

# Inspera Pedagogical Evaluation Report



## Version History

Version	Revision date	Summary of changes
0.1	03 October	Preliminary Report tabled at DLMP-SC
0.2	30 November	Draft Report. Refined qualitative survey summary, and case study interviews. Tabled at ITaLI Advisory Committee.

## Document Owners

Project role	Name	Position	Signature or endorsement	Date
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## Executive summary

This preview report provides preliminary data from the ongoing pedagogical evaluation of the change to assessment practices using the Inspera platform. The evaluation aims to explore the impact of assessment processes and outputs, designed and implemented using Inspera and associated supports. Data used in this report comes from a mixed method survey of staff who used Inspera and preliminary data from staff interviews and a large student focus group (n=10).

Students reported a preference for digital assessment particularly over hand-written examinations. Students noted the ability to edit, the auto-save and auto-submit functions, and the platform's general layout and formatting as being improvements when compared to paper-based exams.

Staff survey and interview responses indicate that working with the combination of the Digital Assessment team's expertise and support, and the opportunities enabled by the Inspera platform has resulted in:

- increased academic integrity with more authentic, secure assessment, including invigilated digital on-campus examinations
- assessment of critical thinking
- improved feedback processes
- richer assessment through a variety of question types and stimulus
- enhanced assessment administration
- better student experiences through assessment design, enhanced interface and digital rather than written examinations
- progression of school initiatives to enhance assessment.

Constraints in using the Inspera platform, and engaging with the transformation of assessments include:

- academic time and support to undertake significant assessment changes to make the most of the possibilities made available through Inspera and the Digital Assessment team
- finding and using space for digital examinations within the room, the availability of power outlets, and network bandwidth sufficient for the student cohort
- identifying the optimal arrangement of assessment and settings can be intricate, requiring thorough knowledge and understanding of both the task and Inspera. Inspera enables a range of complex assessment with functionality to support the design of assessment, the student experience, receipt of feedback, submission conditions, and marking allocations

These initial findings are aligned to the key messages of the Inspera Pilot Evaluation Report (2021).

## The Inspera Pedagogical Evaluation (2023)

### Focus of the evaluation

The project is guided by the following questions:

1. What factors influence the teaching teams' design and implementation decisions? What is their perspective now about the impact of their decisions?
2. What is the student perspective on assessment they completed using Inspera?
3. How did contextual factors impact the pedagogical outcomes of the platform?

### Final report

The outcomes of this evaluation will be released in a final report in December 2023. The final report will provide an overview of the use and experience of staff and students using Inspera and a series of concise

case studies. The case studies will explore the pedagogical possibilities of Inspera and the impacts of different contexts on the specific uses of technology and assessment and feedback design. Analysis of SECaT data and student results will also be reported.

This project has human ethics approval 2021/HE001419 under the leadership of Associate Professor Christine Slade.

## Project Background

The initial aim of the eAssessment/Inspera project was to identify electronic assessment options that both facilitated improved pedagogical practices and addressed existing administrative issues. Strategically, assessment design and redesign has been the foundation of the work conducted within this project. A key component of this transformation process was the selection and deployment of a centrally supported online assessment solution, to be available to all schools and faculties as required, that aligned with the majority of user requirements and could be integrated seamlessly into the existing information technology infrastructure of the University.

Following extensive market research and procurement activities, Inspera Assessment was selected as the preferred provider in 2019. Inspera Assessment is a cloud-based digital assessment platform that offers new and exciting assessment possibilities at The University of Queensland (UQ), supporting a range of assessment types, including digital on-campus and off-campus exams. The platform has targeted functionality across the assessment lifecycle, including creating, administering, and marking assessment, and providing feedback to students.

The Inspera Pilot Evaluation Report was completed in November 2021 and recommendations from this report were submitted to the Assessment Sub-Committee (ASC) in March 2022 and endorsed by the Teaching and Learning Committee (TLC) in May 2022. Responses on the status of the recommendations from the report are summarised in Section 4.

Throughout 2023, the project will transition to a new operating model and the project team will remain in place until December 2023. Inspera continues to be offered as an opt-in opportunity for current users and may be adopted where it is appropriate for the assessment design. There are currently over 100 courses per semester across 17 schools that use Inspera. Teaching teams continue to have the opportunity to work with learning designers to redesign assessments with a focus on contemporary ideas about assessment and feedback and the creation of authentic assessment to enhance the student experience.

## Evaluation Methods

A mixed methods approach is being undertaken for this evaluation to provide a general understanding of the adoption and uses of Inspera and cases to explore the contextual assessment change. This interim report provides results of data collection to date.

The outcomes of this evaluation are informed through:

- high-level usage data from Inspera, including a summary of courses using Inspera in 2023, and staff and student usage numbers are included in this report. The final report included a more detailed breakdown of Inspera usage across schools and faculties.
- a survey of 322 course staff using Inspera (n = 63, 20% response rate). Quantitative responses and example qualitative responses are included here, and the final report will include an emergent thematic analysis of qualitative items.
- semi-structured online interviews of course coordinators and staff who participated in the 2022-23 program, either held individually or with a group.
- focus groups of students from relevant 4 courses. The first focus group invited students who used Inspera in courses in Semester 2, 2022 or Semester 1, 2023. A planned second focus group will invite students with significant experience using Inspera across multiple courses and assessments. All students who attend a focus group will receive a \$40 eGiftcard.

