



inspera

A Practical Guide to Digital Assessment

Everything You Need to Share
with Your Decision Makers

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Introduction

As digital tools become the default across both education and the wider world, using the right digital tools for the right purpose has become increasingly important. A dedicated digital assessment ecosystem allows you to assess with integrity across all assessment formats, in a secure and scalable manner.

Asking yourself the right questions as you further digitize your institution is crucial to selecting the right ecosystem. This ebook is designed to help you make those decisions by asking the right questions, and answering them too.

The experienced team at Inspera consists of education and technology professionals, who are here to help you consider the why - as well as the how - so you can make a positive impact to your assessments by putting pedagogy first and using technology to enable change.



What is a Digital Assessment Ecosystem?

What is Digital Assessment?

Digital assessment has existed in various forms for decades. For instance, emailing a document to an academic for feedback is one form of digital assessment. But in today's learning environment we are more likely to equate it to large cohorts taking online exams remotely around the world, uploading coursework to the LMS or taking an in-class quiz. Not only do these assessment experiences do away with paper testing, they also allow for flexibility over the time and date of the assessment. Of course, they can also completely eliminate the need to travel to a single location.

What is a Digital Assessment Ecosystem?

A dedicated digital assessment ecosystem has multiple functionalities and benefits. Namely, it brings the ability to administer the authoring, delivery, grading, feedback and reporting of all assessment types into a single ecosystem. This is comparable to the way that learning management systems replaced paper and then CDs of electronic files to create a cohesive structure for the delivery of course content to students.

What's the Advantage of Using a Dedicated Digital Assessment Ecosystem Over an LMS?

There are significant differences between an LMS and a dedicated digital assessment ecosystem when it comes to assessing your candidates. A digital assessment platform is a secure, robust at scale and flexible way of delivering assessments in many formats. For example, these can be delivered online or onsite, as formative or summative assessments, and be open book or closed book.



Does a Digital Assessment Ecosystem Replace My LMS?

A dedicated digital assessment ecosystem can replace your LMS for assessments. One of the many benefits of digital assessment ecosystems is their ability to deliver a wide range of assessment types including exams, coursework, tests, quizzes, take-home assignments and portfolios. Having all of these offerings in one place allows you to enhance and innovate the way you assess your students and give them rich and even, instant feedback.

While your LMS continues to be the home of learning and teaching content, we recommend having a dedicated assessment platform working alongside it. You can ensure that data seamlessly flows between the two using an LTI or API.

Why is Inspera the Right Ecosystem for Me?

Inspira is an ecosystem of digital assessment products that allows you to deliver assessments with integrity. We enable institutions to choose the right level of integrity combined with our flexible assessment capabilities to deliver assessments in your context. Our integrity tools include:

- ▶ A secure browser
- ▶ Originality checking in multiple languages
- ▶ Cross language and optional AI detection
- ▶ Live and record & review remote proctoring.

How Secure and Scalable is Inspera?

As the leading global digital assessment ecosystem, we know how critical the assessment process is for both students and faculty. Our cloud-based platform is known around the globe for its robustness and reliability, even when used at scale with thousands of simultaneous assessments. We develop our ecosystem based on proven yet state-of-the-art technologies. This provides you with a stable and worry-free ecosystem for allowing you to focus on innovating your assessment environment, offering secure digital and online exams, coursework, tests, quizzes, take-home assignments and portfolios, and providing the best education to your students.

Inspira can operate standalone or integrate seamlessly with your LMS, Student Information System, and other learning, teaching and digital assessment tools.

Which Assessments Can I Deliver in Inspera?

A dedicated digital assessment ecosystem gives you a rich palette of question types, delivery modes, resources and integrity measures that allow you to author, deliver, grade and feedback and analyze:

- ▶ Formative, summative and diagnostic assessments that span authentic exams, coursework, tests, quizzes, take-home assignments and portfolios
- ▶ Open or closed book assessments
- ▶ In-person or remote delivery
- ▶ Proctored and non-proctored exams
- ▶ Originality checking tools so that you can distinguish between properly referenced material and potential plagiarism.

