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AUTHENTIC ASSESSMENT IN HIGHER EDUCATION AND THE ROLE OF DIGITAL CREATIVE TECHNOLOGIES

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ABOUT THE REPORT

Authentic assessment in higher education and the role of digital creative technologies is a joint Times Higher Education and Adobe report that provides university educators and leaders with key insights into the benefits of authentic assessment of learners, and how digital creative technologies can further empower both learners and faculty to innovate authentic assessment practices.

Using a combination of desk-based research, expert faculty interviews and student interviews, this report showcases the positive impact that digital authentic assessment can have on learner autonomy and creativity, as well as transformative pedagogic practices in the teaching environment. In the context of advancing artificial intelligence tools, the report also elicits expert opinion on the potential challenges that lay ahead for authentic assessment, offering recommendations on how to embed authenticity in the curriculum and realise student and staff potential.

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INTRODUCTION

In the age of Generative Artificial Intelligence (Gen AI), characterized by the advancements in large language models like ChatGPT, Microsoft's Bing Chatbot, and Google Bard, universities are grappling with the need to redefine assessment practices. The Educause Horizon Report (2023) identified Generative AI as “the most disruptive technologies in our time”¹. Gen AI possesses the capacity to craft plausible essays on any topic, tasks that have traditionally demanded independent research, critical analysis, synthesis of ideas, and the production of coherent text. The capabilities of Gen AI extend beyond language production, encompassing the creation of visual content and auditory elements.

Despite the initial anxiety experienced by universities about Gen AI, a prevailing sentiment that has emerged a year after the launch of ChatGPT, seems to lean away from combatting it with punitive measures or antiquated methods such as stringent exam hall regulations or reverting to pen-and-paper exams. Indeed, an increasing number of academics and educators are turning to redesigning assessments to tackle these challenges. As John Knight, Academic Practice and Curriculum Development Lead at Buckinghamshire New University, said, “Going forward into the new academic year, we’re working with colleagues to look at how to make use of AI as part of their assessment approaches. We have to acknowledge that it’s in the world now, and actually, using AI is going to be a key employability skill.” Just as the era of Covid propelled digital skills into the forefront of professional competence, the advent of Gen AI is poised to prompt a shift in the assessment paradigm.

Nevertheless, concerns remain about how Gen AI may impact the authenticity of assessments. This is not just in terms of whether students are producing their own work, but how it might impact the assessment form as a demonstration of applied knowledge. Known as authentic assessment, this can broadly be defined as a process through

which students use their learning to apply or create solutions to ‘real-world’ problems, typically associated with the discipline they are studying. It differs from assessment methods that are more focused on memory recall, or assessment practices that do not reflect the kinds of activities that students would be expected to perform in employment.

CURRENT STATE OF AUTHENTIC ASSESSMENT

Authentic assessment is hailed as a form of assessment that can preserve academic integrity while promoting meaningful learning^{2,3}. Unlike assessments reliant on memory-based testing and objective measurements — such as multiple-choice or writing-based exams⁴ — , authentic assessment calls upon students to apply knowledge and high-order thinking skills to tackle real-life challenges. This approach encompasses a variety of tasks, including presentations, live performances, capstone projects, exhibitions, portfolios, case studies, reflective journals, interviews, and group work⁵. John Lean, a Senior Lecturer in Educational Innovation and Initiatives at Manchester Metropolitan University describes authentic assessment as “any form of assessment in which there is meaningful alignment between experience, process and output and through to the real world.” The “assessment that is itself a learning experience, rather than the culmination of a learning experience.”

Footnotes:

¹ EDUCAUSE. (2023). 2023 Horizon Report Teaching and Learning Edition. <https://library.educause.edu/-/media/files/library/2023/4/2023hrteachinglearning>

² Ellis, C., van Haeringen, K., Harper, R., Bretag, T., Zucker, I., McBride, S., Rozenberg, P., Newton, P., & Saddiqui, S. (2020). Does authentic assessment assure academic integrity? Evidence from contract cheating data. *Higher Education Research and Development*, 39(3), 454-469

³ Kahu, E. R., & Nelson, K. (2019). Student engagement in the educational interface: understanding the mechanisms of student success. *Studies in Higher Education*, 45(1), 58-71

⁴ Koh, K. (2017). Authentic assessment. *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.22>

⁵ Sokhanvar, Z., Salehi, K., & Sokhanvar, F. (2021). Advantages of authentic assessment for improving the learning experience and employability skills of higher education students: A systematic literature review. *Studies in Educational Evaluation*, 70, 101030. <https://doi.org/10.1016/j.stueduc.2021.101030>

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JUST AS THE ERA OF COVID PROPELLED DIGITAL SKILLS INTO THE FOREFRONT OF PROFESSIONAL COMPETENCE, THE ADVENT OF GEN AI IS POISED TO PROMPT A SHIFT IN THE ASSESSMENT PARADIGM.





