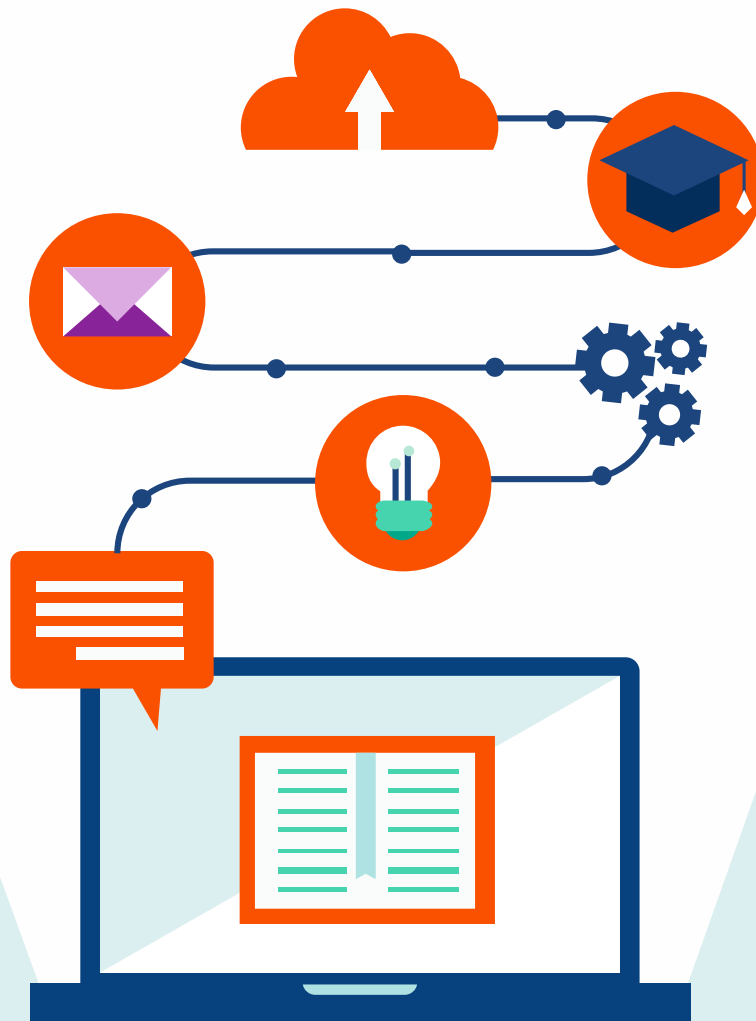




**Flexible
Assessment
with Integrity**



**Empowering Pedagogy
Through Digital Literacy**

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Introduction

Through the selection of purposeful technology that supports teaching and learning, educators have the ability to enhance what they are already doing so well in the classroom in meaningful and impactful ways with the additional capabilities offered through technology.

Therefore, it is important to note that the key to student engagement with digital tools lies not in the tools themselves, but rather in the how and why the tools are being used. This will become even more important when we focus on challenges around adoption, change management, and digital literacy especially in the realm of digital assessment.

The combination of technology, as well as the teachers' ability to leverage these tools effectively to support student learning, requires clear training and empowerment on both the teaching and learning side to support adoption and insight into fully leveraging the technology. In doing so, higher education has the unique opportunity of meeting learners where they are through tools that are aligned with students' preferences and competencies. Tools that support pedagogy and learning and are both effective and efficient are vital for fostering positive engagement and effective learning outcomes.

In this white paper, we examine:

- ▶ Student engagement with assessment and digital tools
- ▶ Enabling pedagogy-driven assessment through technology
- ▶ Student and academic digital literacy: What needs to improve, how to improve it, and how institutions can enhance their strategy.



Student Engagement with Assessment and Digital Tools

Educational technology is not a new phenomenon, and with the continuation of online and blended learning, particularly post-pandemic, academics are continually faced with the dilemma of how best to truly engage students outside of the face-to-face classroom learning environment. The integration of technology to support teaching and learning is widely used in higher education, and therefore highly researched and re-evaluated by scholars around the world trying to unlock the formula for success, namely how to best deliver course content remotely in a way that engages the students, empowers collaboration, and supports students' interactions both synchronously and asynchronously outside of classroom instruction.

