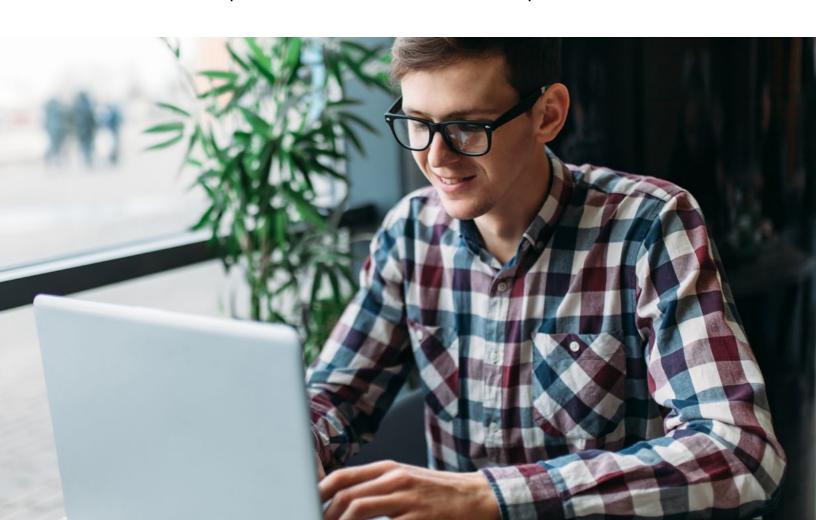


White Paper

A Guide to Delivering Digital Assessment with Online Proctoring

Considerations for professional certification exam providers



Online testing is here to stay.

In response to the technological evolution and the changing landscape in training and education, organisations are adopting online proctoring solutions to secure their digital assessments. The pandemic accelerated this process, since social-distancing policies and travel limitations made it more difficult to conduct exams in person.

With many testing organisations using online proctoring, more candidates have the option to test from home using their own devices, which eliminates the time and cost of travelling to a single test centre. The convenience of selecting a date, time, and location of one's preference, for a variety of exams, can have a positive impact on both practical test arrangements and the level of anxiety for candidates.

Organisations that choose to make the switch to remote assessment with online proctoring can experience immediate benefits, including flexibility for candidates and increased efficiency in the assessment process. However, some organisations still have reservations and are more cautious about making the transition.

For those organisations that have yet to make the switch, this white paper will introduce the range of options available for online proctoring and outline some of the benefits — both in the short term and the long term.

How does online proctoring work?



Not all online proctoring solutions function in the same way. An April 2020 report published by EDUCAUSE identified four different types of proctoring:

- Passive supervision of software on candidates' computers, by detecting any applications running outside of the exam
- Active restriction of software on candidates' computers, by blocking access to any applications running outside of the exam
- Passive monitoring of candidates, by recording candidates via webcam for the duration of the exam session and reviewing the session afterward
- Active monitoring of candidates, with proctors observing candidates in real time via webcam for the duration of the exam session

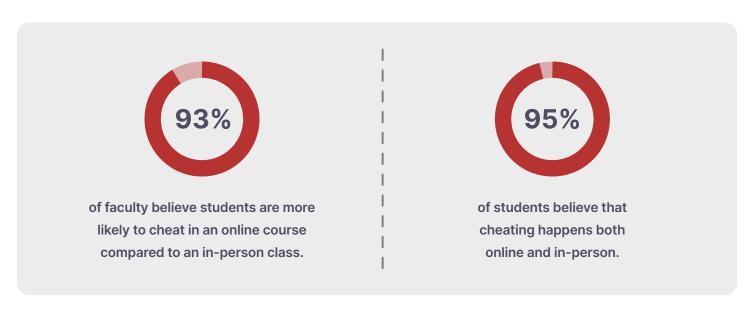
All four of these options have their place in protecting the integrity of a test, but which one is best for your organisation? Here are some considerations to help you make the right decision.

Why use online proctoring for professional certification exams?

Exam Security and Integrity

Security remains a barrier for some organisations considering the move to online proctoring. Without a reliable method to secure online exams, organisations have no way of knowing whether candidates referenced a cheat sheet or retrieved answers from a search engine. And if the integrity of the exam is in question, so too is the value of the exam's credential.

In a May 2020 survey by Wiley, 93% of instructors surveyed believe that students were more likely to cheat online than in person, and 72% of those instructors reported using technology to deliver exams and assessments. However, over 95% of students surveyed believe cheating happens both online and in person.



Wiley. (2020). Academic Integrity in the Age of Online Learning: Survey Shows Sharp Rise In Instructor Perception of Cheating.

For some organisations, the first step toward exam security is to implement online proctoring within a test centre. But with recent industry advances, organisations can deliver secure, online assessments to candidates testing at home. And by implementing a proctoring solution designed to integrate with other parts of the assessment process, such as a Learning Management System (LMS), organisations remain in full control of exam security, all while ensuring consistency in the assessment process.