The integration of authentic assessment methods has permeated technical and vocational education and training (TVET) courses, notably within Further Education (FE) and foundation degree programs at universities, incorporating work-based placements and fostering employer engagement. In response to employer demands for graduates to be equipped with practical workplace skills, there has been a shift towards enhancing students' employability capabilities, adding substantial value to their career trajectories.⁶

There are a number of different derivations of authentic assessment, including challenge-based learning, inquiry-based learning, problem-based learning, scenario-based learning, project-based learning and design-based learning. At Eindhoven University of Technology (TUE), challenge-based learning is articulated as a process that “can raise students’ interest and motivation and connect their learning to social activities, work-practice and societally essential themes.”⁷

Studies have shown that authentic assessment can strengthen employability skills in communication, collaboration, critical thinking, problem solving, applying knowledge to practice, self-assessment, self-awareness and reflective practices.⁸ Connecting student learning to a real-life environment not only enable learners to gain transferable skills for the workforce, but it also increases their engagement and motivation levels. This stems from learner active involvement in the learning process, which promotes autonomy.⁹ As exemplified in Simpson’s (2016) study on an MBA course in the UK, students’ pass rates and satisfaction levels rose after authentic scenarios and formats were implemented.¹⁰

Moreover, authentic assessment bolster students’ confidence, which was noticed in the findings from a midwifery course. Through authentic clinical simulation assessments, coupled with constructive feedback from peer and teachers, students’ confidence in their capabilities increased.¹¹ Furthermore, authentic assessment can foster a student-led curriculum that encourages students to become a more active participant in their higher education journey, which is being increasingly introduced through group assessments and peer reviews.¹²

As Rebecca Rochon, an Associate Professor from Buckinghamshire New University, explains: “Authentic assessment as a terminology in education is used in different ways; its meaning has evolved over time. Ten years ago, it meant assessments that captured learning in a way that is representative of actual learning through meaningful activities (e.g., not relying overly on multiple choice tests). Nowadays it is more about mirroring what happens in the workplace.”

DIGITAL AUTHENTIC ASSESSMENT

Digital authentic assessment (DAA) adds another real-world dimension to assessment, urging learners to leverage digital technologies in tackling genuine problems, and therefore mirroring the demands and tools of their future professions.¹³ DAA serves as a conduit for cultivating digital competencies, deemed “crucial for participation in society, including lifelong learning and employment opportunities”¹⁴. In higher education, we are witnessing a surge in the utilization of immersive technologies, including virtual reality (VR) and augmented reality (AR), to simulate scenarios for skill practice and knowledge application within safe environments. This trend spans various fields including education, healthcare, tourism,

Footnotes:

⁶ How to make sure assessment practices are as authentic as possible. (2022, November 17). THE Campus Learn, Share, Connect. <https://www.timeshighereducation.com/campus/how-make-sure-assessment-practices-are-authentic-possible>.

⁷ CBL’s contribution to learning of theoretical concepts. (n.d.). Centre for Engineering Education. Retrieved September 27, 2023, from <https://www.4tu.nl/cee/news/news/cbls-contribution-to-learning-of-theoretical-concepts/>

⁸ Sokhanvar, Z., Salehi, K., & Sokhanvar, F. (2021). Advantages of authentic assessment for improving the learning experience and employability skills of higher education students: A systematic literature review. *Studies in Educational Evaluation*, 70, 101030. <https://doi.org/10.1016/j.stueduc.2021.101030>

⁹ Sokhanvar, Z., Salehi, K., & Sokhanvar, F. (2021). Advantages of authentic assessment for improving the learning experience and employability skills of higher education students: A systematic literature review. *Studies in Educational Evaluation*, 70, 101030. <https://doi.org/10.1016/j.stueduc.2021.101030>

¹⁰ Pitt, E., & Quinlan, K.M., (2022) Impacts of higher education assessment and feedback policy and practice on students: a review of the literature 2016-2021. University of Kent. https://kar.kent.ac.uk/95307/1/AdvHE_Assessment%20and%20Feedback_Literature%20Review_2016-2021.pdf

¹¹ Sokhanvar, Z., Salehi, K., & Sokhanvar, F. (2021). Advantages of authentic assessment for improving the learning experience and employability skills of higher education students: A systematic literature review. *Studies in Educational Evaluation*, 70, 101030. <https://doi.org/10.1016/j.stueduc.2021.101030>

¹² Archer, M., Morley, D. A. and Soupeze, J-B., 2021. *Real World Learning and Authentic Assessment*. aM.G., eds. *Applied Pedagogies for Higher Education: Real World Learning and Innovation across the Curriculum*. Palgrave Macmillan, 323 - 341.