More than a decade ago, Pu-Shih et al. said, "The Internet and other digital technologies have become thoroughly integrated in the lives of today's college student" (2010) and that has only increased.

Students have come to expect an online component of even face-to-face courses and Garrison and Vaughn (2008) argue that the ability to incorporate online learning materials into their coursework enables students to have independence, and "some control over learning time, place, path, or pace" whereby there is an opportunity for buy-in and strong engagement of the students outside the traditional classroom.

In discussing students' expectations around the incorporation of educational technology, Salaway & Caruso argue, "many students expect instructors to integrate Internet technologies, such as online learning management systems and collaborative Internet technologies, into traditional face-to-face classes to enhance learning experience, believing those tools make the educational experience more convenient and educationally effective" (2008).

To this end, when implemented intentionally and thoughtfully, in support of pedagogy and most importantly human connection, educational technology tools can have a significant impact on student engagement by fostering student engagement in their own learning process through interactivity and participatory opportunities, personalised and adaptive learning, and perhaps most importantly, timely and crucial feedback to support mastery, progression, and completion.

▶ Student Engagement

We know that building strong student engagement, particularly in a digital environment, is no easy task, yet it is the prerequisite for a successful learning experience. Therefore, the study of student engagement, which in and of itself is complex and multi-faceted, is continually studied in the academic sphere due to prevalence, and even demand for, lifelong learning opportunities in the modern world. When discussing student engagement as a key component of success in higher education, Heilporn, Lakhal, and Bélisle state it has, “important repercussions on perseverance, in-depth learning, student satisfaction, and academic success,” and argue it is influenced by not only the teacher, but is also impacted by variations in learning environments (2021).

When considering the online learning ecosystem, and the various digital tools available to teachers as they build and scaffold their course content and learning objectives, it is crucial that educators not only understand the technology and how best to use it to support their pedagogy and course materials, but also to understand how their students will engage with their course as a foundational part of the design experience.

Christenson et al. (2012) summarises student engagement by stating that “engaged students do more than attend or perform academically; they also put forth effort, persist, self-regulate their behaviour toward goals, challenge themselves to exceed, and enjoy challenges and learning.”

In short, when designed purposefully around the themes of cognitive, behavioural, and social engagement factors, we have the ability to measure student engagement through metrics such as the amount of time and investment students put into their own learning, something that is magnified in asynchronous online learning environments. The importance of this lies in students recognising the potential benefits of digital tools in enhancing their learning journey, which is influenced by factors such as applicableness of the tool, ease of use, their familiarity with it, digital literacy challenges, and their understanding of the relevance of the technology to their learning objectives in their course. All things which lead to an increase or decrease in student engagement with the tools provided to them to support their learning outcomes and success.



► Higher Education and the Impact of Digital Tools

In the higher education landscape, there is no question that digital tools, and their continued advancement and adoption, have played a significant role in this evolution. Dr. Monika Bajaj (2024) states, “Digital learning platforms have become essential tools in modern education, playing a significant role in enhancing student engagement. These platforms offer a flexible, interactive, and personalized learning experience that caters to diverse learning styles and preferences.”

As such, educational technology tools are no longer simply content repositories or a home-base of sorts for face-to-face instructional materials, and instead offer a dynamic and accessible platform that provides opportunities for connection, progression, and ultimately an enhanced learning experience that goes beyond the reach of the traditional lecture hall. No longer are students taking a passive approach to their education, and instead they are taking advantage of these digital tools to take a more active role in their educational journey.

As higher education continues to employ and engage with digital tools, coupled with the rapid pace at which technology is adapting, it is crucial that we address student engagement and what technology brings to bear. Addressing engagement is the first piece of the puzzle, and there are three areas that we will focus on when considering the impact of digital tools on the students: interactivity and increased attention, the opportunity to develop more personalized learning, and the empowerment of mastery and progression through timely and relevant feedback used as a tool rather than simply a measure of grading.



► Increasing Engagement and Participation

A primary focus for higher education, with the prevalence of hybrid, blended, and online courses, is that of engagement and participation in a digital setting. To this end, studies indicate that the incorporation of digital tools to enhance the learning experience can have a significant impact on student engagement, including a recent study that indicated “75% of students felt more comfortable expressing their ideas in an online environment, where they could communicate asynchronously” (Bajaj, 2024). Through the intentional design of building a classroom community in a digital space, students have the opportunity to engage in a way that is accessible, engaging, and flexible.

