



In a rapidly evolving digital world, government departments must explore a range of technologies to deliver effective assessment and education.

Solutions must be agile, scalable, and keep up with the pace of change that is required to deliver first-class education to students.

Janison provides flexible platforms that allow schools to deliver assessment for students and professional development programs for teachers. They're designed for maximum scalability and operate seamlessly within the department's existing infrastructure.

These custom-built solutions streamline workflow processes and give educators real-time analytics that help them refine their teaching strategies, leading to better educational outcomes.

We invite you to read about how our solutions are transforming education delivery for Australian government departments and agencies, including the NSW DoE and ACARA.

### Project #1: NAPLAN.

Annual NAPLAN testing for Australian students in Years 3, 5, 7 and 9.



As part of their education delivery strategy, the Australian Curriculum, Assessment Reporting Authority (ACARA) and Education Services Australia (ESA) wanted to transition the annual NAPLAN exam from paper-based to online.

As the country's largest exam event, the primary goal was to deliver thousands of concurrent online tests, with each test running smoothly and without interruption.

### The challenge

For the project's first stage, Janison was asked to deliver a world-first: run a national exam securely and reliably at burst capacity to 1,400 schools with a total of 200,000 students over a nine-day assessment window.

Transaction rates and data stored by the platform during these peak times is similar in nature to loads processed by applications such as Facebook. To preserve the integrity of the exam, the system needed to run smoothly without data losses for every single student. It also needed to be delivered through a usable, engaging online tool that allowed adaptive testing.

### Our solution

Using the stability and scalability of Microsoft Azure cloud hosting, we developed the NAPLAN Online platform with performance, resilience, and engagement top of mind, stress-testing it to handle 400,000 concurrent users.

The system used our highly-usable assessment platform, with built-in adaptive test questions that gave test-takers dynamic questions suited to their ability, leading to a clearer picture of their abilities.





The first stage of NAPLAN Online was successfully delivered in May 2018. A trial report revealed that 99.9 per cent of the 668,529 individual reading, writing, language conventions and numeracy tests attempted by students were completed successfully.

No slowdowns were noted across the system. This major assessment event was publicly praised by then Education Minister Simon Birmingham and received international recognition.

Since then, Janison has continued to deliver annual NAPLAN testing for the Australian Government every year, with around 4.3 million tests delivered every year.

### Statistics and key milestones



### 4.3 million

NAPLAN Online tests delivered over 2 weeks



### 1 million

NAPLAN Online test delivered in a single day



### 315k+

students taking NAPLAN
Online tests at the same time

6

"It's clear that young people are more engaged by technology than by pen and paper."

- Andrew Smith, Chief Executive Officer, Education Services Australia (ESA)

### Project #2:

### Check-in assessment.

Diagnostic "Check-in" testing for Australian students in Years 3, 5, 7 and 9.





After NAPLAN was cancelled in 2020, the NSW DoE wanted schools to be able to check how their students were tracking in the key areas of literacy and numeracy, via an optional diagnostic assessment.

The on-demand online test would be delivered to Years 3, 5 and 9, and required swift results and insights for teachers.

### The challenge

The COVID-19 lockdowns lead to some students missing crucial learning opportunities, causing delays in their development. Principals and teachers were also unable to deliver traditional pen-and-paper testing to identify who was falling behind.

The challenge was to identify which students were missing out and by how much, to help teachers understand the most effective ways to intervene and bring them up to speed.

### **Our solution**

Janison created the Check-in assessment to pinpoint learning gaps for literacy and numeracy, giving NSW teachers hard evidence for important educational interventions.

The tests themselves were designed by the Department and delivered on the Janison Insights assessment platform, integrated with the NSW DoE's reporting and analytics system. They were multiple-choice and able to be auto-marked, delivering results to teachers within 48 hours.

The assessment was offered to schools in a three-week window in Term 3, giving them the flexibility to run the tests at a time that suited them.

Take-up of the test was high, with a total of 1,775 schools and 157,000 students participating during the Term 3 testing window – more than 80 per cent of eligible schools.

Digital delivery was smooth and efficient, with up to 21,000 completions per day for the Year 5 and 9 tests, and as many as 24,000 per day for Year 3. There were a total of 318,000 test completions, with results in the hands of teachers within 48-hours.

In a letter to staff, the NSW DoE said: "The Check-in assessments are designed to supplement existing school practices to identify how students are performing, and to help teachers tailor their teaching more specifically to student needs."