Does a Candidate Need an Internet Connection at All Times to Use Inspera?

Inspira is designed to work offline. Candidates need an internet connection at the point they start an assessment but can then work offline if necessary right up until the point of submission. They either submit online or can download an encrypted file to be reuploaded to Inspira at a later date. Where candidates do have a continuous internet connection, their submission is periodically saved directly to the cloud.

How Does Inspira Cater for Students with Accessibility Needs?

Inspira is committed to not discriminating by taking part in the social responsibility of making the web accessible for everyone. We strive to ensure that our solutions and services can be used by anyone with disabilities by reference to WCAG and ADA standards.

We offer built-in support options for candidates with learning support needs. Through the candidate's settings panel, assessment content (including font) in Inspira can be magnified, both by using predefined enlargement sizes, but also by using zoom functions on the web browser, keyboard/mouse shortcuts or accessibility tools. Candidates can also invert the color scheme for better contrast. We have a built-in text-to-speech tool. It is available in open and lock down versions of assessments. To operate, test takers simply highlight text and then press play to hear it read out by their speakers or headphones. We also support external applications including screen readers and speech to text applications.

What Can I Do in a Digital Assessment Ecosystem?

A dedicated digital assessment ecosystem opens up a greater world of possibilities in how you assess candidates compared to existing digital tools and paper. You can deliver assessments securely and at scale without affecting the candidate experience or other learners using learning and teaching platforms.

A Single Interface with Many Possibilities

Instead of candidates, administrators and faculty reaching for different tools, each with their own login, workflows and interfaces, all those involved in assessment can use a joined up single interface for flexible assessments with integrity.

What is 'Flexible Assessment with Integrity'?

Inspira allows you to create a question and then decide how you deliver it. This decoupling of assessment content from delivery at the authoring stage gives you the flexibility to create assessments in your specific context which may mean differing delivery, grading and feedback settings by cohort or individual student. You retain the ability to make those decisions at the delivery stage rather than the author being constrained or feeling forced into a particular workflow at the outset. This enables them to concentrate on the task at hand, that of authoring the right question.



Integrity is preserved by being able to choose from a range of measures within the ecosystem to ensure that all candidates are subject to the same conditions when they take their assessment. This level playing field lets your institution and importantly too, your candidates have confidence in the assessments they take. This includes proctoring and originality capabilities with AI that give you the right information to make the right call. We strongly believe that judgment calls on academic matters should be made by humans not machines. But those humans can be assisted by the right digital capabilities to both make those calls at scale, speed and with evidence to support their decision.

Can Inspera be Used for Exams, Coursework, Tests, Quizzes, Take-Home Assignments and Portfolios?

Yes. The versatility of Inspera is such that you can create, deliver, grade, feedback and analyze data from any type of assessment. We have a range of automatically and manually marked questions including multiple choice and response questions with complex scoring, essay questions, document upload and oral assessment functionality.

Our numerical simulation question type allows you to create auto-marked math questions with programmed parameterization and response outcomes to achieve randomization.

All question types can be combined with:

1. Randomisation and polling allowing you to serve up an assessment in a different order or with different questions to each candidate.
2. Multiple attempts capabilities that allow candidates to take an assessments repeatedly up to the limit you specify.
3. Assessment paths capabilities that allow you to combine several assessments, each with their own delivery settings and time windows within a greater time window, to be graded as a whole.



Can Inspera be Used for Formative, Summative and Diagnostic Assessments?

Yes. Inspera is capable of delivering all three.

Formative Assessments

An assessment can be set to allow candidates multiple attempts to a number you specify. The candidate is in control of when and how many they take within an assessment window. You can choose to display automated feedback at the end of each submission so that they can use their assessment for learning and improve.

Summative Assessments

For summative courseworks, take-home assignments, portfolios or other open-book assessments, Inspera's many question types can be used to deliver an assessment, or a candidate can upload documents created in another application.