The 'meeting students where they are' is amplified through tools that provide the ability to learn anytime, anywhere, and fosters a sense of diversity in learning styles, particularly with non-traditional students.



► Personalised & Adaptive Learning

It has become increasingly clear in higher education that there is a need to provide personalised learning opportunities, as not all students require the same education nor do they learn the same. Personalised learning, including that of adapting educational experiences and learning journeys to meet individual needs is therefore an ever-evolving conversation in modern education. In addressing key issues like the skills gap, institutions and teachers alike are looking for ways to increase student engagement, retention, and completion through the adoption of learning outcomes that best benefit their students.

One of the ways this is done is through adaptive learning. Contrino et al., states, “Adaptive learning strategies are focused on generating learning experiences based on the student's previous knowledge on their learning outcomes; all this is supported by technologies (software) that allow knowing the student's progress and obtaining data to modify instruction according to the results” (2024). By focusing on performance, and the ability for real-time adjustments in assessment, teachers are empowered by technology to adapt course content, difficulty, and pacing accordingly. On the 'students' end, this challenges students who are succeeding while simultaneously supporting those who are struggling.

Technology plays a key role in this process in providing the tools for teachers to build out alternative pathways and resources for students to engage with during the learning process. In focusing on adapting the content to that of the students, coupled with a strong feedback process (discussed more below), students are engaged and responsible for their learning experiences through technology designed to use data to increase their potential. This increases both their motivation and connection to material, ultimately corresponding to higher rates of completion.

▶ Feedback and Mastery

With the overarching aim of improving student learning, feedback is used to narrow the gap between where a student begins and their final learning outcomes. In doing so, Muslu and Siegel (2024) state, “Feedback is an essential aspect of formative assessment and has strong influences on learning and achievement. Feedback is a vital step. It allows students and instructors to communicate. This communication helps identify student needs and improve learning.” For one of our authors who was a former liberal arts student and completed an undergraduate degree in Philosophy, this played out over and over again during the writing process with improvement achieved through repetitive drafts and comprehensive feedback during the assignment.

In leveraging tools that enable consistent and timely feedback from teachers, students have the ability to not only reflect in between drafts of their authentic work but also engage in a dialogue on the feedback with their teacher, all done so through the use of technology. Studies have shown that multiple venues for feedback, in addition to comments from a teacher, enhance the learning experience and enable the students to understand their own progression, in addition to the collaboration with their community of other students. In doing so, they are empowered to take a level of responsibility for their own learning journey.

Finally, the ability of adding peer-review feedback and enhanced data and analytics in the learning process provides a triangulation for reflection that does not exist in a traditional classroom setting. Digital tools provide another avenue to optimise feedback through visibility, timeliness, clarity, and community in a way that meets students where they are and brings a level of interactivity and engagement on the student’s part. “An anytime-anywhere approach within technology improves communication between teachers and students, thereby promoting the feedback process” (Muslu et al.), and in doing so, teachers in turn have the ability to create a more feedback-rich environment that ultimately enhances student engagement and learning outcomes.

Enabling Pedagogy-Driven Assessment Through Technology

Putting pedagogy at the heart of assessment simply means that assessments are designed in a way that enhances the learning process. In other words, it means creating assessments that have a learning purpose related to learning outcomes and/or skills and attributes - with these attributes going beyond the requirements of one particular discipline.

This section will first describe how assessments can empower students and enhance learning, before considering how digital tools can be used to enhance the pedagogical aspect of assessments.

▶ Pedagogy at the Heart of Assessment

Exams are often rightly criticised for causing stress, being inauthentic, and measuring surface level skills. However, there is still a place for standards-based exams where there is a need to understand what students know, in addition to what they can do with that knowledge. If exams are well designed so that the knowledge required to perform well in the exam is knowledge that will be useful to the student for their learning journey, then those exams serve a pedagogical function. They can be powerful motivators of learning, and can help students to grow in confidence as they have an objective way of measuring their achievements.