Given the success of the initiative, the NSW DoE expanded the program and are continuing to offer the Check-in assessments to their schools every year.

### Statistics and key milestones



**18.5 million** test completions since 2020



**40,000** eligible schools have taken part since 2020



**48-hour** turnaround time for results and insights



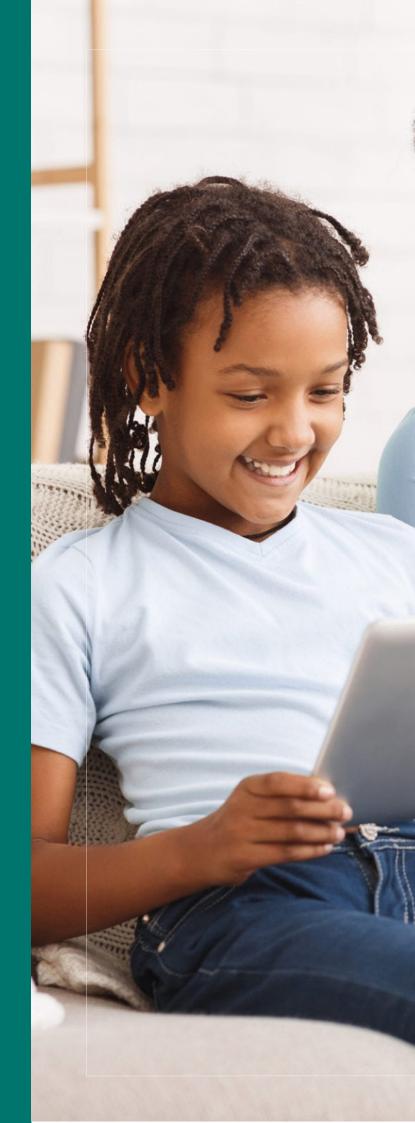
"Feedback has been overwhelmingly positive and is a great example for education ministers across the country. Schools said the major benefits were quick turnaround for results, diagnostic information at syllabus and learning progression level, and ability to use the results to inform their classroom practice."

- Sarah Mitchell, NSW Minister for Education



## Project #3: Best Start Year 7.

Literacy and numeracy assessments for Year 7 students in NSW



The NSW Department of Education (NSW DoE) selected Janison to build and deliver a new assessment under the <u>Literacy and Numeracy Strategy 2017–2020</u>, a four-year plan to ensure students have the essential literacy and numeracy skills they need for success in learning and in life.

The Department was looking for a specialist digital assessment provider to help it achieve the key aim of the new exam: to quickly identify students at risk of falling behind and pinpoint what type of support they need.

As well as offering government-grade reliability and security, the solution needed to be Software-as-a-Service (SaaS) that scales easily year to year and seamlessly integrates with all schools' existing systems.





### The challenge

As acknowledged by the former Minister of Education, Adrian Piccoli, literacy and numeracy skills are the foundation for the next generation's success in learning and in life. It's critical for students to develop confidence in these skills, and falling behind can have devastating consequences for their secondary schooling.

The Department entrusted Janison to deliver the technology that can provide the rigorous evaluation of students' skills at a critical juncture in their education – the first weeks of Year 7 – and quickly provide intricate diagnostic data to allow for swift teaching intervention.

As sophisticated as the technology needed to be, it also needed to be user friendly for all levels of technical literacy among teaching staff, and to operate seamlessly within greatly varying levels of IT infrastructure between the 321 schools across the state taking part.

### **Our solution**

Best Start Year 7 demanded a sophisticated online platform that could efficiently deliver and process a considerable daily number of student test completions and feed a large volume of real-time data into NSW DoE systems, making valuable analytical information available for teachers almost instantly.

A NSW DoE survey of 293 early adopter schools who took part in the Best Start Year 7 professional training pilot found that more than 95 per cent agreed that the exam will help to identify students requiring additional support in literacy and numeracy.

Janison hosted the live assessment event over 31 schools days in February-March 2019, which comprised three exams: reading, numeracy and writing.

A total of 41,000 students sat these assessments, with an average of 2,400 tests completed daily. The highest number of tests in one day during the exam period was 6,673. The system auto-marked the literacy and numeracy portions, enabling real-time data delivery to the NSW DoE, while the platform's discrete marking features streamlined the marking process for the teachers who marked the writing portion of the exam.