For high-stakes summative exams, Inspera provides the capabilities for you to deliver them with the relevant level of integrity. You can secure their computer so it only allows them to access their assessment, or provide specific resources of your choosing.

Where it's the right choice for an assessment, we have live and recorded proctoring capabilities that include your choice of screen, microphone and camera recording for real-time and post submission review.

For both exams and coursework, we also have originality capabilities so that you can discern between properly referenced material and plagiarism in multiple languages, with or without an AI checker.

Diagnostic Assessments

Deliver diagnostic assessments using automated or manually marked questions.



“ The driver comes from enabling our staff to innovate with assessment. With a digital assessment platform, you can really elevate your assessment and make it a bit more engaging. ”

Steve Hoole
University of Surrey



Can I Create Authentic Assessments in Inspera?

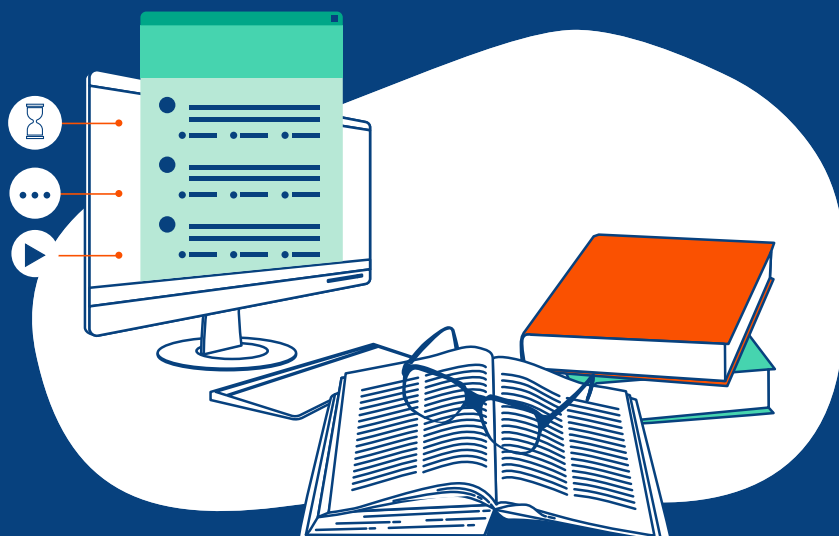
Inspira is the ideal place to create authentic assessments. Its capabilities allow for the use of real-world applications, multimedia, and provide documents, all in a secure environment. By combining this functionality with integrity tools you can innovate and improve your assessments so that they are authentic, without compromising on how they are delivered.

Candidates Can Use Their Own Device or One Owned by the Institution.

You have a choice of allowing candidates to bring their own device or use one owned by your institution, or a combination. Whichever option you decide, the user experience is the same so that there is parity between candidates.

Can I Customize Timings for Candidates in Inspera?

Yes you can. Extra time for candidates can be added before and during an assessment with ease. This allows you to ensure those who require extra time are catered for within the same assessment while not affecting others. You can also customize the start and end time for individual candidates.



How Do I Ensure That My Assessments Have Integrity in Inspera?

Inspira has a range of measures that allow you to deliver assessments with integrity:



Secure Environment

You can secure the browser on which an assessment is taken ensuring that only the assessment can be accessed. Additionally, if you wish, resources you choose (PDFs and specific URLs) can be accessed within the secure environment.



Originality Checking

Inspira Originality, our own originality checker, works in multiple languages. It has cross-language checking capabilities and optional AI detection to allow you to distinguish between properly referenced material and plagiarism.



Proctoring

Choose the right combination of live or recorded with proctors from your staff or ours. Regardless, you can conduct post exam reviews so that you make the final call as to whether a candidate has conducted themselves within your academic regulations.



Randomization and Polling

You can randomize questions or poll, ie randomly pick **X** questions from a larger **Y** set.



What Are the Grading and Feedback Capabilities in Inspera?

