Innovative Assessment Design through Creativity, Collaboration and Inclusion

Hosted by UNSW Arts, Design & Architecture

On campus: H13 G001 Lawrence Theatre

Online: Join MS Teams session

Time	Session	Presentation title	Abstract
11:00 - 11:25		Welcome from Prof. Stephen Doherty (ADA ADE) Presenter: Prof. Stephen Doherty	
11:25 - 11:35	Session 1	Learn to reflect, reflect to succeed Presenter: Valerie Combe-Germes	Abstract
11:35 - 11:45	Add session to calendar	"Just don't make it like a hostage video" – Using video submissions instead of essays Presenter: Dr Deborah Barros Leal Farias	Abstract
11:45 - 11:55		Q & A	
11:55 - 12:00		Break	
12:00 - 12:10		Power Automate, formative assessment and peer feedback Presenter: A/Prof. Silas Taylor	Abstract
12:10 - 12:20	Session 2	Using Virtual Field Trips for assessment using a new UNSW authoring tool Presenters: A/Prof. Carol Oliver & David Edwards	Abstract
12:20 - 12:30	Add session to calendar	Unlocking Creativity - Introducing a Reflective Learning e-Portfolio in the B.Com Integrated First Year Presenters: Dr Helen Parker & Sarah Watts	Abstract
12:30 - 12:45		Q & A	
12:45 - 1:30	Add to calendar	Break with Light Refreshments in Anita B. Lawerence Centre Gallery	
1:30 - 1:40		Putting formative feedback at the forefront of design in the Game Design Workshop Presenters: Dr Sasha Vassar & Dr Jake Renzella	Abstract
1:40 - 1:50	Session 3	Stethoscope to Smartphone - Entrusting Med Students with App-Driven Workplace Assessments Presenters: A/Prof. Arvin Damodaran & Jen Xiang	Abstract
1:50 - 2:00	Add session to calendar	Leadership Development, Self-Coaching, & Authentic Assessments For Our Future Business Leaders Presenters: Dr Kelsey Burton, Elaya Yang & Rushi Vyas	Abstract
2:00 - 2:15		Q & A	
2:15 - 2:20		Break	
2:20 - 2:30		Beyond Exams? – Enhancing Graduate Employability through Video Assessment Presenter: Ed Harbor	Abstract
2:30 - 2:40	Session 4	Make Labs Great Again! Presenter: Dr Nirmani Wijenayake Gamachchige	Abstract
2:40 - 2:50	Add session to calendar	Assessing Authentic Professional Qualities and Workplace Expectations: Design and Implementation of Interactive Oral Assessments Presenter: Dr Pranit Anand & Matt O'Kane	Abstract
2:50 - 3:05		Q & A	
3:05 - 3:10		Break	
3:10 - 3:20		The creation of an inclusive assessment design through collaboration with the student ambassadors and wider student cohort Presenters: Dr Gee Chong Ling, Amulya Regulagedda & Aaron Saint-James Bugge	Abstract
3:20 - 3:30	Session 5	Personalised Learning Made Easy: Our Smart Dynamic Question Generation Tool Presenters: Lionel Kha & Dr Armin Chitizadeh	Abstract
3:30 - 3:40	Add accessor	Rethinking Assessment in the Age of Generative AI: A Focus on Process Over Product Presenters: Dr Sara Mashayekh & Dr. Ali Darejeh	Abstract
3:40 - 3:55	Add session to calendar	Q & A	
3:55 - 4:00		Closing and thanks	

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Learn to reflect, reflect to succeed

Presenter: Valerie Combe Germes

"To be effective, assessments must be frequent, early, and formative." (Tinto, 2012)

In ARTS1480 French 1 and ARTS1481 French 2, the traditional final examinations have been replaced by e-portfolios, worth 30% of the courses' total marks. With six evenly spread submissions throughout the term, the teaching team are able to accompany every student on their learning journey from the courses' very first steps to their conclusions. We are no longer restricted to the written format and can assess all four skills (reading, writing, listening, speaking) as well as grammar and vocabulary acquisition.