Beyond discipline, knowledge and skills, there are expectations of the attributes that graduates should have when they have completed their course of study. Changing work environments and the impact of AI mean that skills such as self-regulation, self-judgement and self-efficacy will be highly valuable, and a pedagogical approach to assessment will value assessment of the process in addition to the final artefact, which will require a diverse range of assessment types. Explicitly assessing this process helps students to break concepts such as 'self-regulation' into identifiable tasks. For example, a student may be asked to reflect on how they have used AI in a task, and whether they have disclosed this fully, and their reasons for this. This is a highly simplified version, but the point is that given that assessments are a clear driver for learning, they can also provide clear and structured steps on a route to students developing their own preferred approach to managing their own learning.

If students are to also develop self-regulation, self-judgement and self-efficacy, then pedagogically driven assessment must include student voice and agency with opportunities for reflection, understanding feedback, and overcoming affective barriers to feedback baked into the design of the assessment cycle.

► How Can Digital Tools Enable This?

Until fairly recently, digital technologies have mainly been used to 'enhance the scalability and efficiency of non-digital tasks rather than to radically rethink assessment and the requirements of the digital world' (Nieminen, Yan, and Boud, 2025). However, digital tools have the potential to enable flexibility and creativity with assessment design which could be exploited to achieve the pedagogical aims described. For example, digital assessment platforms will offer a wide range of question types that mean that assessments can be designed to more authentically replicate real-world experience, or offer a cohort of students a menu of options to choose from in order to demonstrate achievement of their learning outcomes thereby empowering the students and supporting self-efficacy.

Multi-modal portfolios can promote student agency by allowing them to choose the format of their submission in line with the specified learning outcomes (Yeo and Rowley, 2020). These assessments or portfolios are then readily accessible by the student who can develop skills in selecting and applying feedback to later tasks - or developing agency by gaining a comprehensive view of where their strengths and weaknesses lie and asking for feedback on specific areas where they know that they need to improve in other formative assessments.

Using a digital assessment platform supports constructive alignment across disciplines which can support programmatic assessment. Rather than having a number of assessments tucked away within the modules of a VLE, there is a central dashboard for assessments that enables a far more holistic overview and enables assessment across course/module boundaries. With this digital 'home' for the whole process of assessment, students can view their submissions, the assessment criteria, and the feedback that they have received and more easily transfer skills gained in one area to another as connections become more visible.

Finally, there is a wealth of data available when digital tools are used for assessment. Data on assessment outcomes enable educators to evaluate the efficacy of a pedagogical approach, and digital tools can provide data analytics which can help the educator to identify patterns and gaps in learning over time and adapt tasks accordingly.

Student and Academic Digital Literacy: What Needs to Improve, How to Improve it, and How Institutions Can Enhance Their Strategy

► The Evolving Importance of Digital Literacy in Higher Education

Digital literacy is a foundational competency for both students and educators in today's technology-rich society. Learning environments match the post- education norms which gives digital literacy a duality of importance; it's essential to be able to interact with learning, teaching and assessment, and the wider world. It encompasses far more than basic computer skills. The American Library Association defines digital literacy as:

"the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills."

The IEEE develop this further in the context of Higher Education:

In addition to basic computer literacy, digitally literate people have the technical and cognitive skills to handle the following tasks, among others:

1. use a variety of digital devices and tools, including computers, mobile devices, and programs
2. understand how to effectively search through digital content online
3. distinguish low-quality sources from reputable sources online
4. use social media platforms and create social media content
5. avoid scams and keep private information safe
6. communicate and collaborate with others online.



JISC, the body leading the UK tertiary education, research and innovation sectors to be pioneers in the use of digital technology and data, break it down into six elements within a digital capabilities framework:

1. Digital proficiency and productivity (functional skills)
2. Information, data and media literacies (critical use)
3. Digital creation, problem solving and innovation (creative production)
4. Digital communication, collaboration and participation (participation)
5. Digital learning and development (development)
6. Digital identity and wellbeing (self-actualising)

These categories illustrate that digital literacy is not a single skill but an array of competencies that encompass navigating platforms and protecting data privacy, to using collaboration tools and practicing professional etiquette online. It is the ability to effectively use digital tools and platforms, to find and evaluate information critically, to create content, and to communicate and collaborate online. In short, digital literacy equips individuals to function effectively in a digital society.