- SECaT scores and grades for courses using Inspera reviewed for changes that occurred alongside the adoption of Inspera and associated assessment changes. A specific focus is on Question 5 of the SECaT survey, which focuses on the clarity of assessment task(s). Sample analyses of changes in grades are included in this report, and a comparison of SECaT scores will be included in the final report.

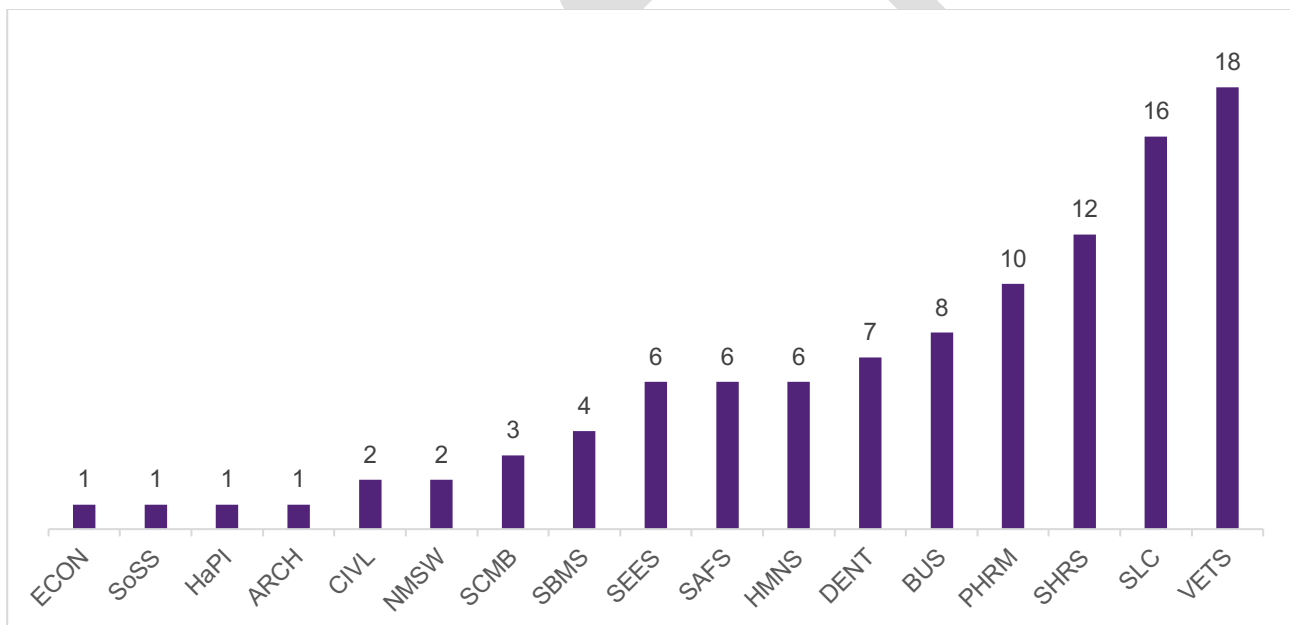
## Usage of Inspera

Inspira has been made available to select courses and schools through a pilot project to ensure our teams can provide an effective student experience.

In 2022, 11,917 students used Inspera, with an increased forecast for 2023. 758 staff (as of May 2023) were using Inspera in over 170 courses in 2023.

In Semester 2 2023, 104 courses from all faculties and 17 schools are using Inspera for a range of formative and summative assessments. A breakdown of Inspera usage by school is presented below:

*Figure 1: 104 courses using Inspera in Semester 2, 2023 (by School) (as of 26 September 2023)*



## Survey findings

### Sample of quantitative responses

Sixty-three course staff (including Course Coordinators, Learning Designers and Tutors) who used Inspera responded to the survey between 10 June and 28 August 2023. This section contains a sample of quantitative questions and responses. The complete dataset will be included as an Appendix in the final report.

Question 1 asked respondents 'Why did you first start using Inspera? (select all that apply)'. 'Exploring a new technology' was the most common response, followed closely by 'Innovate assessment'. Thirty percent of respondents wanted to 'create auto-marked questions to reduce workload' and 22 percent wanted to 'create assessment not possible on paper or Learn.UQ', and on the same percentage 'solve an assessment administration problem'. There was also interest from 19 percent of respondents in 'enhancing student engagement' followed jointly by 'make progress towards an assessment redesign goal' and 'the support offered during the pilot semester'. 'Solving an assessment problem' and 'it was recommended to me' were the least reported.

In summary, there are strong pedagogical reasons for using Inspera, as well as technological, administrative and contextual factors e.g., workload and support.