The platform operated seamlessly with schools' existing IT infrastructure, including student devices such as laptops, desktops, PCs, Chromebooks, iPads and Android tablets.

### 3

"Teachers administering the test found the system easy to use and the online format successfully engaged students to demonstrate their skills and understanding."

- NSW Department of Education spokesman

### Statistics and key milestones



**41,000 students** across NSW sat the inaugural Best Start Year 7 exam in 2019



**>6,673** completions per day



**75,000** tests completed



### Project #4: MyPL.

The largest online professional learning management system in Australia.



The NSW Department of Education (NSW DoE) asked Janison to create a platform that consolidates and streamlines all of its administrative and business processes for planning, managing and recording of professional learning for principals and teachers state-wide. Its key priority was the creation of tools to facilitate large-scale collaborative tasks and distributed authorship.

### The challenge

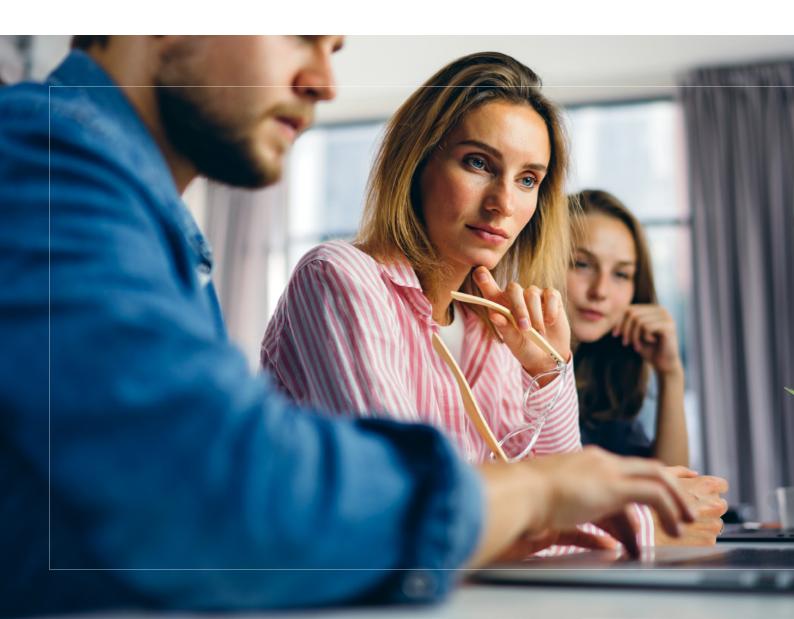
The new platform, to be called MyPL, needed to accomplish a considerable number of simultaneous tasks for hundreds of thousands of active users. This included daily course completion, flexible workflows for scheduling face-to-face and online courses, reporting and tracking each teacher and principals' professional development, as well as facilitating distributed authorship by an internal peer network of almost 10,000 users.

In order to build the platform, Janison faced the sheer scale of the task of migrating NSW DoE's existing data – including a legacy system dating back six years and consisting of tens of millions of pieces of data – and navigating tens of thousands of catalogue items.

### Our solution

Built by Janison in 2017 and with more than 200,000 active users, MyPL is the largest professional learning management system in Australia. It's scalable to a million-plus active users. The platform enables distributed authorship course development by a network of almost 10,000 teacher-authors, including peerbased review and approval.

It also collects and documents educators' entire professional development journey including their mandatory training. To help users navigate the immense breadth and scale of content, Janison created an intricate tagging system across the platform which allows teachers to make detailed searches of tens of thousands of catalogue items.



The platform launched with a high level of success and uptake by staff. In its first year, it facilitated an average of 1,760,920 hours of learning per month, and to date has supported 4,495,491 course enrolments. It also continues to enjoy a high level of social engagement from teachers, with thousands of learner comments having been exchanged within the system.

Importantly, MyPL's distributed authorship learner-author functionality allows a network of educators to actively author and engage in their and their peers' professional development. This supports NSW DoE's ethos for this aspect of the project, that "inclusive professional learning is part of how we make education a great place to work and that our workforce is of the highest calibre".