The phrase 'digital native' has had its day. Now much derided as making inaccurate assumptions and being an inaccurate representation of a skill set, while we do have generations growing up in an increasingly digital-first world, the idea that this means inherent proficiency in all digital skills and applications is plainly a misnomer. So too perhaps is the idea that growing up in an increasingly digital world gives you an advantage over those who have had to adapt from non-digital methods.

Bridging the gap in digital skills is a deliberate action that we need to take for all academics and students to ensure their participation in modern higher education and the world beyond. It improves teaching and learning outcomes, assessment engagement and results, and being part of the modern world.

With this understanding of the scope and importance of digital literacy, we can consider how the skills of students and educators can be improved.

▶ Student Digital Literacy: Gaps and Needs

University students are often assumed to be tech-savvy, yet many arrive with uneven digital skill sets. Their fluency spans device types, traditional 'office' suite products, video editing and more. How well each individual student's skills align to those required for teaching, learning and assessment will vary. It follows therefore, so will the interventions required. These gaps are often wider for those from disadvantaged backgrounds, mirroring the broader digital divide in society. Confidence can mask a lack of skills. Students can be comfortable online but struggle to understand the technology they are required to use. Or their knowledge of one platform may hinder them with use of another. There's also the question of how they can seek help. A desire not to show their peer group their lack of understanding may hinder the help they receive. Without support, students risk falling behind from the start.

Areas of development span the range of IT skills. But they also go further in digital citizenship. Awareness of data privacy and security is also limited; students might reuse weak passwords, click on phishing links, or overshare personal data without realising the risks. Furthermore, students are still developing their digital identity and professionalism. They may not initially grasp how their online presence (social media profiles, online behavior) can impact their academic and career opportunities.

As important, is their awareness of technology. A student may be unaware of accessibility tools that would benefit them in their learning.



Checklist: Key Digital Skills for Students

Using digital platforms: Ability to log into and navigate the LMS and digital assessment platforms (submitting assignments, accessing materials and feedback).

Productivity tools: Competence with common software for documents, spreadsheets, presentations and other academic tasks.

Online research & evaluation: Skill in finding scholarly information through library databases or search engines and critically evaluating the credibility of sources; understanding how to cite sources to avoid plagiarism.

Communication etiquette: Knowing how to write professional emails and participate appropriately in online discussions or video classes (e.g. muting/un-muting, using chat politely).

Collaborative work: Ability to use collaborative tools (shared documents, project platforms) for group assignments and virtual teamwork.

Privacy & security: Awareness of basic cybersecurity (strong passwords, recognising phishing) and understanding what personal data is shared when using educational apps or social media.

Accessibility tools: Familiarity with assistive technologies or accessibility settings (like screen readers, captions) that can support learning, and an understanding of creating accessible content when required.

Digital identity & wellbeing: Managing one's online presence responsibly (e.g. social media privacy settings) and maintaining a healthy balance with technology use to avoid digital burnout.

► Building Students' Digital Capabilities: Strategies for Improvement

Improving student digital literacy requires proactive integration into the higher education experience. An effective approach is to embed digital skills into the curriculum rather than teaching them in isolation. This has the duality of adding immediate context as well as importance to the student.

Institutions who are able to weave digital literacy into course learning outcomes and assessments are likely to see improved results. This elevates their importance and gets away from the dreaded 'soft skills' phrase that denigrates what is actually crucial as an enabler to learning. Examples of embedded digital literacy include an economics module that might teach students to use spreadsheets for data analysis, or a history module that requires an online research bibliography, coupled with how to compile one. This can be taken one stage further by making digital literacy a programme learning outcome or a graduate learning outcome common to all. Charles Sturt University in Australia drew on the JISC digital capabilities framework to define a graduate learning outcome with knowledge, skill and application dimensions.

Alongside curriculum integration, offer training resources to bolster student skills in a format that suits them. Student preference can vary between learning in a classroom with others to individual resources that can be consumed privately and on-demand. Both can include online tutorials, videos and example resources. Self-assessments such as Jisc's Discovery Tool let students gauge their own skills and receive targeted resources to improve. That crucial mix of in-class practice and supplemental training creates multiple pathways for students to develop needed competencies.