*Table 1: Top ten reasons for starting to use Inspera*

<b>Selected response</b>	<b>Number of responses</b>	<b>% of respondents</b>
Explore a new technology	30	48%
Innovate assessment	26	41%
Create auto-marked questions to reduce workload	19	30%
Create assessment not possible on paper or Learn.UQ	14	22%
Solve an assessment administration problem	14	22%
Enhance student engagement	12	19%
Make progress towards an assessment redesign goal	10	16%
The support offered during the pilot semester	10	16%
Solve an assessment problem	9	14%
It was recommended to me	7	11%

Respondents were also asked in Question 4 about the forms of assessment they used with Inspera, and again they could choose all options that applied to their situation. The top three responses were 'non-invigilated exams', followed by 'revision task/quiz' and 'on-campus BYOL digital exam'. The next most reported assessment forms were 'tutorial/problem set' and 'paper/report', followed by 'step-by-step assessment', and 'case study assessment', and lastly, 'laboratory practical'. These results indicate that Inspera is used for a wide range of assessment types, and not solely for exams.

*Table 2: Top 8 forms of assessment used with Inspera*

<b>Selected response</b>	<b>Number of responses</b>	<b>% of respondents</b>
Non-invigilated exam	21	33%
Revision Task / Quiz	18	28%
On-campus BYOL digital exam <sup>1</sup>	15	24%
Tutorial / Problem Set	11	17%
Paper/Report	7	11%
Broken down step-by-step assignment	6	9%
Single or multiple case study assessment	6	9%
Laboratory practical	5	8%

Question 8 asked respondents 'In what ways did you improve your assessment practices with Inspera? (select all that apply)'. Forty-four percent of respondents said that the 'learning experience of students' was improved by using Inspera for assessment, followed by 'sustainability of workloads for staff' and 'academic integrity'. Pedagogical improvements included 'assessment authenticity' and the 'feedback process', and

<sup>1</sup> refers to bring your own laptop

then 'alignment and validity'. Fourteen percent said that 'assessment did not improve'. These responses show that there have been significant pedagogical improvements to assessment design and outcomes for students, compared to a considerably smaller percentage of no improvement.

*Table 3: Ways assessment practices were improved using Inspera*

<b>Selected response</b>	<b>Number of responses</b>	<b>% of respondents</b>
Learning experience of students	28	44%
Sustainability of workloads for staff	21	33%
Academic integrity	19	30%
Assessment authenticity	16	25%
Feedback process	15	24%
Alignment and validity	10	16%
Assessment did not improve	9	14%
Equity of access	7	11%

## Qualitative responses

This section outlines the open-ended responses to the three qualitative questions in the survey.

In Question 9 respondents were asked 'What do you consider to be the main benefit of using Inspera in your teaching practice?'. The abductive pedagogical categories used consider the majority of positive responses to be in line with the aim of this evaluation, as well as contextual factors, such as resourcing and scalability. There were two responses that saw little or no benefit.

*Table 4: The responses for 'Q9. What do you consider to be the main benefit of using Inspera in your teaching practice?'*

<b>Category</b>	<b>No of Responses</b>	<b>Quotation Examples</b>
Resourcing & Scalability	12	<p><i>Administrative ease, specifically distribution of exams to external markers, recording of results. It is much better with respect to reading student responses, and I find I can mark more exams efficiently and effectively with it.</i></p> <p><i>Ease of use, quality of the assessment, ease of marking and speed of collating marks.</i></p> <p><i>The ability to efficiently grade and provide feedback for students in a large course.</i></p> <p><i>Auto marking</i></p> <p><i>Ability to read students' writing. And improved marking</i></p>
Flexibility	10	<p><i>Nontraditional question formats, upload sketches, tables and the use of video examples.</i></p> <p><i>Online, accessible, user friendly, good support, can do multiple things so not having to switch modes.</i></p> <p><i>Flexible assessment formats: Inspera supports a wide range of assessment formats, such as multiple-choice questions, essays, and more. This flexibility allows educators to create diverse and engaging assessments that align with their teaching objectives.</i></p>
Authenticity	5	<p><i>Inspira allows me to deliver practice quizzes prior to the in-class exam so students can get familiar with the platform and style of questions, while checking their own learning progress (formative); for the actual in-class exam, I can ask more dynamic and interactive questions than was possible on paper or with other platforms like Blackboard. It's also easier to meet authenticity by rotating questions or making</i></p>



Category	No of Responses	Quotation Examples
		<i>multiple configurations of the same question to randomise for the cohort.</i>
Academic Integrity	3	<i>I think its advantage is it can support multiple different assessment designs and types which allows more scope in designing authentic and engaging assessment. Other than a hand-written exam that is closed book and closely supervised, it is the only way to prevent cheating and that is only so for Inspera where the exam is sat on a computer at UQ rather than online (since I have experienced cheating using a phone by an offshore student who completed the exam on a computer). So Inspera is a very important tool for UQ to provide where the course coordinator is concerned with academic integrity and where the course coordinator is interested in marking the student's own work.</i>
Feedback	1	<i>Possibility of online exams without proctoring Inspera enables detailed feedback and analytics, allowing educators to provide personalized feedback to students and gain insights into their performance. This feedback can facilitate targeted interventions and help students improve their understanding of the subject matter.</i>
Useability Challenges	1	<i>A wider variety of question types allows greater creativity in assessment design. But the multiple functions for questions, sets, and tests that need to be exact and checked and tested and still end up having problems creates more work in development and stress in delivery with student connection or submission issues than is the extra question types is worth.</i>
No Benefit	1	<i>There was no benefit. It was a practical experiment that I will not use again. I felt Inspera to be highly limiting in the way one had to construct the assessment.</i>