### Statistics and key milestones



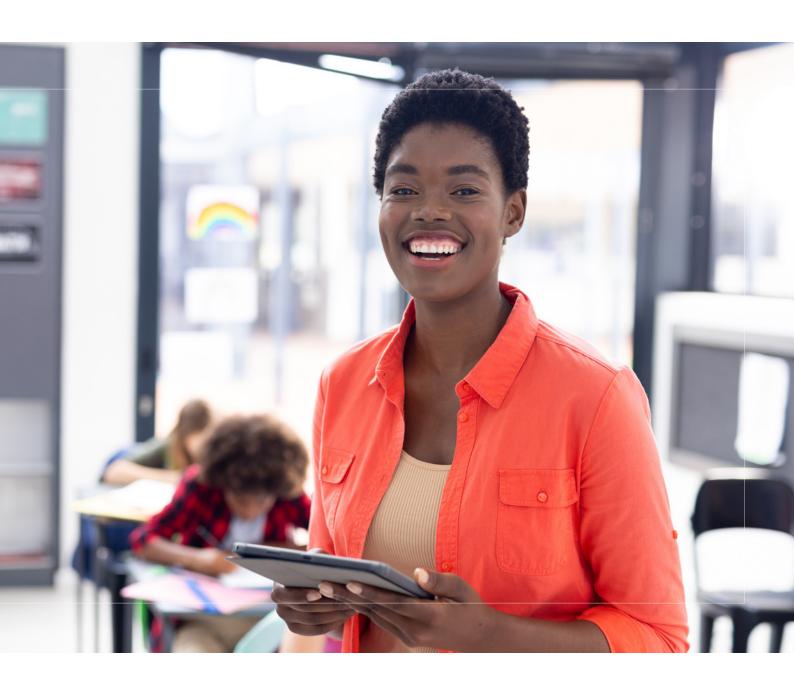
202,355 active users on the platform - the largest in Australia



9,984 teacher-authors creating content via distributed authorship



>4.5M course enrolments since MyPL's launch



### Project #5: VALID.

Annual science testing for NSW students in Years 6, 8 and 10





In 2010, the NSW Department of Education (NSW DoE) approached Janison to help it shift its annual Year 6, 8 and 10 science testing from paperbased tests to online assessment. As part of a wider commitment to improving science results, the Department also wanted to give students authentic, interactive test experiences.

### The challenge

Janison's remit was to host and deliver what was then recognised as the world's first online multimedia interactive whole cohort test to schools state-wide. The test, then called the Essential Secondary Science Assessment (ESSA), is now known as the Validation of Assessment for Learning and Individual Development (VALID) and is mandatory for Years 6, 8 and 10. Supporting tens of thousands of students on the platform simultaneously posed technological challenges, particularly managing data loads. Stable, consistent delivery was vital.

### Our solution

Janison addressed scalability, delivery and security challenges by taking a unique approach to services and architecture. To adhere to strict Government data sovereignty rules, it designed the application to store data in the on-shore Microsoft Azure cloud.

Janison also built multimedia tools into the exam authoring features. These allowed educators to author questions using animation that mimics practical classroom tasks, allowing students to work with virtual beakers, test tubes and measurement tools on the screen.

In October 2010, Janison delivered what was then a world-first: the first standardised, successful, large scale online assessment to nearly 40,000 students from 650 schools in one day. In 2015, more than 100,000 test attempts were delivered and marked. By 2016, the test program had doubled to 81,300 students.

Feedback from teachers involved in the early stages of the project was that VALID had transformed from being seen by students as a dull and dreaded exam into a test that pupils now actually looked forward to. Teachers report that they've never seen some of their students as engaged in a classroom activity as they are when they're participating in VALID.

### Statistics and key milestones



**40,000** students from 6

students from 650 schools sat the test in one day in 2010



81,300

pupils took the exam in 2016 – double the pilot number



**20,000** students can be supported on

the platform concurrently





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"We are delighted with the results. Janison are great to work with and are really leading innovation in this space."

- Eric Jamieson, Former Director of Education Management, NSW Department of Educations

# We help government departments deliver usable, scalable tests to their schools.

### **About Janison**

Janison is an Australian-owned, publicly-listed education technology provider. We create online assessment and learning solutions for governments, educators, and corporations.

Since forming in 1998, Janison has created technology that has improved the way institutions and companies assess and teach their students. Our award-winning assessment and learning products are used in more than 100 countries by millions of students.

For more information, visit janison.com

### Contact Us

Discover how Janison's solutions can help you achieve real outcomes for your department.

Please contact one of our sales team for a chat: you can email us **here**, or call us on **1300 857 687**.

