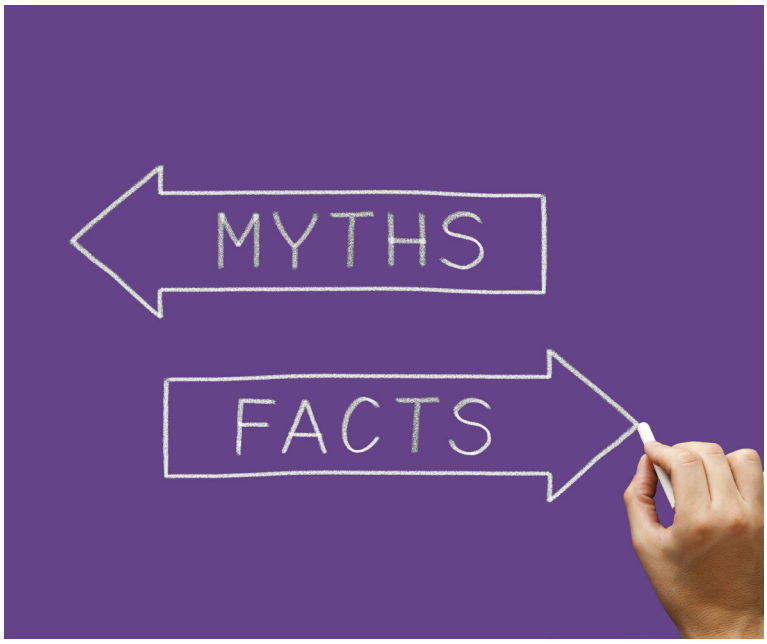
Exploring the Myths of **Virtual Proctoring**

A Comprehensive Guide to Debunking and Exploring the Myths Surrounding Virtual Proctoring



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SmarterProctoring™

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Myth #1

Students Lose Their **Privacy** with Virtual Proctoring

Due to COVID-19, more students are studying and testing online than ever before. This has resulted in a rise of stories from students expressing concerns about remote proctoring. As these stories are spread, more confusion results and myths about virtual proctoring become accepted and more frequent. This eBook will explore these myths in-depth, debunk them, and fully explain the reality of virtual and remote proctoring.

A common story that has reached "myth status" is that students lose their privacy with virtual proctoring. We consider this a myth because students are in complete control over their privacy, even while being monitored during virtual proctoring.

First, students are in control over their physical environment. Some students have expressed concerns that a person they do not know is being allowed to peer into their home via webcam. But with a little effort prior to the exam, the test takers can sanitize their environment as much as they desire. How?

1. By removing any personal objects such as pictures of family or friends
2. By cleaning/organizing their testing environment enough to be presentable before the exam
3. By making sure no other persons are in the room during the proctored testing session
4. By preparing their own clothing and appearance to be presentable since they know in advance when the testing session will occur (procedures are in place to allow for religious or cultural attire during testing when needed)

Second, all monitored testing environments involve a person (typically not known to the students) observing them, and in many of these environments, the testing event is recorded.

Concerns are often expressed that students feel "uncomfortable" or "distracted" by being observed during a virtual proctoring session. While one can't dispute that they feel this way, the same circumstance is true in any situation in which an exam is taken.

Any time students take an exam in a testing center they are being constantly observed by testing center staff that they likely do not know. Even when students test in a traditional classroom, they are being observed by the faculty member and/or teaching assistants whom they likely do not know. Along with that, many times in this post-911, post-Columbine world, all activity in a college classroom is also recorded via security cameras.

Myth #2

Proctoring Companies Have Access to Students' Computers After the Exam

In addition to privacy, another story that has reached "myth status" is that virtual proctoring companies have the ability to access students' webcams and/or computing devices after the exam. Security concerns are also expressed that the proctoring software can view private computing data such as browser history.

However, at SmarterServices, we support the Student Bill of Rights For Remote and Digital Work that was published by our partner, ProctorU.