Candidates in Inspera are identified using a single identifier chosen by you. This allows you to choose whether assessments are marked anonymously or not. Inspera supports single marking, double blind marking, moderated marking and shared marking. Graders have a suite of tools to allow them to quickly and efficiently grade submissions and provide rich feedback to candidates. Planners can easily put graders into committees and assign specific questions to them. Your graders can log in to the ecosystem and just see the submissions they need to grade, removing confusion about what is in their marking allocation and giving them real time visibility of how much of the task they have completed.

The grading tool is optimized for efficiency and supports:



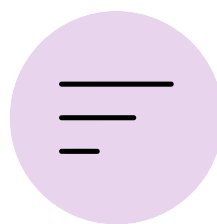
Horizontal and vertical grading



Auto-advance to next task, or candidate during the marking process



Flag candidates and tasks for later follow up



Predefined quick-filters to help Markers focus on the right tasks



Custom lists and filters that allow each Marker to optimize their own workflow



Flexible layout for the Marker to focus on the content of interest

Automatically Marked Questions

Post submission, automatically marked questions will be instantly graded but you retain full control to check and override marks awarded.

Manually Marked Questions

Authors decide how a question is marked when it's written. A numeric scale allows you to select an integer or decimal from 0 to the maximum number of marks available. Criteria-based marking lets you click on criteria that have a preset number of marks available which are automatically added on selection.

Inspira also has the capability to let you mark using reusable rubrics. You can choose the number of criteria, the levels of attainment and whether they are represented by fixed value, a range (both numeric and percentage) or are qualitative only.

Sharing high quality meaningful feedback with candidates along with their marks and grade is simple in Inspira, with several methods available to graders to suit their assessments. At the setup stage, you can decide what sort of feedback a candidate receives, ranging from nothing to all options and any combination of them.

Predefined Feedback

All questions can have predefined feedback authored at the point of their creation. This is particularly useful in a formative context where you want candidates to view their submission instantly and learn from their performance.

Comments and Highlighting

Graders can highlight and comment on submissions and leave bespoke written feedback.

Explanations

Overall assessment feedback can be released to candidates. This can be individual to a candidate and there's also an option to add general feedback to all candidates. Here, graders are able to type and record audio clips within Inspira.

Candidate Report

To allow candidates to see all of their feedback in one place, you can use our rich candidate report so that grades, marks, comments and explanations (including audio clips) all appear in one easy to read report.

Effective Digitization in Assessment: A Guide to Defining Your Institutional Objectives

Whether your assessments are already digital or a mix of digital and paper based, the effective digitization of your assessments involves careful consideration of your institutional objectives to ensure stakeholder alignment, the right capabilities from a digital assessment ecosystem and implementation at the right speed.

Ultimately, this is about digital enablement and putting pedagogy before technology. The technology you choose should enable you to assess relevant to your context and provide you with room to innovate.

How Does Continued Digitization Fit with Your Assessment Strategy?

If you have already digitized assessments, then you need to consider whether what you have gives you the flexibility to innovate and adapt as assessments become more authentic. For example, a closed book exam that has been turned into an open book coursework may no longer be the right option. That decision may have been driven by the technology available at the time. The ability to have a secure environment, remotely, presents several options.

Firstly, you can turn this back into an exam if that is the right method of assessment. Alternatively, you can make the coursework more authentic by implementing a greater range of question types, the addition of multimedia and resources, or part of a series of tasks grouped together in an assessment path.

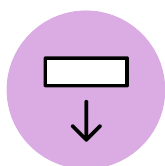
If you are moving from paper to digital, there are two potential routes to digitization: you can either digitize what you have now or amend your strategy and assessment instruments to account for digitization.

If you choose the former, you won't need to change your strategy and your assessments will remain familiar to your stakeholders. However, this option is likely to result in more system requirements, training and support.