¹³ Reimagining digital assessment in higher education - Jisc. (2020, November 2). Jisc. <https://beta.jisc.ac.uk/guides/reimagining-digital-assessment-in-higher-education>

¹⁴ Digital competencies and skills. (2023). UNESCO. <https://www.unesco.org/en/digital-competencies-skills>

military, and aviation, with simulations offering avenues for feedback from both observers and embedded consequential feedback loops.

There has likewise been an evolution in the digital technology tools deployed by universities to facilitate authentic assessment; from learning management systems, the use of e-portfolios and now to advanced digital creative suites, such as Adobe Creative Cloud and Adobe Express. These tools in themselves can stimulate a transformation of thinking around assessment; as Ann Thanaraj, an Associate Professor and Assistant Director (Digit Transformation) at Teesside University, emphasized, “prior to adoption [of Adobe Creative Campus], only a few departments used digital authentic assessment. But once they adopted, there was mass transformation of the design of assessments. For staff, and students, it has completely revamped the experience of designing and doing assessments; there is more equity now as it has given access to industry standard tools to a wider number of people.”

Embracing DAA also supports an embrace of Gen AI, with John Knight from Buckinghamshire New University emphasizing, “it’s about acknowledging that as AI has a place in professional life; we need to prepare our students for that, too. It would be an authentic thing to do to get a student to produce something using AI and then do something with it as a human being to develop it and take it forward in the same way as happens in professional life.” Whilst

there has been some concern over the rise of AI such as ChatGPT, some academics responsible for digital education strategies in UK universities also point out that they must convey the limitations of AI to staff and students in order to placate fears of plagiarism and cheating. At best, AI can be responsibly harnessed to support assessment design in an authentic manner and allow of re-imagination of what assessment should look like.



PRIOR TO ADOPTION [OF ADOBE CREATIVE CAMPUS], ONLY A FEW DEPARTMENTS USED DIGITAL AUTHENTIC ASSESSMENT. BUT ONCE THEY ADOPTED, THERE WAS MASS TRANSFORMATION OF THE DESIGN OF ASSESSMENTS. FOR STAFF, AND STUDENTS, IT HAS COMPLETELY REVAMPED THE EXPERIENCE OF DESIGNING AND DOING ASSESSMENTS; THERE IS MORE EQUITY NOW AS IT HAS GIVEN ACCESS TO INDUSTRY STANDARD TOOLS TO A WIDER NUMBER OF PEOPLE.

Ann Thanaraj,
Associate Professor and Assistant Director
(Digit Transformation) at Teesside University

BEYOND THE WORLD OF WORK

Against the backdrop of climate emergencies and escalating global conflicts, there is a prevailing perspective on the transformative potential of authentic assessment and higher education. McArthur cautioned that authentic assessment should not be confined to mirroring the existing world of work, but rather should challenge the boundaries of what the world could become.¹⁵ In this view, authentic assessment tasks must be crafted in a manner that illuminates the social values embedded within, affording students the opportunity to perceive the worth of their contributions to individual and social well-being.

Despite the advantages and potentials of authentic or digital authentic assessment, traditional forms of assessment remain the dominate mode of assessment in higher education due to time and effort required for the design and implementation of authentic assessment^{16, 17}, coupled resistance from academics and students.¹⁸

Footnotes:

¹⁵ McArthur, J. (2022). Rethinking authentic assessment: work, well-being, and society. *Higher Education*, 85(1), 85–101. <https://doi.org/10.1007/s10734-022-00822-y>

¹⁶ View of “Keeping it Real”: A review of the benefits, challenges and steps towards implementing authentic assessment. (n.d.). <https://ojs.aishe.org/index.php/aishe-j/article/view/280/548>

¹⁷ Sokhanvar, Z., Salehi, K., & Sokhanvar, F. (2021). Advantages of authentic assessment for improving the learning experience and employability skills of higher education students: A systematic literature review. *Studies in Educational Evaluation*, 70, 101030. <https://doi.org/10.1016/j.stueduc.2021.101030>

¹⁸ Dunsmuir, S., Atkinson, C., Lang, J., Warhurst, A., & Wright, S. (2017). Objective structured professional assessments for trainee educational psychologists: an evaluation. *Educational Psychology in Practice*, 33(4), 418–434. <https://doi.org/10.1080/02667363.2017.1352490>



ENABLING DIGITAL AUTHENTIC ASSESSMENT



ENSURING FACULTY ENGAGEMENT

Bath Spa University joined the Adobe Creative Campus programme as a part of the implementation of its digital transformation strategy. This provides both staff and students at the university with access to Creative Cloud and has unleashed new possibilities for curriculum design and authentic assessment.