Case Study

Centre d'exàmens Girona

Problem: "The solutions we used before moving to online proctoring with ProctorExam were almost constantly causing technical problems, and we felt they weren't



providing us or our candidates the quality assurance and security that our candidates deserve. What we needed was also to maintain the high international reputation of our exams. We often had to reschedule exams, which was not the kind of customer service we wished to offer our clients. Furthermore, some candidates had chosen us specifically because of the quick results and report, and, with these problems, we were not meeting their needs."

Solution: "We chose ProctorExam because it uses the webcam as well as the candidate's mobile phone to provide two angles from which to monitor candidates. It also allows us to see the exam in real time or review the session later on. We can see the candidate's desktop and everything they write during the exam, as well as any unauthorised websites they access.

Other supporting features — such as short videos to help the candidate set up for the exam, the ID check and the sound recording — really do ensure the exam is being taken in secure conditions.

Finally, the live chat box, available to test-takers in case they have technical problems, means that we can rest easy over these kinds of issues.

After a few months of monitoring our exams, ProctorExam also put together an easy-to-use troubleshooting guide specific to our exam and the sort of difficulties our candidates had been experiencing. The constant updating and improving is a big plus, as is the ease of setting up exams.

We have saved, quite simply, hours of work (and money) with ProctorExam. Setting up an exam is a matter of minutes and we rarely have any calls from candidates. Whereas before, we had constant phone calls from candidates experiencing problems. Our clients are extremely happy with their experience, which means we are once again providing the level of exam security and customer service we are proud of."

Reaching a Broader Audience

On-demand testing from everywhere, the ability to take a test from home, reduced or no relocation — all of these provide candidates with greater flexibility. Candidates can schedule exams to accommodate work requirements, academic studies, everyday responsibilities, and the general complexities of modern life.

But flexibility is not only a benefit for candidates. Online proctoring can also increase the reach, market, and revenue opportunities for test organisers, who are better able to scale up or scale down their test volume as needed. This is particularly relevant for organisations that require large-scale testing or multi-modal options for exam delivery.

In addition, remote assessment tools can help organisations better accommodate candidates with different learning styles, in a less intrusive way. When individuals need more time to take a test for instance, they aren't singled out for different treatment in a public setting, which may increase test anxiety.

Protecting Data Privacy and Security

Data security and privacy are common concerns with remote assessment, across all modes of delivery. It is essential that organisations are transparent about exam policies and are clearly communicating these policies to candidates.



Case Study

ILTO Exams, International Language Testing Organization

Problem: "We needed a remote testing solution, for companies and universities. Some customers would not be able, or it would be too expensive, to attend test centres. This need became of paramount importance in March 2020 with the beginning of the pandemic. There was a market that was not being reached."

Solution: "When we turned to ProctorExam, customers had been waiting for this solution and they considered it helped their testing and certification processes. Proctors and administrators saw it as a tool that makes their job more efficient. The ProctorExam platform is easy to use, effective and the team behind it is always supportive and open to suggestions. So far, we've managed to offer our certification services in different countries in Latin America, since it would be the only solution remotely proctored."

Any data captured during an exam session should be relevant to the test, taken with consent, and lawful. Organisations that deliver exams to an international pool of candidates have a responsibility to ensure that terms and conditions of testing do not overstep local data laws. When selecting an online proctoring solution, it's important to confirm that the company has clearly stated data retention policies.



At ProctorExam, for example, we always establish a Data Processing Agreement (DPA) with our clients. The agreement regulates what data we can process and how we can do it. We will not process data in any other way or for any other purpose than what is agreed in the DPA, which also stipulates that personal data be stored for only the minimum amount of time following an exam session.

Organisations that deliver online exams using a Bring-Your-Own-Device (BYOD) model may have concerns about granting proctors access to candidates' personal devices. ProctorExam's screenshare tool, which is used to record and observe exam sessions, functions via browser extension. With a browser-based tool for online proctoring, candidates have no need to download software to their hard drives, which removes the risk of unauthorised access to sensitive information.

From the beginning, ProctorExam has strived to design proctoring software that abides by two privacy principles: minimisation and anonymisation. We collect the minimum data needed for the exam session, and we anonymise data before using it for a secondary purpose, such as in statistical analysis.

To maintain the security of exam session recordings, test organisers, together with proctoring providers, should take constant measures against all possible data breaches. At ProctorExam, we make security an ongoing process. We continuously explore the market for new opportunities to further enhance our security level, all while preserving a user-friendly experience for both candidates and administrators. In May 2021, ProctorExam was awarded a Security Verified certificate by the ICT Institute, an open standard for information security similar to the International Organization for Standardization's (ISO) 27001 Certification.



Case Study

Virginia Lyons Exam Centre

Problem: "Before moving to online proctoring with ProctorExam, the solutions we attempted to use slowed us down and the results wouldn't be released on time. Many issues emerged around the software and less support was offered. We knew that our head office was searching for a solution but also that it was going to take more time. That's when we contacted ProctorExam to see if we could collaborate."