By adding a reflective component, our Reflective Learning Journal not only addresses students' learning difficulties with all major threshold concepts, but it also gives them a space to reflect on their personal difficulties within the course (time management, engagement, sense of belonging, etc.): they take charge of their learning, propose strategies to improve and are eager to succeed.

Each tutor is thus in a position to provide timely, regular feedback, encouragement or helpful suggestions. As educators, we feel more connected to our students, we understand them better and in turn they feel supported in their learning, valued as individuals, and included within a community of learners



Valerie Combe Germes is an EF Lecturer in French Studies, and the Nexus Fellow for the School of Humanities & Languages, ADA. She is passionate about innovation in Learning & Teaching and always curious about new technologies: she led VR projects in languages (2018-2019), transformed her lectures into adaptive learning lessons (2020-2021) and hopes to eventually achieve fully personalized learning thanks to AI. She is also looking into providing students with more inclusive learning environments.

"Just don't make it like a hostage video" - Using video submissions instead of essay

Presenter: Dr Deborah Barros Leal Farias

The quest for innovative and better ways of assessing students is anything but new. However, the easy access to powerful Artificial Intelligence (AI) platforms, such as ChatGPT, has dramatically accelerated the pace for introducing changes. In my presentation I will discuss my experience of having to rethink the use of the 'traditional' essay format for an undergraduate course in the field of International Relations. More specifically, I will review the decision to replace two minor essays with two short videos submissions, attentive to the challenges and opportunities that I faced (ex: establishing clear and fair guidelines, rubric, technical details, etc), that my tutor faced when marking the assignments, and feedback from students. The presentation hopes to tease out some key reflections and points to keep in mind for anyone interested in using video submissions in non-media-related disciplines.



Dr Deborah Barros Leal Farias is a Senior Lecturer in the School of Social Sciences, where she researches and teaches in the fields of Politics and International Relations. She is ADA's Wellbeing Co-Champion and current coordinator for UNSW's Globalisation and Governance Network (GGN).



Power Automate, formative assessment and peer feedback

Presenter: A/Prof. Silas Taylor

Students observed and formatively assessed peers on communication skills in a simulated patient interaction. Assessment focuses on the quality of interaction in terms of how well students: Provide structure, Gather information, Build relationships & develop rapport and Ensure a shared understanding of patient's needs. MS Forms and Power Automate were used to automate a process of peer assessment and peer-generated feedback in this experiential learning setting.

Across 20 sessions, 600 students created 1200 pieces of peer assessment feedback that were seamlessly delivered to the observed student's inbox. This is in addition to individual, verbal, formative feedback from tutors and simulated patients as well as individual, written, formative assessment provided during the session. All this feedback contributes to the observed student's reflection which is a required part of the formative assessment.

Observer students are 'activated' by this process and become more familiar with assessment tasks when required to assess peers.

Delegate takeaways: Power Automate does in milliseconds what would take staff several days of tedious manual processing. In this instance, this augmented an assessment process to facilitate peer feedback with multiple positive outcomes yet there are many other possibilities to augment, improve and create educational processes for the benefit of students.



Associate Professor Silas Taylor is the Convenor of Clinical Skills in the Medicine program, Senior Fellow of the Higher Education Authority, a Fellow of the Scientia Education Academy, and a newly-appointed Nexus Fellow. His expertise is in Clinical Skills teaching, experiential learning and assessment, and as a curriculum designer. Examples of his work are the FMH Simulated Patient Program (SPP), the innovative Online Simulated Patient Interaction and Assessment (OSPIA) platform and clinical workplace-based assessment applications.

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Using Virtual Field Trips for assessment using a new UNSW authoring tool

Presenters: A/Prof. Carol Oliver & David Edwards

Laptop-delivered immersive Virtual Field Trips (VFTs) bring a sense of place to student learning. They can be quickly constructed without training using a new UNSW Teaching and Learning Immersive authoring tool. They provide the opportunity for authentic assessment that requires critical thinking combined with active learning through handwritten field notebooks. One published UNSW study demonstrates the latter increased undergraduate/postgraduate astrobiology class scores by more than 10% sustained across more than six years and received many accolades from students. The VFTs can be used to replace field trips to places difficult to reach, or as a pre or post field trip experience.