One of the rights that students have is to understand data collection, retention, and dissemination when it comes to their proctored exam. To inform students about our own proctoring platform, SmarterProctoring, we provide them with a list of FAQs that provides them with information including:

- How they can visually tell when they are being recorded
- A list of all data that we collect and retain
- A description of how they can uninstall the proctoring software after the testing session if desired
- How we protect their data through encryption
- How long we retain data
- Who they can contact if they have any privacy concerns
- And more

In addition to our FAQ resource, we also provide information within that document that describes what SmarterProctoring does and does not do. Ultimately, it reviews how and what we observe and record, with whom we share that information, how we monitor their environment, and more. It also gives details about how we do not monitor anything outside of the exam session, share any information with third parties, nor review any non-exam information such as browser history.

Myth #3

Virtual Proctoring is Not Accessible to Learners with Disabilities

This section will explore the myth that virtual proctoring leads to unequal scrutiny of persons with physical and cognitive disabilities or conditions like anxiety or ADHD. Critics contend that virtual proctoring has the potential to discriminate against marginalized students.

First, let us make it very clear that it is not a myth that some persons need accommodations for disabilities. It is a very true fact that schools must provide appropriate accommodations for learners with disabilities, even during proctoring. The myth is that remote proctoring is unfair to learners with disabilities. Keep reading as we'll be debunking this myth using examples and providing a solution that can help.

EXAMPLE 1: Proctoring Accommodations for Blindness or Low Vision

One example of a physical disability is blindness or low vision. Learners with this disability could utilize text-to-speech conversion tools during the learning process, but during virtual proctoring, a lockdown browser could disable this functionality. Another difficulty could be during an authentication process in which the visually impaired learner is prompted to position their face in an on-screen box for facial recognition.

SmarterProctoring ensures that learners with these disabilities are not treated unfairly in the following ways. First, a unique virtual proctoring configuration can be made for persons with disabilities. As a part of the accommodation, the lock down browser functionality could be modified to allow for the text-to-speech feature. Second, SmarterProctoring is the only proctoring platform that can also give learners the option of testing in a face-to-face environment. To make sure that learners are not unfairly scrutinized, the scheduling and communication process for all proctoring modalities is the same in SmarterProctoring.

Example 2: Proctoring Accommodations for Chronic Tic Disorder

Another example of a disability for which accommodation may need to be made is Chronic Tic Disorder. This disorder is characterized by involuntary body movements, frequently in the face. A person with this disorder is not in control over these bodily movements. Often, in stressful situations like taking an exam, ticcing can happen more frequently.

This condition is an example of a disorder for which a student may not formally request an accommodation through the disability services office of their institution. However, if the student will be utilizing virtual proctoring, they should be encouraged to request an accommodation. When the student has formally requested an accommodation, a notice will be viewable to the proctors and faculty. Using SmarterProctoring, the accommodation could also be to allow the student to test in a face-to-face modality.

SmarterProctoring has an accommodation feature that informs the proctor and instructor of the accommodation in place. For privacy reasons, the disability is not disclosed, only the accommodation. However, SmarterProctoring never stops an exam if such repetitive bodily movements are made. SmarterProctoring also never distracts the learner during the exam by alerting them if a testing anomaly is detected. If the movements were flagged as a testing anomaly, then the instructor who makes the final decision would see the accommodation note and the learner would not be penalized.

Finally, as was the case of the example of blindness as a physical disability, if a person with a condition such as Chronic Tic Disorder would prefer to be tested in a face-to-face setting such as a collegiate testing center, with their instructor, or with a pre-approved proctoring professional, SmarterProctoring is the only proctoring platform that can give the student those options.

Example 3: Proctoring Accommodations for Anxiety Disorders

Many learners experience a heightened sense of anxiety during an exam. The level of anxiety can range from being a distraction to being debilitating.