Solution: "Implementation was fast but what is even better is that we have saved hours of work. The system is userfriendly and easy to use. The interface, as well as the ability to connect from everywhere without needing to install anything — which adds to candidates' privacy — is what we most like about the experience with ProctorExam."





Opening a Channel for Direct Feedback

On-site testing often leaves little room for instant, personalised feedback. With online proctoring, organisations can prioritise the candidate experience by opening a channel for real-time communication. For instance, some solutions offer real-time monitoring by a trained invigilator, who can provide individualised support to candidates during the exam session and notify them of any behaviours that put exam security at risk.

Additionally, assessing candidates remotely in a familiar environment is likely to make the exam experience less stressful and therefore more authentic. An online proctoring tool allows candidates to test from the convenience of home, so they can spend the time it would have taken to travel to a test centre preparing for the exam instead.

If candidates are required to travel to a single location to test, they also require time to plan for travel, which may make it difficult for organisations to deliver exams in short sequence. The availability of online proctoring allows organisations to update exams more frequently as products and industries change, which makes the certification more valid.



Case Study

Dataprox

Problem: "In early 2020, many language test centres were closed due to the outburst of Covid-19. Candidates were not able to participate in their scheduled exams. They couldn't submit the exam results for their university applications on time. All language tests had to stop because we couldn't conduct in-person exams in test centres. We did lots of research and found that online proctoring might be the solution to our problem. That's when we contacted ProctorExam."

Solution: "ProctorExam is very intuitive and easy to use. Main features like creating an exam, record and review, auditing, satisfied our needs. The team was very patient and answered many of our questions. They always reply directly and in a timely fashion. We have improved our market share since we started conducting exams with online proctoring.

ProctorExam's online support also has fast response time to solve technical issues. This is critical for us to submit results on time and give feedback. So far everything is running smoothly. Our clients and team are happy."



Changing Perceptions of Digital Assessment and Online Proctoring

For some organisations and industries, there is a prestige associated with paper-based tests. But with the Covid-19 outbreak and the expansion of online proctoring, this perception is changing fast. Candidates value the convenience and flexibility of taking a test at home, and educators and learning institutions alike are embracing these new modes of assessment as opportunities to grow and to meet the current and future needs of learners. With hybrid learning, there is the potential to reach more learners than before, including those whose professional responsibilities or personal circumstances make traditional modes of learning more difficult.

In some professions that have a long history of delivering paper-based exams for certification or licensure, there may be a greater reserve to make the move to online proctoring. This might stem from a sense of obligation to follow more traditional conventions, such as testing in exam halls, and a desire to preserve the prestige these conventions carry. However, up-and-coming candidates in these professions may not feel connected to these values.

Organisations that represent these professional fields will need to adapt to stay current and relevant with their market. In 2020 alone, ProctorExam conducted more than two million exams, varying from the medical sector to drone skills certification to pre-employment psychological and characteristics tests.



The Digital Literacy Gap is Closing

As more candidates across all generations and learning styles become accustomed to using technology in everyday life, expectations for more user-friendly and convenient ways of testing are continuing to grow. Incorporating an online proctoring solution into your assessment process should be addressed with:

- · Frequent communication and detailed instructions
- · Practice tests to familiarise candidates with the software
- Technology from companies with clear data-protection policies

As more educational institutions and organisations find sustainable paths forward with online learning and assessment, the prevalence of online proctoring is likely to increase. Though in-person exams will inevitably be part of the hybrid future in education, online testing will continue to provide value to organisations by lending flexibility, accessibility, and efficiency to the assessment process.

Conclusion

Testing and assessment have evolved rapidly over the past few years, but the goals surrounding the certification process have remained the same deliver fair and reliable testing at scale. With a trusted

solution for online proctoring, organisations can continue to deliver quality exams in a remote setting, without sacrificing exam integrity. Enhancing flexibility for candidates ensures a wider global reach while also reducing anxiety levels on exam day. And with growing acceptance of remote learning and increasing digital literacy across the world, adopting an online proctoring tool can help organisations create sustainable solutions for the future.





About ProctorExam

ProctorExam is a fully customizable online proctoring solution that adapts to all remote assessment requirements.

With up to three monitoring options, ranging from screen-sharing to a 360° view of the candidates' workspace using their smartphones, ProctorExam provides test organisers with a convenient online platform, adaptable to various assessment contexts, including high-stakes exams and professional certification.

ProctorExam is a fully web-based solution designed to run as a stand-alone experience or embedded within an existing assessment environment. It offers secure and powerful integration with other LMS, LRS, and proctoring services, making it easy to bring everything together in one place. Compatible with Linux, Mac and Windows operating systems, candidates can take their remote tests using their own equipment, with minimum prerequisites.

Talk with an online proctoring expert today.

www.proctorexam.com