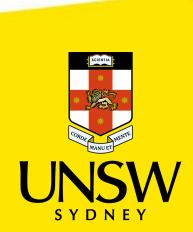
MyExperience despite no specific question on VFTs. The VFT authoring tool is so intuitive students have been able to report back on a geology class field trip using notes and images they have gained from their experience to populate a 360-degree image of the field site, producing a rich assessment in which the level of meeting learning outcomes was quickly assessed. The teaching and assessment approach using a VFT has also been adopted by a large astrobiology undergraduate course at the University of Auckland and another at Georgia State University in the US. We present the use of VFTs in student assessment and the results and demonstrate how the techniques can be used in many other courses at UNSW.



Associate Professor Carol Oliver is a nationally and internationally recognised Education-Focused academic teaching evidence-based science communication and astrobiology (the search for life elsewhere in the universe). She specialises in online learning with a teaching philosophy of education through exploration in learning and teaching and assessment practices. She pioneered the first astrobiology-related laptop-delivered immersive Virtual Field Trip with NASA Learning Technologies and has continued development with Arizona State University since 2008 and with UNSW since 2015, aiming to put VFT creation into the hands of academics with no training required.



David Edwards is an Education-Focussed academic in the School of Biological, Earth, and Environmental Sciences. His research interests are in fluvial geomorphology and the human impact on rivers and estuaries. He co-leads with Carol Oliver on the academic input into the Teaching And Learning Immersive Authoring (TALIA) tool designed for easy access to Virtual Field Trip creation at UNSW. TALIA is an Innovation Pillar project involving learning developers and designers and academics from across disciplines.



Unlocking Creativity - Introducing a Reflective Learning e-Portfolio in the B.Com Integrated First Year

Presenters: Dr Helen Parker & Sarah Watts

The presentation covers the introduction of a Reflective Learning e-Portfolio in a large Integrated First Year (IFY) course in the Bachelor of Commerce. The e-portfolio requires students to reflect on their learning and enhance their capacity for self-leadership by identifying areas for improvement. This is achieved through interactive, hands-on tutorial activities which students must reflect on, encouraging stronger course engagement and a vibrant learning community. Portfolio contained artefacts (key activities completed in the first 8 weeks of tutorials) and reflective commentary and annotations, related to both the artefacts and coursework. Student creativity was encouraged. Microsoft Whiteboard provided a 'blank canvas' where students could include photos, screenshots, text, and other relevant evidence from any part of the weekly learning activities. The e-Portfolio also helps students prepare for their final assessment, showcasing its utility as a scaffolding piece and feeding into the overall constructive alignment for the course.

The successes of introducing the new assessment and the lessons learned for future course improvement are highlighted. Notably, student e-portfolios and reflections on their learning journeys are showcased.



Dr Helen Parker is an education-focussed Senior Lecturer in the School of Management and Governance at UNSW Business School. For over 12 years as an educator, she has designed and delivered learning for a diverse array of audiences. This includes teaching undergraduate and postgraduate students, developing and delivering leadership programs for academic and professional staff at the University of Sydney, and facilitating over 15 highly regarded executive education programs tailored for the Department of Defence.



Sarah Watts is an Education Course Designer from the Education Design and Delivery team in the Business School. She worked with Helen and the COMM1170 team on the course revision project, including the development of this portfolio-style, process-oriented assessment.



Putting formative feedback at the forefront of design in the Game Design Workshop

Presenters: Dr Sasha Vassar & Dr Jake Renzella

Feedback is an integral part of learning at university. Providing effective feedback should be a critical skill for all educators. Formative feedback is when students are given the opportunity to refine their work, and is an important part of the assessment process that guides and enhances learning. This type of feedback provides students with an opportunity to progress and refine their skills as well as acts as motivation for students to complete tasks. On the flip side, inadequate feedback and unfair summative feedback can discourage student effort and achievement. It is thus vital to get the balance right.