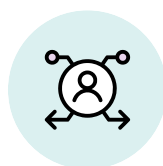
On the other hand, although amending your strategy for digitization may require more time and effort, you're likely to see additional benefits. Perhaps most significantly, you will be able to harmonize assessment instruments across the institution and increase efficiency. Plus, you're likely to see quicker adoption because you can streamline training and support

What Do You Hope to Achieve with Continued Digitization?

Once you've decided on the best route for your institution, it's time to consider the benefits you'd like to see from a dedicated assessment ecosystem. Some examples include:



Reducing the cost and administration associated with printing, delivery and collecting paper exams.



Providing a more user-friendly candidate experience.



Being able to create digital assessments with question types that cater for all disciplines.



Speeding up the marking process.



Creating a more standardized assessment process across your institution.



Ensuring a balance between security and privacy for candidates



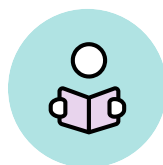
Reducing the institution's carbon footprint.



Adding digital resilience to your assessment process.



Making assessment more accessible for all students.



Delivering authentic assessments that better reflect the tasks that students will be required to complete in the workplace.

What Should be Digitized?

While considering the benefits of digital assessment, it's important to consider a realistic scope for your ecosystem. Although your end goal may be to digitize all of your assessments, you may find that some assessments can't be digitized immediately or shouldn't be because the inherent assessment should be redesigned.

It's also likely that there will be staff who don't want to move to digital assessment because they are accustomed to paper assessments or recent changes to digital. It's therefore important to think about how you make changes and what should be exempt or part of a second phase of continued digitization because of significant impracticality or technical impossibility.

To help you with these critical questions, we have a professional services team who can help with digitizing your paper-based assessments, enhancing existing digital assessments and innovating beyond your current assessments.

To help you make the distinction between what should be digitized and what shouldn't - or perhaps shouldn't immediately - be digitized, you could consider the following:



1. For already digital assessments:

Have they been digitized based on the requirements of the educator and candidate, or have they been made to fit limited technologies available?



2. For paper-based assessments:

Could and should they be replicated digitally without amendment, or do digital capabilities allow for innovation and enhancement?



3. For all assessments:

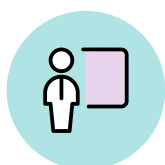
Given flexible assessment with integrity, what are the new possibilities available to educators to assess?

How to Review Your Institution's Current Assessment Strategy

Implementing a dedicated digital assessment ecosystem brings with it opportunities for streamlining internal processes, modernizing practices and improving sustainability. Depending on how far you already are with digitization as an institution, the level of resource required to support educators, administrators and candidates will differ.

Assemble the Right Group

Effective assessment change through using the right digital capabilities can be driven by assembling the right group of people to review your strategy and how you implement it:



Educators

The cognate experts in each field know how their candidates are taught and how they are best assessed.



Learning and Teaching Specialists

For wider academic input on assessment best practice.



Centralized and Local Assessment Officers

Their expertise in how assessments are administered plus their insight into how processes can be improved is invaluable.



IT Professionals

To ensure that a dedicated digital assessment ecosystem sits within the wider institutional set of tools so that data flows are properly and efficiently managed



Accessibility Professionals

To ensure that all candidates are catered for in the right way.



Senior Leadership

So that decisions are taken within the wider institutional strategies.



Learning Technologists

Their combination of learning and teaching and technology knowledge assists with the art of the possible, both in terms of suggesting potential ways of using technology and validating ideas generated by others.

Effective change is driven by the combination of these stakeholders pooling their knowledge, skill and experience to enhance assessment across an institution.

What You Assess and How

An effective review of your assessments consists of considering how you conduct formative and summative assessments today. Take each and break them down into the various modes of assessment within each, i.e. exams, coursework, tests, quizzes, take-home assignments and portfolios.

Next consider the extent to which they are digitized now, or are still on paper. What would you ideally like to achieve with each? How could they be improved? The potential improvements are:

- ▶ 1. Authenticity.
- ▶ 2. Level and speed of feedback.
- ▶ 3. Richness of feedback including audio as well as written feedback.
- ▶ 4. Integrity measures.
- ▶ 5. Assessment design unconstrained by existing technologies.