Another key strategy is to leverage peer support and incentives. Students can learn digital skills from one another informally. 'Digital ambassador' students or tech tutors can offer help sessions to guide their peers in using new tools or troubleshooting technical issues, creating a supportive environment where it's okay to ask for help. Educators and career services can highlight how skills like collaborative online work or data management are highly valued in modern workplaces, so students see immediate relevance. Recognising student achievement in digital skills by awarding digital literacy certificates or badges that students can add to their portfolio or resume, promote engagement. Recognition not only rewards effort but signals to employers that a student has been proactive in developing digital competencies. By embedding skill development in coursework, offering accessible training, and creating a culture that celebrates digital growth, universities can substantially raise the digital literacy of their student body.

Checklist: Initiatives to Enhance Student Digital Literacy

Embed in curriculum: Integrate digital literacy into courses and programme outcomes (e.g. include research, data, or tech-based activities in assignments across disciplines).

Early orientation & modules: Cover key digital skills during first-year orientation or seminars, and offer follow-up online modules/workshops students can use to learn skills (like library research or using new software) on demand.

Library and IT collaboration: Use the library's information literacy instruction and IT support's technical training jointly to teach students critical evaluation of sources and practical tech skills. Provide guides and help desks that address both research and tool usage questions.

Peer mentoring: Establish student "digital mentors" or help labs where tech-savvy peers assist others with using learning platforms, software, or troubleshooting, creating a comfortable peer support system.

In-course support: Encourage instructors to include low-stakes practice with digital tools (for example, a practice online quiz or draft submission) so students gain confidence before high-stakes assessments. Offer alternative access or extra training for students who lack experience or equipment.

Recognise achievements: Implement digital skill badges or certificates for students who complete certain training (or exemplary tech-based projects), and highlight these accomplishments to encourage participation.

Ensure equitable access: Provide loaner laptops, software access, or improved internet connectivity for students who need them. Make all digital learning materials accessible (caption videos, screen-reader friendly documents) so no student is excluded.

▶ Academic Staff Digital Literacy: Gaps and Challenges

The digital literacy of academic staff is as crucial as that of students. Educators and professional staff make decisions that affect how technology is used in teaching and assessment. However, faculty members vary widely in their digital capabilities. The rapid shift to online learning during the COVID-19 crisis exposed this uneven readiness: some instructors excelled at virtual teaching, while others found the learning curve steeper. Beyond routine technology, those with greater digital literacy have the opportunity to embed a greater range of supporting materials and capabilities into their learning and teaching. This assists with authentic learning, student engagement and outcomes.

Common professional development needs for academic staff include mastering the core educational technologies such as the LMS, lecture capture, virtual classroom software and digital assessment tools. Learning to create digital teaching materials from well-designed slides to recorded lectures or tutorial videos, and developing skills for online engagement and assessment. Faculty may need training to run effective online discussions, to enhance digital assessments, and to use tools like similarity or plagiarism checkers appropriately.

Data literacy is another growing need. Educators should be able to interpret learning analytics and associated data to build a picture of their students to augment their in-person or online interaction. Additionally, academics must uphold digital ethics and accessibility standards, ensuring that content is accessible to all students and that student information is protected.

Keeping pace with emerging technology is an ongoing challenge. Keeping pace with the advances in AI to make a conscious decision over its use or not requires continuous engagement with the topic. This can't be left to individual educators or it will feel overwhelming.

Checklist: Core Digital Capabilities for Educators

Educational platform mastery: Ability to use the LMS and other campus systems to their full extent (posting content, managing online assignments and quizzes, tracking student progress).

Digital content creation: Skill in creating and curating engaging learning materials using digital media (e.g. slide design, video lectures or podcasts, interactive content) with attention to accessibility (captions, alt text, etc.).

Online communication & teaching: Proficiency in communicating with students through email, forums, and video conferencing. Know-how to facilitate online discussions or virtual classes effectively (using features like screen sharing, breakout rooms, polls).

Assessment technology: Ability to design and administer assessments using digital 'tools. For instance', creating diagnostic, formative and summative assessment. Using similarity or plagiarism detection tools responsibly, and providing rich feedback through digital platforms.

Data literacy: Competence in interpreting basic learning analytics and other educational data to inform teaching while understanding the limitations and ethical use of such data.

Privacy & cybersecurity: Awareness of policies and best practices for protecting student data and academic integrity in digital environments to include secure data handling, compliance with FERPA/GDPR, avoiding security risks.