Developing a new course is never simple, but the opportunity to create the new Game Design Workshop, where students are tasked with analysis, and creating games, made for an incredible opportunity to build the course structure around the formative feedback model. Using Formatif, tasks were designed to encourage open dialogue between students and instructors. This exchange of ideas and perspectives not only enriches the learning experience, but also simulates real-world collaboration in design teams and studios. Additionally, the structure helps to reduce stress and anxiety in students. By addressing issues and challenges early in the design process, formative feedback helped students to manage their workload effectively and minimise the pressure associated with not being able to address feedback and continually refine their work.

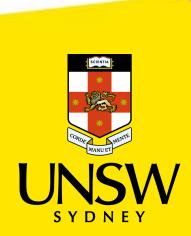


Dr Sasha Vassar is a Senior Lecturer in the School of Computer Science and Engineering. She has a cross-disciplinary background in Computer Engineering, Biomedical Engineering and a PhD in Education (UNSW). She worked in the engineering industry improving problem solving and design processes before her passion for education brought her back to UNSW. She is an Associate Fellow of the Higher Education Academy and an Early Career Academic member of the Australasian Association for Engineering Education. Sasha is interested in the intersections of human-computer interaction, user experiences, and interfaces, in engineering solution design; the role of design thinking in engineering problem solving; and the application of cognitive load theory to improve pedagogy.



Dr Jake Renzella is a Lecturer and Co-Head of the Computing and Education research group in the School of Computer Science Engineering at UNSW. Jake's research is at the intersection of novel software and artificial intelligence-based systems applications and world-class computing education. Jake's work has been published in premier conferences and journals. More importantly, it is embedded in open-source education projects such as SplashKit, and notably, Formatif, used at several Australian and New Zealand universities with over 230,000 students. Jake is an Associate Fellow of the Higher Education Academy, and an Early Career Academic member of the Australasian Association for Engineering Education.





Stethoscope to Smartphone - Entrusting Med Students with App-Driven Workplace Assessments

Presenters: A/Prof. Arvin Damodaran & Jen Xiang

Entrustable Professional Activities (EPAs) are representative tasks of junior doctors that medical students undertake, with supervision and feedback, during their hospital placements. They offer a valuable framework for progressively entrusting learners, thus bridging the gap between academic learning and professional practice. However, to realise its pedagogical benefits, workplace-based assessments need to be monitored and tracked for learners across timeframes and locations. We must be able to summarise and present EPA data in ways that can be easily utilised by both learners and educators.

As such, the School of Clinical Medicine initiated a project in 2023 to digitalise EPAs in the Bachelor of Medical Studies / Doctor of Medicine Program, taught across four metropolitan and five rural campuses and their associated hospitals. This led to the leveraging of Microsoft Power Platforms to develop a custom mobile-friendly application that replaces paper-based forms. This app improves structure, user experience, record keeping, efficiency, accessibility, and data analytics. By fostering timely feedback and progress tracking, it supports dialogue between students and supervisors and encourages learner ownership of the assessment process. Despite the geographic spread, a unified database offers in-depth analytics on EPA completions, detailing activity types, campuses, cohorts, and year levels. Such insights could spotlight at-risk students for early intervention, and pave the way for programmatic curricular enhancements.



Associate Professor Arvin Damodaran is an awarded clinical teacher and Rheumatologist in the School of Clinical Medicine (SoCM), based at Prince of Wales Hospital, Randwick. As SoCM Director of Teaching, with dedicated colleagues, he aims to improve the medical student experience across SoCM's metropolitan and rural campuses. He is also involved in junior doctor training and interprofessional education. His research interests include workplace learning and assessment, in particular trust and risk in complex clinical teaching environments.



Jen Xiang is an Education Designer in the School of Clinical Medicine, where she collaborates closely with colleagues to improve the medical student experience across campuses and learning environments. She is deeply committed to designing environments and tools that foster genuine engagement. Drawing from her background in creating learning activities, content, digital tools, and programs, Jen's passion is rooted in implementing evidence-informed pedagogical practices to nurture intrinsic motivation and deepen students' connections to their own learning. She works closely with the Direct of Teaching, A/Prof Arvin Damodaran to develop and integrate educational technologies in work-integrated learning environments to enhance these pedagogical practices.