Although staff received training, the implementation plan aimed to deliver holistic cultural change and attitudes. A ‘hearts and minds’ approach was adopted to encourage faculty to directly integrate Creative Cloud into assessments, resulting in a move away from traditional essays towards blogs and infographics. Tailored learning sessions for heads of school and course tutors enabled buy-in and a cultural shift towards digital authentic assessments.



CULTIVATING EMPATHETIC HEALTH PROFESSIONALS WITH CHATBOT

Western University is developing a chatbot that aims at teaching medical students how to communicate with empathy. This tool utilises a natural language processing (NLP) platform along with scripted patient case scenarios. The chatbot will replicate patient interactions and engage in dialogues with students assuming the role of the healthcare provider and engage in meaningful dialogues. This immersive experience will help students to refine their Communication Skills and better prepare for the Objective Structured Clinical Examination (OSCE) module.



CREATING AUTHENTIC LEARNING EXPERIENCES

Solent University in the UK partners with Adobe to create an engaging and inclusive real-world curriculum. It is a part of a broader university initiative to ensure that learning and assessment activities mirror those carried out in the workplace.

Staff follow the university Learning Design Framework when developing the curriculum, which requires them to design active learning assessment experiences. For Accounting and Finance students, this could include using Adobe tools to create infographics to supplement dense spreadsheets, or Marketing students designing their own corporate brands and logos.



ENHANCING HOSPITAL WORK PLACEMENTS WITH DIGITAL ASSESSMENT

Bond University’s Medical Program partners with a software company to develop a mobile-accessible Clinical e-Portfolio. The platform aggregates students’ on-site clinical evaluations at the patients’ bedside. This subsequently provides a measure of student competency. It also encourages interprofessional learning, enabling nurses, allied health staff, and supervising clinicians to assess and provide feedback on essential skills for students.¹⁹

Footnotes:

¹⁹Tepper, C., Bishop, J., & Forrest, K. (2020). Authentic assessment utilising innovative technology enhanced learning. The Asia Pacific Scholar, 5(1), 70–75. <https://doi.org/10.29060/taps.2020-5-1/sc2065>

THE BENEFITS OF AUTHENTIC / DIGITAL AUTHENTIC ASSESSMENT

PROMOTE MOTIVATION AND ENGAGEMENT

Authentic assessment, according to the academics interviewed for this project, tend to motivate learners more effectively due to the relevance and depth of the assessment activities, as well as the sense of purpose they convey. Such assessments mirror tasks encountered in professional settings, making learning more practical and applicable. Knight distinguishes between 'real' and 'authentic'. The issue is that in 'real' situations, there is always a purpose and an audience for an activity – e.g., writing an email to a client to inform a business decision, etc. In order for learning and assessment activities to be authentic, there also needs to be purpose and audience. This might typically be achieved via scenarios in which the students have clearly defined roles and tasks, or live brief approaches in which the teacher acts as the 'client'. This "makes the process of engaging with that task, and how you communicate it, very different to the process of writing an academic essay and arguably makes it more relevant." When students perceive the relevance of assessments to their future careers or current roles, they are more likely to be engaged.

Digital simulations are a particularly effective form of learning, according to Oguz Acar, a Professor of Marketing & Innovation at King's Business School. In a business class, replicating real-world business scenarios is not often practical. For instance, it won't be feasible to provide students 10 million pounds of funds to develop a business over the course of 5 years. However, in one class that Acar taught, a simulation was set up to enable groups of students to compete with one another to develop products that better meet the customers' needs. In addition, different external factors that might impact a real-world scenario, such as the introduction of carbon taxes, could be introduced to the simulation whereby students need respond by modifying their strategies. In this way, the students can apply theoretical concepts to an authentic context.

It has been reported that millennials and Gen Z²⁰ tend to be more socially conscious compared to previous generations. Knight frames authenticity in a broader sense, involving factors beyond employment. "Increasingly, we are recognising that authenticity extends beyond relevance to the 'world of work', to broader global and social issues, such as sustainability, climate change and social justice. There is also a kind of authenticity in acknowledging learners as 'whole people', valuing their diverse backgrounds and providing opportunities for them to draw upon their existing values, knowledge, and identities as a basis for how they engage with their learning. Being authentic here, as Helen King, Director of Learning Innovation, Development & Skills at Bath Spa University, says that being authentic includes enabling students to "express their learning in their own voice". In addition, Knight believes that authenticity of this kind requires dialogue

and an acknowledgement of the possibility of transformation of existing norms, which can be challenging for institutions and disciplinary communities.