Question 10 asked respondents 'What do you see as the main benefit for student learning?'. As with the analysis of Question 9, the responses have been analysed into abductive pedagogical categories to enable a clearer understanding of the data. Although the number of responses was smaller than the survey sample, they provide insights into academics perceived benefits for student learning. Often, the data was clustered around several parts of the assessment ecosystem and shown by the examples below:

*Table 5: The responses for 'Q10. What do you see as the main benefit for student learning?'*

Category	No of Responses	Quotation Examples
User Interface	9	<i>Inspira has a modern interface and works very well on nearly all the devices we encounter. It is easy to use from a student perspective and allows for more interesting questions than Blackboard does.</i>  <i>It seems to be relatively easy for the students to use.</i>
Authenticity	6	<i>A consistent platform across multiple UQ courses for online assessment. Personalized learning experience: With Inspera, educators can design assessments and learning activities that can be customized to individual student's needs.</i>
Engagement	6	<i>Greater opportunity for challenging, "authentic" assessment in both manually marked and automatically marked questions. Interactivity, engagement, dynamism - anything to improve how students learn!</i>
Feedback	3	<i>Easy to use, accessible, and more engaging than the traditional worksheet. Inspira provides timely feedback on assessments, often with automated grading features. Students can receive instant feedback on their performance, helping them identify areas of strength and areas that require improvement. This timely feedback promotes a more active and iterative learning process, allowing students to make adjustments and enhance their understanding.</i>

Category	No of Responses	Quotation Examples
Flexibility	2	<i>much better interface than BB, accessible, more varied question types</i>
Academic Integrity	1	<i>Where questions are well-designed and flow from a central scenario, the ability to use AI and googling is limited so students are forced to think for themselves and apply the knowledge that they have learnt.</i>
Equity & Fairness	1	<i>The main benefit in my classes is to give the majority of honest students some comfort that they are being examined fairly. Their sense of fairness is very important because the good students are not applying for sick/deferred exams nor are they seeking special exam conditions. To that extent Inspera has given them a measure of confidence that the University cares about those who take their studies seriously.</i>
Inclusion	1	<i>More diverse and authentic question types and accessibility</i>

Questions 13 and 13.1 are connected, with the former asking respondents to evaluate how worthwhile their assessment enhancement work was with Inspera, considering their reasons to use the platform. The latter question asks respondents to explain their rating.

The respondents were asked to record their choice in Question 13 using a scale of '1 (not at all)' to '5 (extremely worthwhile)'. '4 (very worthwhile)' was the highest category with 31 percent of respondents (n=15), followed closely by '5 (extremely worthwhile)' at 23 percent (n=11). At 19 percent was '3 (moderately worthwhile)' (n=9), at 14 percent was '2 (slightly worthwhile)' (n=7), and lastly '1 (not at all)' (n=6) at 12 percent. Whilst the number of respondents to this question was small compared to the survey sample, 73 percent considered the assessment improvement work as extremely or moderately worthwhile. Only 12 percent or six respondents stated it had not been worthwhile, which indicates strong support for the benefits of using the platform.

*Table 6: The responses for 'Q13. Considering your reasons for using Inspera, on a scale of 1 to 5, how worthwhile was your assessment enhancement work with Inspera?'*

Selected response	Number of responses	% of respondents
Extremely worthwhile	11	23%
Very worthwhile	15	31%
Moderately worthwhile	9	19%
Slightly worthwhile	7	14%
Not at all	6	12%

The qualitative answers in Question 13.1 as to the reason for respondents' choice in question 13 were coded in three categories, namely 'Positive' (n=23), 'Neutral' (n=9), and 'Negative' (n=9).

'Positive' (n=23) comments provided insights into a range of pedagogical reasons for using Inspera, such as taking advantage of the platform's capabilities to develop engaging and creative assessment tasks, which can challenge students' higher order thinking. One respondent summed up these elements by saying that:

*"Inspera's flexibility in supporting various assessment formats can enhance the quality and engagement of assessments. By incorporating interactive elements, multimedia-based questions, and simulations, educators can create assessments that challenge students' critical thinking skills, promote deeper understanding, and cater to diverse learning styles."*

Other benefits followed as students provided very positive feedback to these new assessment designs, and automatic and simpler marking procedures solved timing and practical challenges, as explained below:

*“With increased enrolments and very short turnaround times for marked assessments to be graded, along with increased student expectations around feedback, Inspera is an excellent mechanism to ensure both academic integrity as well as a more realistic way of completing an exam (i.e. using a keyboard rather than handwriting).”*

The ease of uploading and linking with Blackboard (BB) was mentioned as well as the choosing to build assessment in Inspera over BB quizzes.

