was a big fan' (S8) and 'I actually love the oral interactive assessment' (S5), which were indicative of enthusiasm for the experience. The participants saw the IO assessment as a conversation, 'So it didn't feel like an exam or an interview. It felt like a conversation at the end' (S1). The participants' relationship with their teacher was key, as S2 described 'maybe because I knew [the teacher] for like 13 weeks as well...so, it felt like a conversation'. In general, participants enjoyed the challenge of conversation: 'You're kind of put on the spot and you've gotta think pretty fast. And I

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

really like that sort of approach' (S8). Also, it was evident that the professional framing influenced their attitude and behaviour in the assessment itself: 'I just actually feel like treating it as like a real working environment' (S2), and 'I wore shoes and a tie. [...] I made greetings with [the assessor] and like we shake hands' (S1).

Navigating language barriers: considerations for non-native English speakers

None of the student participants complained of having to converse in English, but some challenges were noted. One international student (S4) spoke of how she and some Chinese students felt 'scared' speaking in class, but that the teacher's approach to encouraging speaking in class made her feel more confident doing so in the IO. In general, though, students accepted the English language requirement of the IO assessment and saw it as necessary – 'it would be kind of weird if it was in my native language' (S9).

Deep learning and concerns about reliability

Students viewed the IO as pedagogically superior to a written exam. Describing an exam, S3 noted '[the knowledge is] just like all gone when we finish the exam', while S2 said 'I probably would have just rote learned the models instead of like understand them and like walk someone else through them'. Students described how preparing for the IO influenced their learning 'it actually refreshed a lot of my studies', (S2) and helped to 'connect all the contacts' and 'deepen understandings' (S1). The IO assessment also encouraged students to 'go beyond what the classroom has taught' (S7). Student S8 praised the 'open-ended' nature of the IO but at the same time worried that this appealing characteristic was also its weakness: 'I mean, there's sort of 1,000,001 things that you could do in response' highlighting a concern over the IO's reliability adding 'I imagine every conversation was sort of guided a bit differently'.

Discussion

The IO assessment experience was an enjoyable one for both students and assessors. This alone should interest academics who find marking a toil. Our results also supported findings that the IO drives deep learning (Newell, 2023; Tan et al., 2022) and encourages students to extend their knowledge (Logan-Fleming et al., 2024). Furthermore, the authenticity of the IO influences student behaviour in a meaningful way focusing on skills that may enhance their employment prospects (Ward et al., 2023). Our findings support the view that assessors perceive the IO to support academic integrity (Sotiriadou et al., 2019) and we found no perceived personal inequity for non-native English speakers despite some concerns, which chimes with the findings of a recent study (Krautloher, 2024). We do acknowledge however that our findings may be impacted by the small sample size. Also, though we found no evidence of assessor bias towards students based on their knowledge of the student, it should be noted that this risk is a characteristic of any form of non-blind assessment and should be minimised by adherence to a considered and well-written marking rubric to promote objectivity and consistency. Overall, we conclude that the IO is a viable means to assure learning in the AI age (Lodge et al., 2023; Newell, 2023). For these reasons, the IO assessment should attract serious interest from higher education leaders who need to stand by the credibility of their degrees as statements of achievement.

The IO experience may have felt relaxed and informal on the surface, a conversation of sorts, but for assessors there was significant self-regulation taking place behind the scenes. While the students provided positive accounts of their experience, they also recognised the considerable risk of inconsistency and potential inequity in the experience. Together, these two findings suggest that assessors require a distinct set of skills and knowledge to deliver a fair and consistent experience. While some academics may already have the soft skills required to skilfully conduct a professional conversation, others may need targeted professional development. More work is required in this space to develop an IO Assessor Toolkit to guide others interested in this form of assessment.

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

Implications, limitations and conclusions

The planning and commitment required to implement IO assessments is significant. Those interested in implementing IOs should learn from existing cases in the literature, such as Ward et al. (2023) as well as from others in the community who are willing to share their insights and practice. In our study, we discovered that while students and assessors had a positive experience of IOs, more research is required to better understand the real value of this kind of assessment. Our findings are limited by the small number of participants who may not be representative of a larger and more diverse cohort. Though our findings have been mostly positive, IOs need resourcing. Assessors will require a new set of skills, which requires time and resources, especially when scaling up the IO. We conclude that the benefits to both the student and teacher of IO assessments far outweigh the costs and risks – in short, it is more work, but it is worth it. As a final note, the assessors in our study are planning to do it all again.