DEVELOP DIGITAL COMPETENCIES

Some educational leaders advocate for cultivating digital authenticity by utilizing industry-standard tools. This an approach that better equips students with the skills to use tools they will encounter in their professional endeavours. This is particularly pertinent for disciplines such as film production, where students benefit from hands-on experience with industry-grade cameras and editing software. However, Mark Peace, an Associate Director for Innovation and Initiatives at Manchester Metropolitan University, advises against overly prioritizing technology in pedagogy, pointing out that the focus should be on pedagogy-driven approaches with technology as an enabler. Furthermore, not all universities are engaging with digital technology companies at the same rate, meaning there is differential adoption across the higher education sector.

Similarly, Rebecca Rochon at Buckinghamshire New University, cautioned against requiring students to use a specific technology for the sake of the technology. For example, a nursing program requiring students to submit assignments in a podcast format. Very few nursing students would aspire to become podcasters or perceive it as relevant to their field. This would render the assignment inauthentic for the majority of students. Having this as an option rather than a requirement changes this.

Footnotes:

²⁰ Contributor, D. (n.d.). Deloitte BrandVoice: Millennials And Gen Z's Are Shaping A Better World For Us All. Forbes. <https://www.forbes.com/sites/deloitte/2020/09/16/millennials-and-gen-zs-are-shaping-a-better-world-for-us-all/>

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THE THING WITH CREATIVE CLOUD IS THAT ALL THESE PROGRAMS HAVE A LOT OF DEPTH TO THEM. THEY'RE EASY TO GET FAMILIAR WITH THE BASICS BUT THEN THERE'S A LOT UNDER THE HOOD THAT YOU CAN REALLY GET INTO. EVERY TIME YOU USE IT, YOU CAN TAKE A DIFFERENT APPROACH TO CREATING A VISUAL, DO SOMETHING COMPLETELY NEW. I THINK YOU CAN START TO CREATE A LOT OF VERY UNIQUE AND INTERESTING CONTENT.

Kiran Scott de Martinville
Design Engineering Imperial College London,
Digital Edge Awards Winner

Indeed, even if there appears to be no direct relationship in terms of using a podcast in the context of nursing, the scaffold of skills required to create the podcast to explain complex pieces of information in a digestible manner is of transferable use. It can also facilitate greater technical skills through easy to use -to-use platforms such as Adobe Podcast. On the other hand, offering learners a degree of autonomy in selecting their path to meeting learning objectives can be advantageous. Peace illustrated this with an example from a production activity, where one student ended up creating a narrated video by acquiring video production skills on their own. Peace believes that students have a diverse range of talents, some of which untapped. While they may not even realize they have the capacity to be digital content creators, providing choice can enable the “talents to shine”. Authentic digital assessments often involve creative tasks, fostering an environment that encourages students to think innovatively.

CULTIVATE CREATIVITY

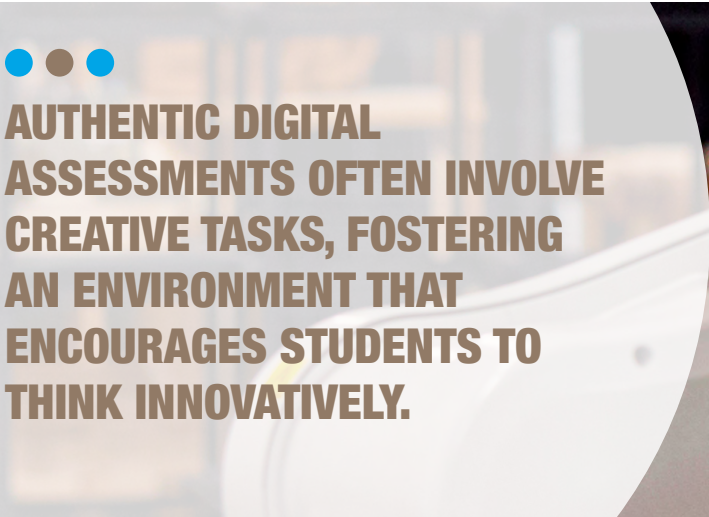
Creativity has been identified as one of the most important skills in the age of AI. Mark Simpson, Pro Vice-Chancellor (Learning and Teaching) at Teesside University, spoke about the increasing significance of emotionally intelligent and creative abilities in the face of AI advancements. In the same vein, Lean believes in crafting activities that stimulate creative thinking and advocates for the adoption of assessments like portfolios, enabling learners to showcase their understanding. In Lean’s approach, students are given complete autonomy over the format of their deliverables, as he says to the students, “we will reward creativity. We do not expect you to present in a particular format.” Lean notes that while digital submissions tend to be the default choice for some students, many also opt for physical submissions. The crucial principle here is offering students the freedom to choose their form of assignment. A recent architecture graduate shared her experience of working on a presentation design that incorporated video elements. She remarked that “designing the video really got me out of my comfort zone, in terms of not being in the library, but using new applications.” The student stresses the importance of choice – the freedom to submit assignments in different formats – even though she acknowledges that in the future world of work, such freedom may not always be available. The student further urges universities to adopt an open-minded stance toward the utilization of AI tools.