Several responses mentioned that there was a significant learning curve at the start but the benefits that resulted outweighed the initial effort, as explained by two respondents:

*“All of the courses I teach into use Inspera for assessment, now the steep learning curve is over, it is enjoyable to write case-based assessment, use different question types and mark Inspera exams.”*

*“Using Inspera has really elevated how I deliver assessment to my students and has enhanced their opportunity to undertake formative assessment to better prepare them and get feedback throughout the course. Whilst I have saying workload is a factor, it has definitely made an improvement in that it has provided a base of material that I can now work from year-to-year to develop assessment... There was a lot of time upfront to transition to Inspera, but I have not looked back!”*

Support in those early days was important too:

*“The learning curve for me was steep, but I was well supported by the exams and Inspera team.”*

*“We were ‘volunteered’ as a school by our HOS to use Inspera, which many academics did reluctantly but in retrospect it was beneficial to have the Inspera team hold our hand while they had few participants and now we are ahead.”*

Yet, a few respondents in the Neutral (n=9) category found the significant time investment too high for the resulting benefits, or Inspera was not suitable for some courses:

*“While Inspera did allow for some increased flexibility in terms of exam question design and improved the overall presentation of the exam for students, the time investment required was too high for what proved to be a minimal gain. It is easier and more efficient to use a paper-based exam instead (at least for the purposes of my course).”*

Another respondent found that the marking options were not suitable:

*“The more structured report with a word limit reduced the marking effort. However, with the current marking options choice in Inspera, it has not reduced marking time.”*

In the Negative (n=9) category comments were made that related to times when the experience of using Inspera did not meet the usability expectations of the academic. For example:

*“I can do everything I needed in Blackboard, Inspera is yet another system to learn and it doesn’t integrate well with Blackboard or UQ Extend.”*

*“Too much training needs to happen for anyone to interact with the platform on a basic level.”*

*“Marking through Inspera is not ideal. Navigating to an individual student’s response for a single question is not intuitive, and there is no progress bar for how many student responses you have marked. I had multiple markers think they were finished with marking their question but had over 100 unmarked responses hidden somewhere in the system.”*

*“There were some limitations of the assessment such as limited feedback capabilities, students having issues when using a Mac, not being able to make adjustments to the assessment once it has been published.”*

## Course staff interviews and case studies

A total of six interviews have been conducted, with five interviews with individual course coordinators, and a group interview of four course coordinators from a school-based implementation. Course coordinators could volunteer themselves for an interview by filling in an optional section of the survey, with the knowledge that

the interview data could be used to develop case studies. The project team selected interviewees by comparing the respondents use of Inspera and how it related to the study's thematic and contextual indicators. The case studies also include an example of a 'whole of school' approach.

The use of case studies allows snapshots of current and past Inspera practice across a diversity of courses. Six cases were determined by the researchers to be ample for the scope of this project. The structure of the case studies is purposeful in meeting the research questions, through examination of the motivation for using Inspera, what changes were made and the impact of those changes across all cohorts involved, and finally insights into future plans and advise to others about using Inspera.

In addition to a preliminary analysis below, select case studies have been attached as Appendix A. The final report will have a more thorough analysis, together with all case studies attached as an appendix.

## Emerging themes

Preliminary analysis from the interview data and the development of the case studies is outlined below.

### Opportunities for assessment design

Course coordinators were attracted to using Inspera for numerous reasons, whether it was part of an overall course redesign, wanting to change the type of assessment used for pedagogical reasons, or addressing a logistical or administrative challenge, to name a few. The case studies exemplify the diversity of how Inspera is being used, such as improving examinations through moving from a MCQ based task to scenario-based assessment using video and a large bank of pictures.

The teaching staff found that the validity of the new assessment design enabled them to distinguish between students who knew the right answers and those who were guessing. Another sought to focus on challenging students' higher order thinking skills through the use of real-world genres that would be meaningful for the students. Inspera's functionality also enhanced academic integrity and assessment security by asking questions in different ways.

The individual Course Coordinators interviewed offered further insight into assessment redesign using the Inspera platform. How they responded was dependent on why they were redesigning their assessment. Their reasonings included the need to promote academic integrity, embedding authenticity, allowing assessment creativity and achieving specific learning objectives, as explained by a participant:

### Marking and grade distribution

It was reported that the marking process was much easier, even with large numbers of markers, or established routines of marking, such as each marker focuses on one question across the cohort of students. Marking digitally also removed the challenge of hardcopy papers going missing which had happened in the past, and as mentioned in the survey results, the teaching staff can read the students' 'writing'. Three interviewees reported that auto marking was reported as saving time and being cost-effective, although one interviewee reported that it takes considerable effort to set up. Another reported benefit in one case was a downward move in grade distribution in a course that previously had high cohorts of 6s and 7s.

### Student experience and engagement

The interviewees reported that feedback received from students is very positive around their experience with assessments run in Inspera. Instructions are clear and students know how to address the tasks. Although tasks may have challenging content, the way it is delivered assists students with thinking through their answers. Inspera also enabled learning to be scaffolded, making students feel more confident in approaching their assessment tasks.

### Support

The need for support is a consistent theme throughout the interviews, particularly the recognition of the ITaLI Digital Assessment (previously eAssessment) team's support in onboarding Inspera during the initial learning

curve, as mentioned by several survey respondents. Ongoing support was found in different ways, such as from colleagues, faculty learning designers and through self-directed learning. At a school level, the support of the school leadership was seen as a vital factor.