Leadership Development, Self-Coaching, & Authentic Assessments For Our Future Business Leaders

Presenters: Dr Kelsey Burton, Elaya Yang & Rushi Vyas

To encourage student engagement, we employ a coaching model and an authentic leadership development plan assessment, both drawn from prior industry experience. This presentation will outline the S.P.E.E.D. (self-awareness, purpose, engagement, experimentation, direction) coaching model used to structure a postgraduate leadership course and the corresponding authentic assessments, rooted in evidence-based leadership development practices.

Students receive a comprehensive one-page table outlining the course - readings, prep work, concepts, activities, etc. With this document, students actively shape their learning journey. The first assessment requires students to self-select specific leadership capabilities they wish to develop throughout the course based on their career goals. Then students identify specific course elements (e.g., readings, activities, concepts) that will support their learning and development. Essentially, students design their own learning journey prioritizing their learning and developing targeted toward career readiness.



Dr Kelsey Burton is a passionate educator and coach, who aims to create an authentic and practical learning experience in her courses (business innovation, negotiations, and leadership). Her PhD research focused on the rise of narcissistic/psychopathic leadership, and now she is collaborating with Juliete Burke, developing her inclusive leadership research into a teaching model to naturally cultivate an inclusive culture.



Elaya Yang is a PhD candidate, working with Dr. Kelsey Burton on researching the use of AI in neurodivergent learning and development.

She is also co-presenting with Kelsey on: Manage Emotions, Avoid Explosion (Friday, 24 Nov)



Rushi Vyas is a student in the Master of Commerce, Sustainability & Business Analytics program. Rushi was the winner of UNSW ADA Dean's Digital Innovation Award 2023 and a part of UNSW's highly competitive Peter Farrell Cup in the Top 3 winning teams in 2023. He is also co-presenting with Kelsey on:

An Al Odyssey: Crafting Courses at the Speed of Trimesters (Wednesday, 22 Nov)

Beyond Exams? – Enhancing Graduate Employability through Video Assessment

Presenter: Ed Harbor

The purpose of this presentation is to share the experience of developing an alternative to the traditional exams for assessing students. This assessment was designed to address the current professional world trends and with the aim of enhancing the employability of graduates. This assessment also was introduced to address and provides evidence about how role of exams is being disrupted as the Higher Education sector needs to address emerging trends including artificial intelligence such as ChatGPT.

This topic is crucial, firstly given that students and future employees are seeking universities take an active part in preparing students for professional careers in the business world, as well teaching them subject knowledge. Secondly, communication skills are now more important than ever, in a modern professional environment, that requires the ability to communicate effectively online, as well as in face-to-face situations.

Thirdly, the Higher Education sector also need to consider the emerging impact of Artificial Intelligence on traditional Exams and consideration is timely for rethinking assessments in due to the disruptive new technology. Fourthly, and finally, is need to pivot assessments is particularly relevant as many Australian universities now have no invigilation of final exams post-COVID pivot to online or are considering dropping final exam invigilation.



Ed Harbor has been in the training sector for the last 25 years, and is now responsible for the design, development and delivery of training on the Masters programmes at the UNSW School of Accounting, Auditing and Taxation and the MBA Executive Programme at AGSM. He has also recently been awarded the Marcus Cohen Award for Teaching Excellence at the UNSW Business School. He is a firm believer in the principle that you must engage with an audience through enthusiasm and inspiration in order for them to really appreciate individual topic areas.

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Make Labs Great Again!

Presenter: Dr Nirmani Wijenayake Gamachchige

Undergraduate laboratory classes are generally disjointed with standalone labs being delivered every week. As a result, students often struggle to see the link between theory and the lab component and don't appreciate how experiments done in laboratory classes have real-world applications. The laboratory program of a second-year undergraduate biochemistry course was redesigned to demonstrate the relevance of biochemistry in real life, how experiments are used in disease diagnosis, and how to work effectively in a team.

In the new laboratory program, the students are presented with a case about a specific individual who might be at risk of developing a metabolic disease. Students are required to work as a team to carry out experiments every week to help establish the diagnosis. Each lab adds to the previous ones until the students are able to bring all the results together to complete the final diagnosis report. The students get to act like a detective and use all the available data to arrive at a conclusion. According to student feedback, the collaborative problem-solving approach not only heightened engagement but also resulted in significant improvements in students' laboratory technical skills and data analysis proficiency. This dynamic encouraged them to work together, leveraging each individual's expertise to effectively tackle scientific problems.