Consider the phasing of how you continue your digitization journey. You may want to start by improving summative assessments so that educators have greater flexibility but with a suite of integrity measures. Or you might want to pick a specific assessment type such as exams in both a formative and summative context to improve the level of availability and feedback open to candidates.

What Are the Metrics to Consider When Reviewing Your Current Assessments?

The intricate interplay between technology, student experience, pedagogy, and the evolving needs of educational institutions also requires special consideration to be given to metrics. When reviewing your assessment strategy, you should consider metrics such as:



Ease of administrative tasks



Candidate experience



Ease of assessment creation



Ease of marking



Academic integrity



Environmental sustainability



Accessibility



Digital resilience



Digital Literacy among all stakeholders; faculty, staff and students



Authentic or varied assessment types

Mapping these against current technologies versus what is possible with greater flexibility will demonstrate both where you can innovate alongside what you need to do as an institution to unlock the greatest benefit from new capabilities.

What's Next?

From here, you have the right information to decide how to implement a flexible digital assessment ecosystem with integrity measures. Depending on your context, there are several routes you can take, but these are three of the most popular:

- ▶ **Piloting in a specific school or programme** - This allows you to conduct a small scale trial within a specific context and limit the number of people involved in change to a manageable level
- ▶ **Piloting a specific assessment type, eg summative exams** - This requires a larger number of people but will give you a greater data set to make future decisions
- ▶ **Institutional wide change** - This may be after a pilot or you may have the right data and resources to make the change now.

At Inspera, we have worked with institutions across the globe who have taken these and other routes to implementation. Flexible assessment with integrity can be achieved in many different ways and we can help you create an optimized route to success. Check out the customer stories on our website to find out more about their journeys.



How to Get Started with Digital Assessment

Assessments are business-critical for educational institutions, and it is with good reason that adopting new modes of testing needs careful consideration. Digital assessment can strengthen the unique position educational institutions hold by providing a secure, scalable, and reliable ecosystem for applying knowledge and assessing students' abilities.

While digital assessment can be complex, a good start is to focus on these 7 areas. We can help you answer these questions and create the right implementation plan.

Why Digital?

Identify what you hope to achieve by continuing to digitize your assessments. Defining the project background is integral in both aligning the implementation strategy and gaining support from your stakeholders. Benchmarking the benefits and readiness of the organization to change will help consider the pace and extent you change your assessments each year.

Research

Visit different vendors' websites, subscribe to demos and webinars, and compare capabilities, design, and customer cases, before you start sketching your requirements. Your needs will be specific to your institution but there are some key considerations you will likely share.

Make sure you also contact institutions similar to your own and ask them about how they have handled the transition to online assessment. Crucially, consider the

pace at which you are thinking about change. Which capabilities do you need at the outset, versus which will you use a year or two down the line. What's the vision of the vendors you are considering? Does it match where you want your digital assessments to go?

Framework Agreements

Investigate if a framework agreement is available. A tendering process can be complicated and could cut into your resources. Framework agreements save you the time and cost of a sourcing process, as they remove the need to renegotiate standard terms and conditions.



Piloting

Consider running a pilot project. A pilot project helps to trial the different processes in a controlled and managed environment, and is a good way to reduce risks. Use the lessons learned from these early-stage trials to inform and direct the strategy for wider adoption of digital assessments.

Devices

Consider your device strategy. Should your institution adopt a Bring Your Own Device (BYOD) policy or invest in computer labs? The devices students will use to sit their assessments should be established early on. With an increase in remote exams, BYOD holds many advantages over onsite setups.

Stakeholder Involvement

Involve all stakeholders from the start. Bringing the right people together right from the beginning of your digital assessment project may be crucial to your success. Communicating the benefits and implications of digital assessments is important when setting up your team.