Inclusive & adaptive pedagogy: Capacity to use technology in ways that accommodate diverse student needs, ensuring materials are accessible, understanding how to support students with limited access or disabilities, and adapting tools or approaches as needed.

Continuous development: A habit of continuously learning new technologies and pedagogical methods by attending training, exploring technology and sharing experiences with peers to keep teaching practices current.

► Enhancing Academic Digital Literacy: Strategies for Development

To improve academic staff's digital literacy, institutions should establish robust professional development and support systems for educators. A foundation is to provide regular training opportunities focused on technology in teaching. Not just one-off workshops, but ongoing programs that faculty can engage with over time. The introduction of online certification courses or bootcamps for faculty, covering practical topics like how to design an online course, how to use multimedia for instruction, or how to implement new assessment software. These can be complemented by on-demand resources (video tutorials, how-to guides) that instructors can consult when adopting a specific tool. Dedicated one-on-one support is equally important. Learning technologists and learning and teaching specialists provide contextualised information, recommendations and support.

By combining formal training, peer support, and strong leadership backing, institutions can help all faculty progressively raise their digital competency, which in turn elevates the educational experience for students.

Fostering a collaborative culture goes a long way in sustaining digital development. Institutions can nurture communities of practice where educators share tips and experiences with educational technology. Peer learning can be facilitated through informal sessions, teaching forums, or internal conferences focused on digital innovation. Peer demonstrations of successful tech-enhanced teaching can inspire others to try something similar. Leadership can also play a role by incentivising and recognising digital upskilling. This might include factoring digital teaching into promotion criteria or celebrating 'Tech Champions' in campus communications. Clear signals from Deans and Heads of Faculty that digital teaching excellence is valued will motivate more staff to invest time in it. As technology evolves, providing training and pilot opportunities for new tools ensures faculty stay up to date.

► Toward a Holistic Institutional Digital Literacy Strategy

Sustained progress in digital literacy comes from treating it as a strategic institutional priority. This means developing a coordinated plan that links student initiatives and staff development under a common vision.

A cross-institution team or committee involving academics and professional staff can drive implementation so that efforts are aligned. The strategy should treat digital literacy as a shared responsibility across campus units rather than an isolated initiative.

Resource support and policy alignment are also key. Institutions must ensure the technology infrastructure and support staff are in place to facilitate digital learning, from reliable Wi-Fi and up-to-date software, to accessible IT help and instructional designers to assist with course development. Investment in these areas demonstrates a commitment to the strategy.

Policies should likewise reflect digital priorities: for example, including digital competency in graduate attributes, mandating accessibility standards for course materials, or providing time in faculty workloads for tech training. It's important to cultivate an inclusive approach, ensuring no one is left behind. Finally, a holistic plan should include evaluation and continuous improvement. Regularly tracking progress (through surveys, usage metrics, and academic outcomes) allows the institution to celebrate gains and identify where to adjust its approach. Digital literacy needs will continue to evolve as technology changes; a forward-looking strategy positions the institution to adapt and keep its educators and students digitally fluent for the long term.

Checklist: Elements of an Institutional Digital Literacy

Vision and framework: A clear statement of digital literacy's importance in the institution's mission or strategy, and an adopted framework that defines key digital competencies for students and staff.

Baseline assessment: Data gathering on current digital capabilities and needs through surveys, assessments, audits to inform goals. Identify where gaps exist and which groups need the most support.

Integrated planning: A cross-department committee or task force to coordinate initiatives. Ensure academic faculties, IT, library, student services, and HR/professional development are working in sync. Align policies and incentive structures to support digital literacy objectives.

Infrastructure and resources: Sufficient technology tools and support personnel. This includes up-to-date hardware/software, robust network access, and dedicated staff to help implement digital learning and assessment.

Faculty development: Ongoing training and professional development opportunities for instructors to build their digital teaching skills. Incorporate digital competency expectations into faculty onboarding, evaluations, and rewards to encourage participation.

Student support: Programmes and services to help students develop digital skills outside of class. For example, orientation modules, workshops, online tutorials, peer mentoring, and readily available tech support. Make sure students know where to get help.

Inclusivity and access: Measures to ensure equitable access to technology and training. Provide support for those with limited devices or connectivity, and ensure all digital content and tools used in courses meet accessibility standards for students with disabilities.