## Student focus groups

Students who had completed at least one assessment with Inspera in a course in Semester 2, 2022 or Semester 1, 2023 were invited to take part in an online focus group. A 60-minute focus group via Zoom was held in August 2023. Students who attended received a \$40 eGiftcard.

Students discussed the positive features of Inspera assessments, particularly in examination circumstances tended to focus on the technological affordances of the platform. Multiple students found typing more convenient and efficient, enabling them to edit and format their responses easily:

*"It's more stressful in a written exam, for example, because one thing I always think about in a written exam is, can the teacher like even understand my handwriting."*

Students also valued the interface, organisation and easy navigation opportunities of the platform:

*"I'm at a college where our wi-fi is not always given, like it drops and things like that, so can be quite stressful when you see that rolling wheel of death. And you see that you can't upload, and it's a bit stressful. So, I definitely think Inspera makes it much easier to just upload. Submit. And then that's it. You're done."*

*"I prefer the whole interface in Inspera and it's easier to track which questions are where. And the fact that each question is on different pages. It's harder to miss any questions compared to Blackboard, in my own opinion. And it takes less time typing than writing, and we can always edit things quicker and easier."*

One student mentioned that using Inspera for practical assessments in subjects like EARTH1000 was beneficial as the assessment design and implementation enabled students to complete the assessments even if they could not attend the physical practical sessions:

*"We used it for our weekly prac, so it would be it would open on the day of the prac, and then during the prac, which is a 3-hour class you could work through the questions, and the teachers help you and stuff, and you might have a problem and then you get help and there were real life samples to look at as well. And you could do it at home if you wanted to and then you'd have a whole week to submit it. And then at the end of the week the prac would close. It was just really convenient."*

Students also recognised the challenges associated with digital assessment, including concerns around what the platform might do to their laptop and the technical issues that they might experience:

*"To be totally honest when we first were told we were going to use Inspera for our mid Sem, I wasn't super happy with the idea of like the software itself just because it has the ability to access your microphone and your camera and lockdown your computer."*

*"And even though I've had technical difficulties (the red screen) there's always people to help us, and we can also have extra time if we really experience this kind of difficulties."*

A second student focus group is planned, and its findings will be added here as part of the final report.

## Grades analysis

Ten courses that undertook significant assessment redesign were examined for changes in grades. The rationale was to find the impact of implementing Inspera and changes to course grades. No general trends or casual associations could be identified. A sample of this analysis for 2 courses is presented below.

Table 7: DENT1020 (Assessment redesign in Semester 1, 2022)

Grade	2018	2019	2020	2021	2022	Average
2	1.1%	0.0%	0.0%	0.0%	0.0%	0.2%
3	0.0%	2.6%	0.0%	0.0%	1.4%	0.8%
4	5.4%	2.6%	0.0%	2.7%	2.7%	2.7%
5	22.8%	26.9%	1.3%	1.4%	30.1%	16.5%



6	53.3%	60.3%	5.1%	66.2%	60.3%	49.0%
7	17.4%	7.7%	93.6%	29.7%	5.5%	30.8%
Average	5.79	5.68	6.92	6.23	5.66	
n	92	78	78	74	73	

Final grade outcomes were reviewed for DENT1020 over the last 5 years. In this course there were more than 90% of students awarded grades of 6 and 7 in 2020 and 2021 after the introduction of Inspira the proportion of grades 6 and 7 lowered to closer to 65% nearer to 2018 and 2019 distributions.

*Table 8: EXMD2362 (Assessment redesign in Semester 1, 2022)*

Grade	2018	2019	2020	2021	2022	Average
1	0.0%	0.0%	1.9%	2.9%	0.0%	1.0%
2	1.4%	0.0%	0.0%	0.0%	0.8%	0.5%
3	0.0%	2.4%	1.9%	0.0%	0.0%	0.9%
4	25.4%	19.4%	24.1%	22.5%	19.5%	22.2%
5	31.0%	43.5%	31.5%	33.3%	39.0%	35.7%
6	38.0%	28.2%	28.7%	36.3%	33.9%	33.0%
7	4.2%	6.5%	12.0%	4.9%	5.9%	6.7%
Average	4.87	4.72	4.33	4.77	4.78	
n	71	124	108	102	118	

Final grade outcomes were reviewed for EXMD2363 over the last 5 years. In this course the grades appear relatively consistent over the 5 years with a slight increase in grades of 7 and reduction in average grade in 2020. There appears to be no change associated with the introduction of Inspira Assessment in 2022.

