

Shaping the future of learning: the role of digital Identity



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Introduction

Education is a crucial driver of personal and national prosperity, empowering citizens with knowledge and skills to lead meaningful and productive lives in a rapidly changing world.

The education sector is broad and diverse, with unique challenges facing education departments, urban and regional schools, universities, and TAFE colleges.

However, all educational institutions must contend with increasingly complex hybrid IT environments, marked by the explosion of digital learning and administration tools, remote learning, and the persistence of legacy systems, processes, and tools.

The sector faces three major challenges to improving student outcomes, protecting student data, and creating a better student experience:

1. Institutions are constrained by budgets and staffing costs, with personnel (educators, administrators etc.) spending too much time on manual administrative processes.
2. Cyber security teams are struggling to manage the growing risk of cybercrime and unsecured apps.
3. A lack of integration between systems and applications is hampering efforts to utilise data and modernise the systems necessary for lifelong learning.

Born-in-the-cloud Digital Identity platforms are helping education providers and agencies overcome these challenges and have a proven track record in supporting the sector by:

- Automating tedious manual processes relating to identity and authentication, giving time back to employees to perform higher-value work, and minimising IT administration costs.
- Improving compliance, privacy, and security through features such as multifactor authentication (MFA).
- Integrating disparate applications and systems, setting the groundwork for continuous modernisation to support the emergence of lifelong learning initiatives, such as skills passports.

Digital Identity platforms reduce manual work

The education sector has experienced significant difficulties with funding and staffing in recent years, meaning schools, universities, vocational colleges, and education departments never have ‘enough’.

Despite a 20% increase in funding for primary and secondary schools over the past decade, NAPLAN test scores have not increased¹.

While new technologies have augmented the learning experience and increased productivity in several areas, it has created new administrative burdens, particularly on overstretched teachers and support staff.

For example, repetitive manual tasks such as marking assessments and attendance constitute 20% of an average teacher’s workload, taking away from lesson planning and student-teacher time².

Cloud-based Digital Identity platforms can help educational institutions free up resources by automating and streamlining many manual processes.

Digital Identity platforms are the key to transforming the following processes:

Formative assessment: Marking assessments, administering assessments ‘on demand’ for remote learning, capturing and storing data, and conducting gap analysis at a cohort or individual level.

Administrative processes: Replacing paper-based processes such as marking attendance and enabling self-service for procedures, for example allowing parents to approve excursions and book interviews.

Continuous improvement: Automating manual back-end and administrative support and corporate processes, e.g. real-time collection of institution-wide student data for reporting to relevant education agencies.

[1] ACARA, 2023, [National Report on Schooling in Australia](#).

[2] Productivity Commission, 2023, [From learning to growth](#).

Digital Identity platforms are critical for privacy and security

Educational institutions possess large amounts of sensitive personal information and are viewed by criminals as a valuable target, with **11% of all ransomware attacks** targeting the sector in 2022³.

The rise of remote learning and the growing suite of digital tools and apps contribute to a broader attack surface and complex hybrid IT environment, making monitoring challenging.

Many of these new tools also risk breaching data protection laws around children. A global survey of 164 common EdTech products found that **89% engaged in unethical data practices**⁴.

In 2023 a state education department revealed that over **16,000 documents** were published following a ransomware attack on a file transfer service provider, directly affecting over **150,000 students and other users**⁵.

Teams must also manage the wide variety of user personas that require regular access to IT systems, including students, staff, visiting researchers, parents and alumni.

A 2022 audit of Western Australian tertiary institutions found that cyber security controls had deteriorated over the previous year. **22% related to poor access controls**⁶.

Digital Identity platforms can reduce the burden on cyber security teams by supporting:

Seamless and secure access to various systems through Single Sign-On (SSO) and multifactor authentication (MFA) capabilities.

Integration of identity and access management (IAM) with the broader cyber security ecosystem to form the basis of a zero-trust architecture.

Automation of manual processes such as on/offboarding to minimise the risk of human error.

[3] ACSC, 2022, [Annual Cyber Threat Report 2022](#)

[4] Human Rights Watch, 2022, [How dare they peep my private life](#)

[5] Tasmanian Government, 2023, [Update on cyber investigation](#).

[6] Office of the Auditor General (WA), 2023, [Financial Audit Results – Universities and TAFEs 2022](#)

Digital Identity platforms: The keystone for lifelong learning

[Our vision is to] create trusted digital services that empower personalised, **lifelong learning journeys**, allowing individuals to reach their goals and positively impact our community into the future.

NSW Department of Education, Digital Strategy (2023)⁷

Governments and educational institutions increasingly recognise that education is an ongoing journey, and that improving student outcomes requires tracking performance throughout their lives.

A lack of integration and interoperability between the components of contemporary hybrid IT environments threatens the ability of governments to achieve this policy goal, with institutions burdened by legacy systems and resource shortages.

Although education departments develop some centralised systems for use across the sector, institutions are free to procure systems that best serve their users, resulting in a variety of systems that may be incompatible.

[7] NSW Department of Education, 2023, [Digital Strategy](#).

Establishing a single record of educational attainment across institutions with an interoperable Digital Identity solution has been a challenge for governments. The Unique Student Identifier (USI) is a national system intended to track lifelong outcomes, however slow implementation over the past decade has yet to realise the stated benefits of interjurisdictional data-sharing and improved student outcomes⁸.

The NSW government is emerging as a trailblazer in developing lifelong learning solutions, currently trialling a statewide Learner Passport⁹ that will include verifiable credentials, such as academic transcripts and professional certificates, alongside a record of personal achievement, experiences, and skills.

Digital Identity platforms support lifelong learning initiatives by providing:

Inbuilt integration with widely used cloud services supporting corporate and administrative services.

Interoperability with systems used by other institutions, agencies, and services.

Automation of back-end processes to free up more time and resources for modernisation projects.

[8] Productivity Commission, 2023, [Review of the National School Reform Agreement](#).

[9] NSW Government, 2023, [NSW Education Wallet](#).

Conclusion

Digital Identity is the keystone for various systems that reduce manual work, support privacy and security, and enable lifelong learning initiatives. Despite this, three key challenges hamper progress:



Challenge: Funding levels have not kept up with demand meaning that schools, university, TAFE colleges and education departments never have 'enough'.



Challenge: An explosion of digital learning tools and apps is leading to a rise in ransomware attacks and threatens privacy.



Challenge: The lack of interoperable systems and poor integration with legacy IT hamper progress towards personalised, lifelong learning.

A modern Digital Identity platform can help reduce manual workloads and costs by automating repetitive tasks done by educators (e.g. formative assessment and administrative processes) to free up time for more valuable activities. It can also automate back-end IT and administrative processes to make better use of limited resources.

In addition, a secure Digital Identity solution can help manage risk by supporting seamless and secure access to solutions with SSO and MFA, enable movement towards a zero-trust approach, and automate processes such as on/offboarding.

Finally, interoperable Digital Identity can help realise a better student experience by integrating with commonly used apps and enabling data-sharing with other entities. This in turn enables continuous modernisation practices and supports lifelong learning.

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