Change Management

Implementing digital assessment is essentially about people, not technology. Your digital assessment project should be recognised as a business-critical change management process. Make sure that the project is anchored within the management of your organization. Engage your stakeholders and motivate them through change with ongoing communication, well-planned awareness activities, and regular reporting.



“

The deans have been eager, as they can see the benefits. And once the users have transitioned to digital examination, they would not go back to the old system – there is no question of that. The use of digital examinations has risen steadily.

”

The University of Oslo



**UNIVERSITY
OF OSLO**

Using International Standards to Seamlessly Integrate Inspera into Your Institution

The Inspera ecosystem is designed to work seamlessly with your existing technology using internationally recognized standards.

These standards allow for the control and flow of information, data and platform usability between technology solutions. This creates a more cohesive experience for users, while supporting the institution's technology goals and objectives. By including these in our solutions, we ensure as smooth an integration process as possible, allowing for customized requirements.

Technology Standards

Identity and Access Management

Single Sign-On (SSO) provides many benefits, not least that after users sign in to one of the services at an institution, they are automatically authenticated into any other service that uses SSO. The user is only required to remember one set of credentials.

In general, adding support for a new identity provider only requires minor work, assuming one of the following standards is supported: SAML 2 or OAuth OpenId Connect.

For most of these integrations, a Privacy by design scheme for Inspera Assessment can be used to de-identify personal data. In this way, it is impossible to connect personal data to an identifiable learner without the use of additional information stored outside of our assessment ecosystem.

Student Information Systems

Inspera supports integration with Student Information Systems (SIS) to offer synchronization from the SIS to retrieve information about users, roles, groups and learner's exam enrolments, and in some cases also transferring results back to the SIS after marking and/or grading has been completed. Integrations to a SIS greatly relieve the administrative work involved in managing assessments and reduce risks of errors in the processing of student and assessment data. We have both built in support for certain SISs and bespoke integrations can also be supported through the extensive Inspera APIs.

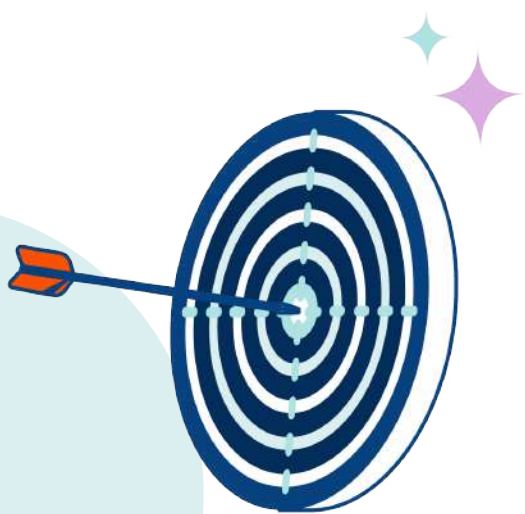


Existing Questions

Inspira uses IMS Question and Test Interoperability Specification (QTI) to allow you to import questions from other assessment platforms and export to them. This means years of good practice can be retained and improved upon instead of starting from scratch.

Learning Tools Interoperability (LTI)

Inspira can be launched as a tool from an LMS using LTI, allowing candidates to be assessed directly through your existing platforms. Student data flows from the LMS to Inspira and grades can be passed back.



Open APIs

For more complex integrations the preferred way to integrate is via the Inspira Assessment open APIs. Inspira Assessment's set of REST APIs include:

- ▶ Support for creating and updating tests, including enrolment and access arrangements
- ▶ Support for retrieving test results, including learner responses, their scores, and metadata
- ▶ Support for reading, updating, and creating assessment content
- ▶ Access to the API is controlled via OAuth using API Keys defined either for regular users or for dedicated system users in Inspira Assessment.

Further Discussion

Tell us about you and the impact you want to achieve with a dedicated digital assessment ecosystem. We'll help you develop a strategy that lets you assess flexibly and with integrity.

Visit inspera.com for more information





inspera.com