Students want more authentic activity and less research-led teaching

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Abstract

This opinion piece argues that authentic activity which emphasises real-world practices may help to improve the student experience and employability. Through a discussion of five specific strategies used for enhancing authentic activity on a games development degree programme, the author argues that authentic activity may, in some situations, be a more appropriate guiding principle for designing teaching activities than research-led teaching.

Key words: pedagogy, industry links, employability

'Authentic activity' (Brown, Collins and Duguid, 1989) is a well-established pedagogical principle, which argues that learning activities that reflect real-world practices are crucial for effective learning, in contrast with tasks that are disconnected from professional practices. In this opinion piece I argue that the principle of authentic activity is an essential foundation for enhancing student experience and employability in video games development and, in many cases, should be prioritised over the more pervasive principle held in higher education of 'research-led teaching', which many universities prioritise (Marshall, 2015, p.30). I also provide insights based on some key strategies that our teaching team has used to enhance authentic activity on the games development degree programme, which may be generalisable to other areas of study.

The field of video games development is perhaps unusual in academia, in that much of the cutting-edge activity and innovation within this field does not emerge from academic research. Academic research does make important contributions to related fields in games: computer graphics and animation research (Burbando, Zorin and Jarosz, 2024) can advance techniques that end up being used in games, while such fields as serious games research can forge adaptive new uses for games technologies of benefit to wellbeing and society (Dewhirst, Laugharne and Shankar, 2022) or expand the use cases for games technologies (Jungherr and Schlarb, 2022; Weinel, 2024). Yet, as was discussed at the recent TIGA Games Education Conference 2024, the core business of video games as entertainment is a commercial sphere of activity where most of the innovations happen within industry – often behind closed doors – under the protection of non-disclosure agreements which defend the intellectual property rights of games developers who operate in competition with each other.

Because academia is not usually where the main innovation in video games happens, 'research-led teaching' may not always be an appropriate way to approach the teaching of games development. Though a research-led approach may help students to understand some of the wider innovations that are related to the discipline or perhaps open pathways to postgraduate study or other related career paths, it may not align well with their specific

research aspirations. According to Tinto's (2016) discussion of 'student persistence', key aspects of motivation may come from perceived alignment of curriculum content with the goals of students, which often relate to future employment. If not used carefully, research-led teaching may cause a disconnect between topics the student seeks to learn and those that are being taught. At worst, this may give rise to significant levels of discontent and unhappiness within the cohort, some of whom begin to question what they are being taught on their degree and why. This becomes a harder problem to fix.

The antidote, best used as a preventative measure, is 'authentic activity', as discussed by Brown, Collins and Duguid (1989). Authentic activity highlights the importance of real-world practices within teaching, favouring this over the tasks and activities we often find in teaching that are more abstracted from professional activity in the related sphere of work. Critically, an approach of authentic activity helps to make clearer to students the pathways from study to employability: it is easier for them to understand what they are doing in their studies and how it may help them ultimately to get a job doing something they enjoy. In what follows I list some specific initiatives we have used on the games development degree programme to implement authentic activity:

- 1. Industry-standard tools and technologies. Our team has undertaken significant upskilling training in current games technologies such as Unreal Engine which are widely used in the games industry. We have also invested in Sony PlayStation 5 Development Kits (industry-standard hardware used for making games). By learning the most relevant tools for games development, we are then able to incorporate these into teaching, so that students are learning how to use the software and hardware tools most relevant to their future careers. For staff, there are massive time investment implications (not always well accounted for), but, among students, there is recognition of the value of learning these tools (highlighted in student evaluations).
- 2. Industry guest speakers. For the games degree programme, we arranged a schedule of guest speakers from industry, bringing in professionals from well-known games companies working in areas directly related to the modules in which the talks were being hosted. Guest speakers typically spoke about their journey into the industry and what their daily work involved. These talks were always well received and it was often possible to draw links between topics in these guest talks and course content elsewhere, helping students to understand how the module as a whole reflected authentic activity.
- **3. Creating placement opportunities.** Little can be more authentic for a student than actually working with a company via an industrial placement. However, in games development, the scarcity of placements creates significant competition for those that do exist. We therefore sought to increase the range of these enrichment opportunities by establishing exclusive short-term placements in companies with which we had formed direct links.
- **4. Live industry briefs.** Recognising that not all students would be able to find industrial placements, for our collaborative group project module we incorporated authentic activity by working with external companies, who provided project briefs for the students to work on. Where possible, one or more representatives from the external company would launch the brief for the students and the companies would at key points give feedback to the students on their works-in-progress. Few sessions can be as powerful for students as giving a presentation about their team project to a panel of five experts from Sony, as we managed to provide in

one instance. This initiative gave all students on the module an authentic industry-like experience.

5. Mapping final-year project topics to industry roles. The final-year individual project module allows students to create an in-depth project related to their specialism. However, we noticed that many of the project briefs that supervisors were providing were very research-focused, reflecting the interests of the lecturer, but potentially becoming disconnected from what a project in industry might look like. To address this, we revised the list of project topics and mapped new briefs in specific relation to different job roles (for example, 'gameplay programmer' and 'technical artist') in the video games industry. The students could then readily see the relevance of their projects to their career aspirations.

Conclusion

In implementing the strategies above, we have not abandoned research-led teaching completely and it is still used where relevant. However, our emphasis is much more firmly explicit, with authentic activity prioritised. The outcome: happier students, able to correlate easily what they are doing in their studies with their career aspirations. For subjects like games development, it is important to understand why students are studying in the first place and where they hope it will lead them in the future. In recent times, the cost-of-living crisis and the cost of education have placed increased pressures on students (Schofield, 2024), who may be less inclined to pursue learning for its own sake and more concerned about having the job they want after they graduate. Academics may not like this shift, but it is the reality that we must face; authentic activity can help us to meet the expectations of these students.

That students were complimentary about our initiatives in their evaluations no doubt contributed to an overall satisfaction score of 97% in the National Student Survey 2024. Many of the strategies outlined here could also be implemented in other subject areas. When designing courses and programmes of study, academics may find it useful to look at how knowledge and innovation are constructed in their own discipline and consider these in relation to student aspirations of employment within the field. Not all innovations come from research and students do not often aspire to be researchers. By implementing strategies such as the ones above, it may be possible to improve student satisfaction and employability.

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