ENHANCE COLLABORATION WITH HUMAN AND AI

Authentic assessment often entails collaborative teamwork, providing an opportunity to enhance communication and teamwork skills. As one student noted, working within a group enables the exchange of ideas and exposes individuals to various techniques, fostering a collaborative environment. The student acknowledges that while disagreements may arise, that actually reflects the reality of professional settings. In our time today, our collaborations extend beyond human interactions, but also with AI. Prompt engineering, also known as prompt design, can be defined as the ability to communicate with large language models (LLM) clearly in order to get the desired output, such as through image generation software like Adobe Firefly. It is “an emerging field that requires creativity and attention to detail. It involves selecting the right words, phrases, symbols, and formats that guide the model in generating high-quality and relevant texts.”²¹ Education leaders interviewed recognized the importance of designing assessment that allows or encourages learners to use AI. While concerns about academic integrity persist in higher education, perspectives on the authenticity of individual work are evolving. The definition of individual effort has changed, with students increasingly leveraging assistive writing tools to support their writing. Knight said, “We have to acknowledge that writing has become a highly

technologically mediated activity in both professional and academic life.” While Knight acknowledges that the rapid pace of technological advancement can be a source of anxiety, it is an integral aspect of future-oriented authentic assessment. Knight further questions the authenticity of traditional exam context, arguing that while we while ‘real’ writing is a highly technological activity, examination settings often continue to expect extended handwritten pieces. This incongruity prompts us to reconsider the assessment methods themselves. Similarly, recognizing the pervasive role of AI and other technologies in professional spheres, we need to equip students for its integration into their future careers. In other words, tasking a student with generating content using AI and subsequently refining it, mirrors the processes they might encounter in professional settings, making it more authentic, meaningful and relevant.

Footnotes:
²¹ Madea, J., & Bolanos, M. (2023, May 23). Prompt engineering overview. Learn.microsoft.com. <https://learn.microsoft.com/en-us/semantic-kernel/prompt-engineering/>



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AUTHENTIC DIGITAL ASSESSMENTS OFTEN INVOLVE CREATIVE TASKS, FOSTERING AN ENVIRONMENT THAT ENCOURAGES STUDENTS TO THINK INNOVATIVELY.

THE CHALLENGES OF AUTHENTIC / DIGITAL AUTHENTIC ASSESSMENT

Authentic assessment, while advantageous, is not the prevalent mode of assessment in universities. Several factors contribute to this, including the time and effort required for implementation, the lack of agility within universities, potential pushback from students, and concerns about digital divide.

TIME CONSUMING & LABOUR INTENSIVE

One of the key challenges for authentic assessment is that it is time-consuming. According to Acar, authentic assessment is resource-intensive and requires significant coordination. In the context of a business school, when collaborating with external partners, it is important to identify the right professionals and align learning objectives with their goals, while ensuring that students have the necessary background knowledge. Knight further pointed out that adopting authentic assessment methods can be risky. They can be resource and time intensive in terms of teacher commitment and states that students are students, not professionals. They may not attend or complete work effectively. Similarly, in work placements, industry plans may change, which could mean a loss of learning opportunities. Additionally, evaluating digital authentic assessments is more complex due to a “wider range of outputs and multiple plausible answers”, according to Acar. Simpson concurs here and believes that it can be challenging to evaluate fairly and provide feedback on collaborative components.

LACK OF AGILITY AMONG UNIVERSITIES

The slow adoption of authentic assessment can be attributed to several institutional factors. First, the process of curriculum change requires time, typically spanning 12 to 18 months, which may explain why universities can face difficulty keeping pace with students’ rapid adoption of different technologies; an issue that is rooted in university governance issues around curriculum.. There is also the need to gain acceptance for authentic assessments from regulatory bodies.