In addition to typical testing anxiety that results from the phenomenon of being evaluated, other factors can increase during a virtually proctored exam. If the technology is not intuitive or does not function properly, this can elevate levels of anxiety. When students do not understand what behaviors could be flagged as an anomaly, their anxiety could disrupt them. Anxiety during virtual testing by neurodiverse learners may trigger a response similar to stage fright.

A survey at Lousiana State University (LSU) conducted on campus found that 99% of students felt more anxious when testing using virtual proctoring than traditional, in-person testing methods. Anyone who has ever tried to type while someone is watching can relate to how their performance can be impacted.

Anna Hammons, the LSU Center for Academic Success Program Coordinator, says there are many things students can do both before and during their virtual exams to reduce testing anxiety. She stated, “Make sure that you know the platform that you’re using really well… make sure you’re aware of the procedures, the technology you’re going to need, and that all of those things are in working order before you begin the exam… students should also analyze their testing environment well before the exam begins to ensure it’s secure and distraction-free.”

SmarterProctoring is committed to ensuring that all students who need accommodation for any reason, physical or emotional, have options that fit their needs. SmarterProctoring is the only proctoring platform that provides four face-to-face and three virtual proctoring modalities.

Myth #4

Virtual Proctoring Technology is Susceptible to **Racial and Socio-Economic Bias**

The topic of bias is very important as it is paramount that equal educational opportunities be provided to all learners – that includes equal opportunity and treatment during proctored exams.

SmarterServices does acknowledge that there are weaknesses and limitations to facial recognition technology. These limitations are real and not a myth. But the myth that we are addressing is that these technology weaknesses automatically hurt some categories of students and that there are no alternative proctoring options.

CONCERNS

There are four categories of concern related to bias that can be caused by learner authentication technologies.

First, socio-economic bias could occur when learners are not financially able to engage in virtual proctoring. Some students may not possess or find it difficult to afford technology such as webcams and broadband Internet access. They may also be living in an environment where multiple other persons reside which makes it difficult to craft a testing environment in which they are alone. Also, learners living in poverty may prefer for their environment not to be viewed by others.

Second, persons who wear religious or cultural attire that covers their face may be resistant to removing their coverings for the purpose of authentication.

Third, research has shown that facial recognition technology is not as accurate for females, and fourth, persons with dark skin tones as it is for white males.

INDUSTRY ACKNOWLEDGED TECHNOLOGY WEAKNESSES

In 2018, a report of research done at the MIT Media Lab reported that error rates for facial recognition systems from major tech companies, including IBM and Microsoft, for identifying darker-skinned individuals were dozens of percentage points higher than when identifying white-skinned individuals. The issues seem to stem from the data sets used to train the systems, which can be overwhelmingly male and white.

A year later, a separate study that utilized Amazon's Rekognition system also revealed significant issues identifying the gender of darker-skinned individuals, as well as mistaking darker-skinned women for men. The system worked with a near-zero error rate when analyzing images of lighter-skinned people, the study found.

As a result of such research, IBM has taken the position that it will no longer offer, develop, or research facial recognition technology, citing potential human rights and privacy abuses. Amazon has also announced a one-year moratorium on allowing law enforcement to use Rekognition.

HOW SMARTERPROCTORING CAN HELP

SmarterProctoring provides several configurations and modality options that makes sure students are not academically harmed through the proctoring process.

When students have concerns with matters such as bias, SmarterProctoring is the only proctoring platform that allows them to schedule a face-to-face testing session at a testing center, with a proctoring professional, or instructor-as-proctor if available.

SmarterProctoring also has an emerging form of virtual proctoring that will allow for the staff of the school which could be a proctor working in the testing center and/or the faculty member to serve as the live, virtual proctor. These persons may know the student and/or can authenticate the student from a baseline image provided by the institution.