References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Fawns, T. (2022). An Entangled Pedagogy: Looking Beyond the Pedagogy—Technology Dichotomy. *Postdigital Science and Education*, 4(3), 711–728. <https://doi.org/10.1007/s42438-022-00302-7>
- Hillier, M. (2023). Making Online Assessment Active and Authentic. In M. D. Sankey, H. Huijser, & R. Fitzgerald (Eds.), *Technology-Enhanced Learning and the Virtual University* (pp. 307–352). Springer Nature. https://doi.org/10.1007/978-981-99-4170-4_17
- Hillier, M., & Fluck, A. (2017). The assessment triad and e-exams: Integrity, authenticity, and scalability. <http://transformingexams.com/>
- Karlton, A., & Karlton, J. (2014). Interactive Oral Assessment Supporting Active Learning. 10th International CDIO Conference.
- Krautloher, A. (2024). Improving assessment equity using Interactive Oral Assessments. *Journal of University Teaching and Learning Practice*, 21(04), Article 04. <https://doi.org/10.53761/4hg1me11>
- Lodge, J. M., Howard, S., Bearman, M., Dawson, P., & Associates. (2023). Assessment reform for the age of Artificial Intelligence. Tertiary Education Quality and Standards Agency.
- Logan, D., & Sotiriadou, P. (2020). Interactive Oral Assessments: A viable solution to mitigate potential reverse effects of global threats to the higher education sector. Griffith Business School.
- Logan, D., Sotiriadou, P., Daly, A., & Guest, R. (2023). Interactive Oral Assessment: An authentic and integral alternative to examination [Microsoft Sway]. <https://sway.office.com/yQ2s0Bm3lKwGII?ref=>
- Logan-Fleming, D., Sotiriadou, P., & Wilson, S. (2024, March 11). Interactive Oral Assessment: An introduction to Interactive Oral Assessment and the Interactive Oral Project in the Business School [Presentation].
- Newell, S. J. (2023). Employing the interactive oral to mitigate threats to academic integrity from ChatGPT. *Scholarship of Teaching and Learning in Psychology*. <https://doi.org/10.1037/stl0000371>
- Shaeri, S., Logan, D., & Krautloher, A. (2022). Evaluating competency development using interactive oral assessments. REES AAEE 2021 Conference: Engineering Education Research Capability Development, 103–112. <http://doi.org/10.52202/066488-0114>
- Sotiriadou, P., Logan, D., Daly, A., & Guest, R. (2019). The role of authentic assessment to preserve academic integrity and promote skill development and employability. *Studies in Higher Education*, 45(11), 1–17. <https://doi.org/10.1080/03075079.2019.1582015>
- Tan, C. P., Howes, D., Tan, R. K. W., & Dancza, K. M. (2022). Developing interactive oral assessments to foster graduate attributes in higher education. *Assessment & Evaluation in Higher Education*, 47(8), 1183–1199. <https://doi.org/10.1080/02602938.2021.2020722>
- Ward, M., O’Riordan, F., Logan-Fleming, D., Cooke, D., Concannon-Gibney, T., Efthymiou, M., & Watkins, N. (2023). Interactive oral assessment case studies: An innovative, academically rigorous, authentic assessment approach. *Innovations in Education and Teaching International*, 1–18. <https://doi.org/10.1080/14703297.2023.2251967>

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

Acknowledgements

The authors would like to acknowledge the study participants, the CLaS Project of which this study is a part, and Educational Innovation at The University of Sydney for supporting the project through a Strategic Education Grant.

Norman, A., Wilson, S., Nash, J. & Casey, A. (2024). Marking 'on the fly' in interactive oral assessments in Business. In Cochrane, T., Narayan, V., Bone, E., Deneen, C., Saligari, M., Tregloan, K., Vanderburg, R. (Eds.), *Navigating the Terrain: Emerging frontiers in learning spaces, pedagogies, and technologies*. Proceedings ASCILITE 2024. Melbourne (pp. 584-589). <https://doi.org/10.14742/apubs.2024.1392>

Note: All published papers are refereed, having undergone a double-blind peer-review process.

The author(s) assign a Creative Commons by attribution license enabling others to distribute, remix, tweak, and build upon their work, even commercially, as long as credit is given to the author(s) for the original creation.

© Norman, A., Wilson, S., Nash, J. & Casey, A. 2024