Dr Nirmani Wijenayake Gamachchige is an education-focused Senior Lecturer from the School of Biotechnology and Biomolecular Sciences at the University of New South Wales, Sydney, Australia. With over 10 years of experience in higher education, she has taught and coordinated large undergraduate courses in biochemistry and cell biology. With a passion for promoting teamwork and collaboration, student well-being, project-based learning, and innovative technology, she has made a significant impact on promoting student engagement and learning.

Assessing Authentic Professional Qualities and Workplace Expectations: Design and Implementation of Interactive Oral Assessments

Presenters: Dr Pranit Anand & Matt O'Kane

Undoubtedly two significant trends that will continue to have a significant impact on university teaching, learning and assessments are: various emerging technologies such as artificial intelligence and greater focus in 'employability centric' courses. A consequence of these is greater regard for assurance of learning, that is "how do I know that students have met the course and program learning outcomes?".

Interactive Oral Assessment (IoA) is an "efficient and effective form of authentic assessment that promotes skill development and employability, enhances overall student engagement and a personalised approach to learning and teaching, and preserves academic integrity" (Sotiriadou, et al, 2019). Existing studies indicate its effectiveness in assessing various professional qualities and employability skills, while helping to reduce assessment anxiety and angst (Tan et al., 2022). Students tend to feel more supported and allows their individuality to be recognised and valued, leading to improved student engagement and motivations (Colvin & Gaffey, 2023).

An IoA has been developed for a post-graduate information systems course in the School of Information Systems and Technology Management with the support of the Curriculum Design Institute at UNSW. Through this presentation I will share the processes involved in designing the IoA, including the exemplar videos, rubrics, resources for the markers and the students and initial students' perceptions about the IoA. The presentation will be beneficial for colleagues thinking of using authentic oral assessments in their courses.



Dr Pranit Anand is a Senior Lecturer in the School of Information Systems and Technology Management in the Business School. He currently teaches various networking and cybersecurity courses. He is passionate about students' engagement and success and recognises the important role assessments play towards this. He attempts to design assessments that are meaningful, transferrable, and flexible. The assessment processes are always transparent, and students are considered equal partners in the design and implementation of these assessments.



Matt O'Kane is the Director for Notion Digital Forensics in Sydney. Notion Digital Forensics provides cyber emergency response, digital forensics and cyber security services for businesses and legal professionals. Before Notion, Matt held leadership roles in dotcom and online marketing firms. He has worked in IT for over two decades. He teaches cyber subjects at UNSW Business (Sydney) and UNSW Canberra. Matt holds a B. Sc. from UNSW, an MBA from the AGSM (UNSW) and a Masters in Cyber Security (digital forensics) at UNSW Canberra.





The creation of an inclusive assessment design through collaboration with the student ambassadors and wider student cohort

Presenters: Dr Gee Chong Ling, Amulya Regulagedda & Aaron Saint-James Bugge

Assessment has long been used as a tool to grade students' performance by creating a required standard to determine the competence of the learner. Through collaboration with student ambassadors, assessment designs within a course, as it progresses can be infused with student voice and feedback and adapted to better support specific cohorts, rather than taking a more general approach by altering assessments after a cohort has passed through and left feedback. With the aim of immediate change, a new form of assessment can be created that is not solely designed and developed by the academic team, but also by the learner as well, resulting in a fair assessment that better reflects student needs as well as a clear demonstration of the flexibility and inclusiveness of the assessment activity.

Development of formative assessment activities involve the collaboration of student ambassadors with respective course conveners, allowing for the barrier between academics and students to be broken down, as well as providing more frequent and impactful opportunities for students to provide feedback and better support their learning needs by making active, real-time changes to their courses.



Dr Gee Chong Ling is an education focussed Lecturer who teaches undergraduate courses in the discipline of Biological Sciences. He adopts highly structural approach to my educational change process, based on Kotter's 8 step, double loop learning and design thinking strategy. Employing Students as partners represents his 'human-centered' piece of the educational change strategy promoting learning experience and personal development in his learners.



