Exams - Effective or Futile?

The Future of University Assessments





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The Future of University Assessments

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Questioning The Value of Exams

There has been intense debate about the value of exams in education. It is fair to assume that most students dislike exams, some passionately. To justify continuation of such a widespread practice, there needs to be a strong evidence-base for their value. How did exams originate? Should universities continue to rely on them, or should they be replaced by more modern and innovative assessment tools?

Questioning the Why

Part of the problem, is that universities often consider the value of exams in an ivory tower of age and tradition. Do contemporary educators believe exams are the best method to assess teaching and learning? There is first, another question that needs to be addressed, what is the real purpose of higher education? It is essential to answer this question first, otherwise we can't begin to consider the effectiveness of particular tools across the academic arsenal.

The answer of course depends on who you ask. In academia, a likely answer might include the development of thinking skills, understanding and knowledge. According to students, based on extensive research, the vast majority have a far narrower view, "to get a job", while employers seek graduates with foundational knowledge and practical skills that make them "job ready". The reality is, that many university assessments concentrate on knowledge rather than the student's understanding of that knowledge.

Are Exams Valuable - For Whom?

In considering the value of exams, it is fair to ask, valuable to who? Let us assume the majority of students would prefer not to take exams. As for employer's - I have been privileged to give keynote presentations from Harvard University to European governments. Sometimes, I begin with a knowingly odd question, "please raise your hand if you took an exam at work this week". Fully anticipating the strange looks from the audience, I reply, "OK, so nobody has raised their hand, actually that's no surprise, because industry sees no value in the exam as part of professional development, despite budgets of billions of dollars annually in training". So, the real question is, if external organisations don't see any value in exams why does this underpin the entire university assessment system?

As is too often the case, we rely on a practice because it's the way it's always been done, without actually questioning the basis of its origin and perhaps more importantly, considering whether that reasoning is still valid.





The Tale of a One-way Road and the 1956 Olympics

When the youngest ever Secretary of the Department of Transport for the Victorian government was appointed, with his office sitting high above one of the major roads into the Melbourne central business district, he noticed that Wellington Parade was a one-way street, and thought, why? He asked staffers why, and they said they didn't know. He suggested they find out. A few weeks later the Secretary asked again, what happened to that question about Wellington Parade being one-way? "Oh, we looked into it, nobody seemed to know" was the reply. With clear frustration, "that's not an answer. Keep searching".

Finally, the answer came back, the road was in fact two-way traffic 70 years ago. During the Melbourne Olympics in 1956, it was temporarily changed to one-way to manage increased traffic to venues. Nobody remembered to put it back!

This story may seem extraordinary, but in fact, it is far more common than we might expect. It is routine, even habitual, to go along with the status quo. It takes imagination, innovation and entrepreneurship to challenge a system and to invent a better mousetrap. And for those that may be curious, yes, Wellington Pde. is now two-way traffic once again.

Does this inertia apply to universities? Absolutely! In an article published in the US, Chronicle of Higher Education, titled, "What Is the Purpose of Final Exams, Anyway?" (November, 2018), Professor Gannon stated,

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Most still did what I was doing: giving an exam because... well... because we give exams at the end of the semester. It's what we do!

The History of Exams

Examinations have an ancient lineage, in China for example as a method for selecting government officials, or in Europe typically in the fashion of oral theological exams in front of an audience. However the "modern exam" was introduced into schools in England in 1858 by The University of Cambridge Local Examinations Syndicate (Cambridge Assessment). Cambridge initiated two examinations: The Junior (16 years of age) and Senior (18 years of age).

Importantly something monumental in world history was occurring simultaneously. The industrial revolution which began in England, and spread across the globe; a revolution that would fundamentally change how we live from rural to a urban societies. Quite simply, it introduced the age of efficient process and mass production.

What does this have to do with universities? Cambridge was historically a centre of theological religious teaching, as well as having an excellent reputation for advanced mathematics. In the 1850's the British government instituted the most comprehensive reforms of both Oxford and Cambridge, including substantial expansion of facilities and programs, which led to a threefold increase in student numbers over the next 50 years. Oxford undergraduate education was dominated by exams after 1870 (Oxford University Gazette).