Continuous evaluation: Mechanisms to monitor progress and adapt the strategy. Track usage of digital tools, gather feedback from students and staff on their digital learning experience, and periodically review whether the initiatives are improving outcomes. Use this evidence to update the strategy and address new needs over time.



Works Cited

Bajaj, Monika. (2024). *The Role of Digital Learning Platforms in Enhancing Student Engagement. Collaborative Paths in Multidisciplinary Research*. 10.25215/819818984X.01.

Christenson, S. L., Reschly, A. L., & Wylie, C. (2012). *Handbook of research on student engagement*. Springer US.

Contrino, M.F., Reyes-Millán, M., Vázquez-Villegas, P. et al. (2024). *Using an adaptive learning tool to improve student performance and satisfaction in online and face-to-face education for a more personalized approach*. Smart Learning Environment. 11, 6.

Heilporn, G., Lakhal, S. & Bélisle, M. (2021) *An examination of teachers' strategies to foster student engagement in blended learning in higher education*. *International Journal of Educational Technology in Higher Education*. 18, 25

Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. San Francisco, CA: Jossey-Bass.

Muslu, N., Siegel, M.A. (2024). *Feedback Through Digital Application Affordances and Teacher Practice*. *Journal of Science Education and Technology*. 33, 729–745

Nieminen, J. H., Yan, Z., & Boud, D. (2025). *Self-assessment design in a digital world: centring student agency*. *Assessment & Evaluation in Higher Education*, 1–15. <https://doi.org/10.1080/02602938.2025.2467647>

Pu-Shih Daniel Chen, Amber D. Lambert, Kevin R. Guidry. (2010). *Engaging online learners: The impact of Web-based learning technology on college student engagement*. *Computers & Education*, Volume 54, Issue 4.

Salaway, G., & Caruso, J. (2008). *The ECAR Study of Undergraduate Students and Information Technology*.

Yeo, N., & Rowley, J. (2020). *'Putting on a Show' Non-Placement WIL in the Performing Arts: Documenting Professional Rehearsal And Performance Using Eportfolio Reflections*. *Journal of University Teaching and Learning Practice*, 17(4). <https://doi.org/10.53761/1.17.4.5>

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He has a deep understanding of how pedagogy needs to be enabled by technology through experience before and while at Inspera.



Jessica Awtrey

Jessica Awtrey is a passionate advocate for the transformative power of education, recognising its significant impact on individuals and society alike. As a non-traditional student herself, she understands the diverse challenges learners face and is deeply committed to bridging educational gaps. She champions accessible learning experiences that meet students where they are, harnessing the power of technology to bring this vision to life.

As the Head of Americas at Inspera, Jessica draws on over a decade of experience in academia and ed-tech, including leadership roles at Instructure and Utah Valley University. In her current role, she collaborates with higher education institutions to implement innovative and user-friendly solutions that inspire and empower learners.

Jessica holds a Bachelor's degree in Philosophy with a minor in Religious Studies from Utah Valley University. She furthered her education with a Master's in Public Administration from the University of Illinois, completed doctoral coursework in Political Science at the University of Utah, and a certificate in Women in Executive Leadership from Cornell University.



Fiona Orel

Fiona Orel joined Inspera in 2022 after many years in higher education assessment, and brings a deep passion for inclusive and meaningful assessment. As a Senior Account Manager at Inspera, Fiona draws on her extensive experience to support UK partner institutions in using Inspera to enhance their assessment practices and reach their strategic ambitions. One of the aspects she most enjoys about her role is the opportunity to continually learn from UK and global partners, share best practices, and help to foster networks and user communities.

Having taken a non-traditional path into education, Fiona viewed her assessments as powerful tools that helped her track her progress, increase her confidence, and refine her expertise. As such, she is passionate about well-designed, inclusive assessments that empower learners to take charge of their academic, personal, and professional development.

Fiona holds an MA in Teaching English as a Foreign Language, and is a Senior Fellow with Advance HE and a graduate of the Advance HE Aurora Women in Leadership programme. Outside of work, Fiona loves exploring the Derbyshire countryside with her dog, has recently rekindled her passion for horse-riding, and is an avid reader with a particular fondness for science fiction.

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