Amulya Regulagedda is a second year Bachelor of Medical Science student and a passionate individual advocating for positive changes towards student learning, primarily through the Student Ambassador programme in the School of BABS. She is always looking for a challenge and for ways to make an impactful difference in the community, most recently by speaking on student panels for FULT and the Teaching Accelerated Programme, and by being a part of the Diversity Fest this year.



Aaron Saint-James Bugge is a mature-aged, second year Bachelor of Advanced Science undergrad majoring in Molecular Biology. He led the Diversified Project as project manager, advocating for neurodiversity awareness and accessibility within education. As a passionate proponent of Universal Design for Learning and codesign, he serves as both a PASS Leader and a Student Ambassador within the School of BABS. His commitment to enhancing accessibility and championing equity, diversity, and inclusion is unwavering.





Personalised Learning Made Easy: Our Smart Dynamic Question Generation Tool

Presenters: Lionel Kha & Dr Armin Chitizadeh

Our new software system revolutionises question generation. The traditional methods that took too long to be developed, were rigid and lacked support. On the other hand, our new system is dynamic, provides tailored support for our students and can generate random set of questions with a click of a button.

Lecturers only need to create question templates, and our AI system will generate personalised sets of questions for each student. It also provides personalised support for struggling students.

If a student answers incorrectly, the software offers step-by-step solutions and directs them to related resources. For repeated errors, it tailors a scaffolding set of questions for personalised assistance.

This software, initially requested by the Schools of Mathematics & Statistics and the School of Computer Science and Engineering, can be utilised by all academics across all schools. We plan to begin prototype testing in term 3, 2023.



Lionel Kha is currently in his penultimate year studying a Bachelor of Engineering (software) at UNSW Sydney. He is currently constructing the highlighted system as part of his research and development thesis.



Dr Armin Chitizadeh serves as an Education-Focused Associate
Lecturer at the School of Computer Science and Engineering, UNSW
Sydney. He earned both his PhD in Artificial Intelligence and
Bachelor's in Software Engineering from UNSW. Currently, he
supervises three honors students working on education and
teaching-related topics, addressing real challenges encountered by
academics in the field.

Rethinking Assessment in the Age of Generative Al: A Focus on Process Over Product

Presenters: Dr Sara Mashayekh & Dr. Ali Darejeh

In this presentation, we advocate for a transformative shift in assessment strategies, placing a strong emphasis on the learning process rather than the final product. Central to our proposal is the introduction of a novel assessment method known as "Critical Reflective Timelines." These timelines empower students to chronicle and reflect upon their educational journey, fostering key attributes such as self-awareness, critical thinking, metacognition, and learner agency, ultimately empowering students to take ownership of their learning journey and enhancing their engagement with the subject matter. This method is equally advantageous for educators who can employ these timelines to better comprehend and validate the steps taken by students throughout their learning voyage. This validation process, in turn, ensures the authenticity of students' learning experiences and the originality of their work. The presentation will delve into practical implementation strategies and offer illustrative examples, demonstrating the versatility of Critical Reflective Timelines. By showcasing the potential of process-oriented assessment, we underscore the dynamic learning process, ultimately enriching the educational experience for all stakeholders. This innovative approach is poised to redefine the way students and educators perceive assessment, cultivating a deeper, more reflective, and effective learning experience.



Dr Sara Mashayekh is an experienced educator and researcher at UNSW College who has also served as a project manager and learning designer in university initiatives. She frequently publishes and reviews in peer-reviewed journals. She has been invited to speak and present at international conferences. Her contributions to university and state research projects have primarily focussed on educational technology, pedagogical tasks, formative assessment, and teacher education.



Dr Ali Darejeh, PhD, is a Lecturer and academic lead at UNSW's CSE immersive technologies lab. With 10+ years of expertise in metaverse, AR/VR, serious games, and more, Ali conducts interdisciplinary research to create special needs software and motivational e-learning platforms. His prior experience spans UX research and gamification design in various industries. He is the founder of Research Tech Software Solution and Degree Game Studio, specialising in game-based learning platforms and innovative mobile apps.