Rochon acknowledges that the process for changing assessments is slow due to the need for

robustness and external factors like consultations. However, she highlights that keeping assessment details at a high level allows for quick changes in assessment practices, such as transitioning from written to practical assessments, and that building in choice is key. For example, as described by Todd, changing a word-based essay to an express page format can open up new creative possibilities without breaking the assessment. This can be facilitated through the course amendment process, which involves a monthly panel review. While changes mid-year may not be feasible, their university aims to maintain as much agility as possible in accordance with regulations.

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IN THE CONTEXT OF A BUSINESS SCHOOL, WHEN COLLABORATING WITH EXTERNAL PARTNERS, IT IS IMPORTANT TO IDENTIFY THE RIGHT PROFESSIONALS AND ALIGN LEARNING OBJECTIVES WITH THEIR GOALS, WHILE ENSURING THAT STUDENTS HAVE THE NECESSARY BACKGROUND KNOWLEDGE.



POTENTIAL PUSHBACK FROM STUDENTS

As suggested in the literature, some students may experience anxiety with authentic assessment. In Simpson's view, the UK education system traditionally prioritizes end-point assessments, leading some students to focus on tests and exams over learning. Authentic assessment, while seemingly less intimidating, introduces uncertainty. The shift from clear, linear tasks to authentic assessment can be challenging for students accustomed to structured assessments.

A physics student from the Open University commented that authentic assessment tends to involve group work. The student illustrated this with a recent group project, where each group member contributed to 10% of the overall project. This means to perform well, one needs to "replying on other students to do their bit as well", casting doubts on whether the assessment is an objective measurement of the student's own ability.

CONCERNS ABOUT DIGITAL DIVIDE

Both students and academics share concerns about digital divide. A recent graduate from Durham University expressed apprehension about the level of technological proficiency required for video presentations.

Peace and Chris Ware, Senior lecturer Maritime History at University of Greenwich, caution against assuming all students, especially younger generations, are naturally skilled with digital tools. While students are often considered digital natives, they may still require guidance in non-traditional digital formats like podcasting and digital learning skills. Initiative such as those undertaken by Bath Spa university aim to close the gap and provide access and equity using Creative Cloud.



"IT WAS REALLY IMPORTANT TO USE THE CREATIVE CLOUD APPS SO I COULD TAKE THOSE SKILLS INTO A PROFESSIONAL SETTING."

"FROM USING CREATIVE CLOUD, I LEARNED HOW TO FIRSTLY LEARN INDEPENDENTLY. IT TAUGHT ME TO BE DETERMINED, IT TAUGHT ME TO BE SELF-SUFFICIENT."

Layla Chauhan
Textile Design, University of Edinburgh,
Digital Edge Awards Winner



"I'VE HAD VERY MINIMAL VIDEO EXPERIENCE BEFOREHAND, SO WHAT I DID WAS I WENT TO THE ADOBE HELP WEBSITE WHERE IT TAUGHT ME HOW TO WORK WITH DIFFERENT TOOLS, DIFFERENT EFFECTS. IT WAS REALLY INTERESTING USING ALL THESE DIFFERENT TOOLS TO COMPILE EVERYTHING TOGETHER AND SEND OFF ONE POLISHED PROJECT THROUGH ALL THESE DIFFERENT STREAMLINED TOOLS THAT CONNECTED TOGETHER."

Lauren Chiang
Genetics & Plant Biology, UC Berkeley,
Digital Edge Awards Winner

RECOMMENDATIONS

In discussions with academics and students, valuable recommendations have emerged to promote the wider adoption of authentic and digital authentic assessment. These include listening to students, offering support and resources for staff and students, fostering partnerships between universities and industries, and integrating AI into assessment.

1 LISTENING TO STUDENTS

Adopting student-centred approaches is vital for promoting authentic assessment. A recent graduate from King's College emphasizes that assessment should be a living thing that needs to evolve over time. Rather than treating students as passive consumers that are "buying (content) from the university", the student urges institutions to establish closer connection with their student body, understanding their needs and adapting the curriculum accordingly.

Another recent graduate from Cambridge advocates for greater personalization in assessment and the need for a diverse range of assessment options. This approach not only nurtures a broader spectrum of talents as discussed earlier but can also support inclusivity and diversity.

Additionally, Simpson highlights that to alleviate anxiety among students, educators must provide clear assessment details, and criteria. Improving transparency through the use of rubrics especially for assessments that involve group work can be highly beneficial.

Lean further emphasizes the significance of two-way feedback in implementing authentic assessment. On this view, authentic assessment often involves personal narratives from students. Educators often need to be able to discern whether learner sentiments are performative (i.e., to demonstrate they have achieved the learning outcomes) or genuine. Following the assessment, Lean suggests proactively communicating with a small subset of students, particularly those who have had a negative experience. This enables educators to understand their perspectives on the process and explore how they may handle the challenges in the future. While this approach may not involve all students, it serves as a useful mechanism for managing large student populations.