## Appendix A: Sample Case Studies

### 1. Academic Integrity and Student Engagement

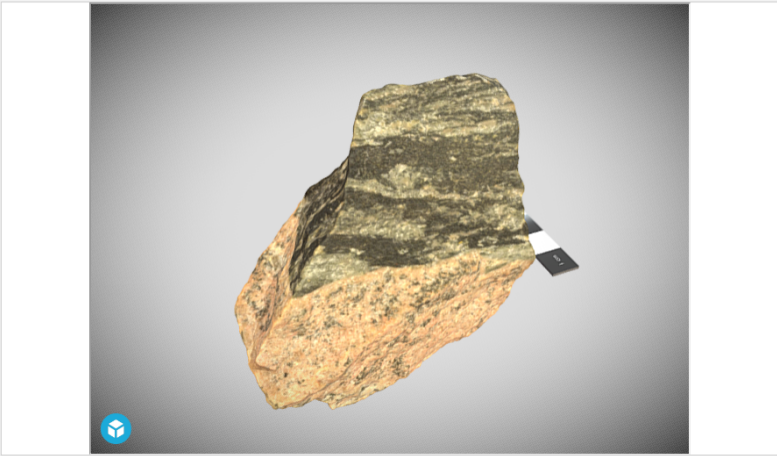
Associate Professor Gilbert Price, EARTH1000

#### Why did you use Inspera?

Inspira was adopted to enhance academic security and prevent unauthorised distribution. Originally, the course involved hands-on activities with physical specimens, with students submitting hardcopy reports. Pre-Covid, course materials were digitised, allowing online access to visualisations and specimens on a website, but the report was downloadable via Blackboard. As a result, there was increased intellectual property loss and students selling or trading resources on file-sharing platforms, such as CourseHero and Studocu.

Figure 2: Example of an interactive 3D visualisation in Inspera

**4 Metamorphic rocks**



Sometime around 220–240 Ma, a magma intruded into Brisbane's metamorphic rocks, cooling to become an igneous rock. Examine the 3D specimen above. Note that there are two rock types present.

**Answer the following questions by dragging the relevant words from the list (below the questions) into the blanks.**  
*Scroll down to see the full list if required.*  
**Note:** You will receive part marks for each correct response.

#### What did you do?

My teaching partner heard about Inspera at a workshop, and we agreed to use it for the integration of models and worksheets. Despite a slightly tricky setup, Inspera's integration has been seamless. I have received substantial support in using the system effectively, particularly from Arti Singh, learning technologist in the faculty.

#### What impacts were there?

The incidents of academic misconduct through file-sharing sites dried up as we restrict students from downloading or printing their completed and marked worksheets. In the physical class, students have 2-3 hours with the objects and then answer the questions within the same timeframe. With Inspera they can engage with the materials for several days before completing the assessments, improving their understanding. In two years of using Inspera, not a single student has expressed any negative feedback.

## Advice for others/where do you want to go from here with Inspera?

In my regular Mentimeter student check-ins, they praise Inspera, not about the content, but its superior delivery, accessibility and ease of use compared to other classes.

This positive experience for students and how they have responded is why I keep using the platform. This benefit outweighs the time it takes for me to transfer material into Inspera and remembering how to allocate marking, for example. Everything is harder and longer from my end, but it is not at the tutors' or the students' ends. I would absolutely struggle if I didn't have that just-in-time one-on-one support, and I am happy to share with others what I do in Inspera.

## 2. School of Pharmacy case study

Associate Professor Marie-Odile Parat, Chief Examiner  
Dr. Adam La Craze, Dr. Peter Moyle, Mr Brett Simmonds, Course Coordinators

### Why did you use Inspera?

In 2020, COVID with the associated lockdowns and shift towards remote teaching made traditional examinations very difficult. Alongside this, the school had been notified that central support for scanned, auto-marked exams was discontinuing. This led early adopters to pilot Inspera with positive experiences.

Subsequently, and with recognition that digital assessment was the future path for UQ, a need to invigilate assessment, support being available, and alignment with identified school assessment priorities, the School of Pharmacy opted to adopt Inspera as a school. Academics were encouraged but not required to use Inspera for assessment in their courses and school assessment processes were adapted to incorporate the Inspera platform.

For staff across the school Inspera provided leadership opportunities, secure replacements for auto-marked exams, and opportunities to enhance assessment tasks. One of the interviewees also commented that:

*"I think pharmacy has always been an early adopter of technology to be honest. So, I think as a profession, we do that."*

### What did you do?

Course level assessment, mainly examinations were transitioned to Inspera, across 21 courses with offerings over 7 semesters, making use of the digital capabilities and security features of digital examinations. Progress is ongoing to enhance the interactivity and authenticity of assessment to match the rich online learning resources used across the school.

Staff engaged in the change academy and available Digital Assessment team's support to consider assessment transformation, and learn the possibilities of assessment with Inspera. Staff have continued to explore Inspera capabilities as their experience with the system has increased and new features have been released.

Systems and support within the school were adapted with administrative support, updated exam processes and leadership support for using Inspera.

### What impacts were there?

As a school *"our undergraduate program is now on UQ Extend, so I think it would be inconceivable to have paper-based exam. I mean, we have to have an exam platform that matches the visually enriched experience that we give them for their learning. The second part is it (Inspera) being online makes a big difference for our procedures."* The school-based approach supported collaboration and learning for staff: *"I've been able to see what other people have been able to do and to incorporate those ideas."*

Staff appreciated the range of support available, from assessment design to technical advice, and guidance to help students. While some staff wanted to shift current assessment into a digital platform with minimal change to the assessment and struggled with the change academy approach, most appreciated the support focused on assessment transformation as it integrated with school priorities.