The basic purpose of the examination system was to deal with the significant expansion of student enrolments in a systematic manner. Just as industrialisation affected everything from textiles to steam engines, education became (for the first time in history), a mass market product. The basis of exams was not rooted in academic excellence but rather, efficient processing.

What Does the Research Tell Us About Effectiveness of Exams?

Universities are certainly expert at conducting research, including on themselves. There is a wealth of university-based research on the effectiveness of exams, and most of it doesn't bode well for maintaining them. A study published in the British Journal of Educational Technology, analysed assessments at 21 research universities across 4 continents, to find that:



It is something of an anachronism, given the human capital need of a knowledge economy, not just because of the absence of technology that is routinely used in everyday business, but because this type of examination is incompatible with constructivist learning theory that facilitates deep learning.

Critical of the exam, the same research report offered insights into what a viable replacement should look like:

It is further argued that a commitment to authentic assessment will pave the way for a different type of final examination, where real-world problems are allowed to take centre stage, and multimedia can be harnessed to provide the learner with a more engaging experience.*

According to the former President of Harvard University, examinations are not about effectiveness.



Although 99 percent of professors consider critical thinking an "essential" or "very important" goal of a college education, fewer than 20 percent of the exam questions actually tested for this skill.

Derek Bok

Are Exams Redundant, Or Here to Stay?

Given the negative research outcomes on exams, the tenuous basis for their initial existence, and the palpable dislike by many students, we might fall into a false confidence about their imminent obsolescence, so why do leading educational institutions still broadly rely on exams?

There are two main reasons: The first is inertia, or reluctance to change. The second and larger problem. The growth of education has continued exponentially over the past 150 years since exams were introduced, and so, the need for a highly efficient industrial delivery model is even more pressing than ever. Neither of these reasons are based on effective learning, but efficiency.

* The efficacy of final examinations: A comparative study of closed-book, invigilated exams and open-book, open-web exams.





Put more simply, there is no more efficient system than herding 800 students into an oversized dining-hall, distributing a standardized exam, and expecting simultaneous responses over a three-hour period. A process that rarely challenges the imagination.

Across universities, as academics research and find sophisticated answers to world problems from medicine to mathematics, photonics to artificial intelligence, what of the research into assessment?

Educational research appears to be held to ransom by league tables and traditions rather than improved teaching and learning. Assessment can easily be improved through online delivery with access to multi-media platforms, catering to students different learning needs, customised to students' preferences, personalised to demonstrate career goals and positing real-world problems to respond to. But the reality is, such levels of personalization are out of reach of mainstream institution's availability to appropriate resources. Unfortunately for the students who may not perform at their best on the day of the exam, who are confined to pen and paper, divorced from their digital world, such limitations determine the status quo which is likely to characterise traditional universities for the foreseeable future.

Imagining Beyond the Exam

Ducere Global Business School partners with prestigious universities around the world, in designing and delivering degrees drawing on the wisdom and experience of world leaders articulating the diverse metaphors of organisation across government, business and the not-for-profit sectors.

Assessments are tailored and integrated into each student's job, career and personal passions. Ducere and its university partners students are excited and challenged to solve practical and often complex challenges within and across many of the world's leading organisations, from Disney, Qantas, LinkedIn, United Nations, Save the Children, KPMG, PWC, governments, financial institutions and many more, finding solutions that are central to the learning and assessment process. Ducere undergraduate and postgraduate degrees contain no exams. Assessment is articulated through solution finding, improvisation, interrogation, interaction, integration and imagination all of which shape change.



The Results of a Re-Imagined Assessment Method

- » Students are less anxious, despite arguably working harder.
- » Students feel pride and are valued in the application of their knowledge towards solving complex global challenges in the corporate, public and philanthropic worlds.
- » Employers obtain the practical benefits of student solutions to real challenges which businesses implement to improve their bottom line, working conditions or stakeholder engagement.
- » Academics obtain the value of operating at the important intersection between academic foundations and practical application.

Ultimately all participants are engaged in a process that delivers true ROI. Learning does not take place in a vacuum. Learning is part of an ecosystem where each interaction enhances knowledge and with applied knowledge and understanding comes productivity and economic advantage.

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