2 OFFERING SUPPORT AND RESOURCES FOR EDUCATORS AND STUDENTS

Institutions need to promote professional development and foster networking opportunities to advance the concept of authentic assessment. King spoke about the value of establishing communities of practice within institutes to produce resources, facilitate discussions, and encourage

colleagues to exchange practices and ideas. This can incentivize personal growth, and help establish an institutional culture for creativity, curiosity, and innovation. Likewise, Rochon emphasizes the significance of networking and engagement in advancing authentic assessment.

Simpson outlines several strategies to enhance digital competency among educators and students. This includes the implementation of mandatory digital development programs for all staff members, ensuring they are equipped with essential skills. Simpson noted how the early adoption of technology platforms like Microsoft Teams, coupled with the provision of iPads and a suite of software, has promoted digital proficiency among staff and students in their institute.

3 FOSTERING PARTNERSHIPS BETWEEN UNIVERSITIES AND INDUSTRIES

Enhanced collaboration between universities and industry partners can provide students access to relevant technologies. A student further advocates for universities to provide software for free, so that students can have access to the latest technologies, while offering equitable opportunities for all students. Northumbria University stated that "in today's digital world, proficiency in creative software is a valuable skill. Whether our students are studying design, marketing, business, or any other subject, Adobe Creative Cloud will give our students the opportunity of gaining skills that will give them that competitive edge in the job market." Simpson also provides an illustrative example of globally connected learning, where students in a fashion design course were able to collaborate in an assessment with students from an overseas institute using digital platforms and specialized Adobe software packages tailored to their field.

4 INTEGRATING AI INTO ASSESSMENT

Students and academics recognise the usefulness of AI across disciplines. A recent graduate from Cambridge compared the use of AI to the use of internet for research, urging university to embrace it to enhance learning process. A medical student at King's College London sees the potential of AI for assisting in medical diagnosis, believing in the benefits of using these types of statistical based tools to complement human intuition. Similarly, an emerging artist and recent graduate from King's College speaks about the potentials of using creative tools powered by Gen AI in education, while emphasizing that prioritizing critical thinking is essential for thoughtful research and creative outputs.

5 TOOLING FOR SUCCESS ACROSS THE INSTITUTION

Providing access to both hardware and software allows the greatest uptake of digital technologies for both staff and students. For example, Adobe engage Teesside University teaching staff on training and development courses to enable greater digital teaching, learning and assessment skills. This has led to greater levels of buy-in from both staff and students. Investing in technology, and providing a persuasive context for adoption, can enable more opportunities to be more creative with assessments. Some longer term advantages can include an improved student experience and constancy; scaffolding of expertise that will enhance the quality and proficiency of work; and the nurturing of digital fluency in an authentic way across the entire institution.

CONCLUSION

Drawing on literature and in-depth interviews with education leaders and students, this report highlights the benefits of digital authentic assessment. These include creating an engaging learning environment in which learners can enhance creativity, develop better employable skills, i.e., communication and collaboration skills, and improve digital competencies, crucial for their professional endeavours and active civil participation in the future.

The report acknowledges various challenges to the widespread adoption of digital authentic assessment, ranging from institutional factors like curriculum design and quality assurance frameworks to human factors including student and educator mindsets, as well as issues of equitable access. Implementing digital authentic assessment, in Peace's views, demands a holistic effort to reform practices, administrative procedures, and quality assurance mechanisms.

Strategies for advancing this assessment approach include developing a community of practice along with professional development opportunities for staff.

Equally important is to actively listen to students, addressing concerns ranging from ensuring equitable learning opportunities to alleviating anxiety, and adapting to evolving needs. Moreover, establishing collaborations with industry holds promise in offering learners real-world experiences and access to latest technologies. This is exemplified by case examples of pedagogically driven and technology-enabled learning design, such as leveraging the metaverse for marketing education or employing chatbots for the cultivation of empathetic communication skills among medical students.

The evolution of digital technologies that enable digital authentic assessments clearly has a role to play in adoption strategies, and ultimately how learner assessments can be imagined for the future. Where universities have supported institutional wide reform or change, for example through the implementation of a suite of digital assessment tools, and through dedicated staff up-skilling, there has been a mentality shift in both staff and students towards a positive mindset for engaging with digital assessment and AI.

Indeed, academics and students remain optimistic about the transformative impact of AI on assessment. Simpson highlights that regulatory bodies will likely adapt to the evolving landscape. This shift may necessitate changes in how students are evaluated. Over time, concerns about authentic assessment will diminish, as AI continues to influence assessment methods, leading to more innovative evaluation techniques.

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