Some staff experienced a steep learning curve with Inspira. *“I found it actually quite hard to get the head into it, and to write questions with it and get things going.”* However, with subsequent exams they found Inspira much easier and began to explore more features including the analysis of questions and understand some of the design principles behind Inspira which proved to be quite helpful for designing further exams and assessment.

A range of functionality in Inspira enabled improved assessment practices. Inspira facilitated case-based questions that were easier for students to navigate and easier for staff to mark. The ease of marking short answer questions in Inspira enabled a shift to more open questions. *“I had a variety of questions, plus short answer questions. I was concerned about the marking of those short answer questions, and how hard or easy that would be. But I found it really easy, actually.”*

Pharmacy students have said little about Inspira. For some courses students reported hating online invigilation, but they did not mind in-person invigilation, and specifically taking their exam with their own laptop. *“Students will let you know very quickly, particularly if there’s any issues around assessment, we are very happy to take no news.”*

## Advice for others/where do you want to go from here with Inspira?

Dedicated time-bound support that aligned with school priorities and approaches was critical for the successes in the school. *“I think for me, what has been particularly amazing is the amount of support that we’ve had... has really helped everyone transition.”* This success would not have been possible without the support of school leadership, as incorporating Inspira into school processes removed many barriers and supported academics to adopt Inspira and enhanced assessment practices.

While there may be possibilities to transform assessment more significantly. For example:

*“Personally, I think it would be best if the students were exposed to only one sort of exam platform, and that there was consistency there.”*

*“There’s probably some innovative ways we can do things throughout the program with the right kind of tools.”*

Refining and improving assessment across course offerings has been important for staff across the school to identify great approaches and improve assessment tasks with ongoing support and collaboration with colleagues. Academics across the school continue to progressively enhance their assessment practices:

*“I see everybody’s questions in the review process, and what I can see is that we’re making more and more use of the special features of Inspira. Initially we just transferred questions that we already had from either paper or Blackboard. But now we’re exploring, and we do talk to one another, and we see someone else has done a question we didn’t know was possible. And then we can apply that to our own set. So, I think progress is going to keep going on”.*

## Appendix B: Literature Review

The evaluation will use a constructivist paradigm, seeking to understand participants’ perspectives and experiences within a contextual setting. The three guiding principles; relevance, adaptability and trustworthiness outlined in the [UQ Assessment Action Plan 2022-2027](#) provide a foundation for the work, enhanced by the assessment indicators from Huber et al. 2023. The research team has adapted these indicators to the project’s context, currently including ‘Authenticity’, ‘Flexibility’, ‘Resilience’, ‘Inclusion’, ‘Academic Integrity/Assessment security’, ‘Equity/Fairness’. The contextual factors influencing these indicators include ‘Scalability’ and ‘Resourcing’.

The concept of quality assessment is complex with contested priorities (Kibble, 2017; Williams, 2014; Boud et al., 2010). UQ identifies 8 principles for “high quality, authentic and engaging assessment practices” ([PPL3.10.02](#)). Some of the recurring terms are used through literature to describe quality assessment

include reliable (Towns, 2014; Kible, 2017); reproducible (Lucander & Christersson, 2020); valid (Sadler 2005); transparent (Lucander & Christersson, 2020); and authentic (Gulikers, et al., 2004).

Assessment is a critical and central feature of Australian Higher Education with regular calls for renewal (Boud et al., 2010; Bearman, et al., 2020; Gneil, 2023). Recommendations for enhancing assessment include alignment between the learning outcomes, the teaching and learning activities, and the assessment (Wang, et.al., 2013); appropriate task-specific criteria and standards (Sadler, 2005); moderation and calibration (Bloaxham & Boyd, 2007; Sadler 2017); security (Dawson, 2020); timely and effective feedback (Ryan et.al., 2021; Winstone & Carless, 2019); inclusion (Tai et al., 2023); opportunities for students to assess their own work (Yan et.al., 2023) and student partnerships (Bovill, et al., 2021).

Henderson (2017) highlighted the differences between the possibilities of technology and most students' experiences of technologies in Higher Education. Sweeney et.al (2017) found where technology is adopted it is often used to replicate existing assessment practices rather than embracing transformative practices. Some of the perceived barriers to technology adoption include, insufficient time and increased workload, lack of confidence, inadequate technical skills, support, and training and inadequate pedagogical skills, support, and training (Curti & Mena 2020; Mercader & Gairin 2020; Teo 2019). An educators' underlying personal beliefs and attitudes concerning teaching, learning and technology are also obstacles that impede technology adoption (Celik & Yesilyurt, 2013). Fluck (2019) found these issues combining with tensions around administrative challenges of examinations when implementing eExams.

To explore the pedagogical implementation of Inpera, a case study methodology is considered appropriate for this pedagogical evaluation as it captures the richness of multiple views of reality and the complex experience and perspectives of different users (Patton, 2002). Categorised assessment approaches and activities enabled by the Inpera platform at UQ will be seen as a single case, with a range of courses providing a breadth of different contexts, assessment needs and student cohorts, as embedded units within the case. This structure allows analysis within each unit, between different units and across all sub-units, with these data-sets situated into the wider pedagogical evaluation context (Baxter & Jack, 2008).

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