Unlike some other virtual proctoring solutions, SmarterProctoring does not stop the student from starting or continuing the exam if an authentication routine is failed. When that happens, we provide the video and audio to the faculty member who ultimately makes the authentication decision. As such, it is not possible for SmarterProctoring to automatically fail or academically disadvantage students due to learner authentication issues.

As your school is evaluating its proctoring services, we provide a proctoring matrix that allows you to compare proctoring platforms. Check out this helpful resource to see and make the comparisons for yourself.

To summarize how SmarterProctoring avoids harming students:

- It provides several configurations and modality options
- It is the only proctoring platform that allows students to schedule face-to-face-testing sessions
- It does not stop the students from starting or continuing the exam if an authentication routine is failed

Consider utilizing SmarterProctoring to provide your students with as many proctoring choices as possible. And if you have any questions, we'd be happy to help. Just reach out to us and ask.

View all of SmarterProctoring's features and benefits and compare them with other proctoring platforms on the market by downloading our free comparison spreadsheet.

Myth #5

Proctoring Technology Can Fail a Student

Given all of the concerns described with remote virtual proctoring, it is logical that a concluding concern some students have is that the proctoring technology itself will fail them. The fear is that the technology would incorrectly identify some behavior as an incident of academic dishonesty and then automatically lock them out of the exam thereby failing them. The Automated Virtual Proctoring modality provided by SmarterProctoring controls against this in three ways.

First, faculty are allowed to determine what actions they consider inappropriate. When faculty gives exams in a physical classroom some are more vigilant than others. While one faculty member may regularly walk around the room observing students, others may sit and read a book while students are testing. At SmarterServices, we recognize and value the academic freedom that should be extended to faculty and have built our automated modality to provide that. When a faculty member configures an automated exam, they can toggle on or off options such as verifying ID, recording a webcam screen or audio, doing a room scan, allowing only one monitor, etc. Faculty are in control over the level of monitoring.

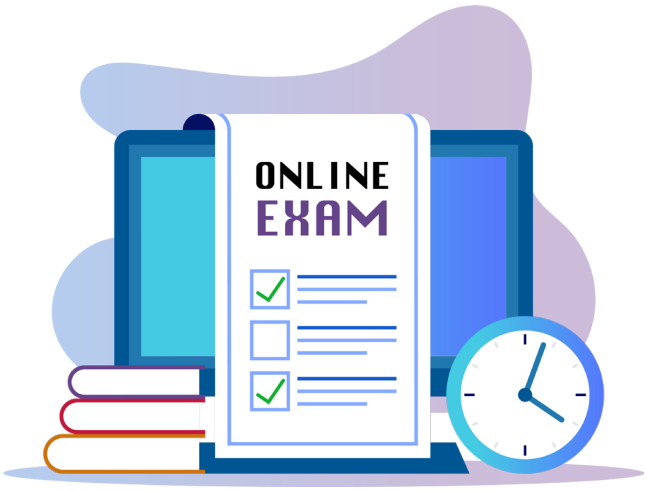
Second, SmarterProctoring does not compute any sort of numerical score of academic integrity that faculty members could construe as some evaluation or grade. Instead, we provide the faculty a labeled list along with a timeline of the testing anomalies observed so that they can then review the event themselves. It is then the faculty member, not the technology, who determines if an incident of academic misconduct occurred.

For example, our technology will indicate when a second face appears. If this face is of a child who unexpectedly entered the room, the faculty member would likely not be concerned about this. But, if the face was of another student, this could be a matter of concern. Just as in the classroom, the faculty member is in control over the environment and decides if behaviors are of concern.

Finally, unlike some other services, SmarterProctoring does not stop the testing session if an authentication attempt is failed or if an anomaly is detected. The fact that some other proctoring tools do stop the exam is one of the main concerns that students have. The students fear, for example, that if they are taking the exam near the deadline and the technology mistakenly locks them out, then they may fail the exam due to non-submission. Not only does SmarterProctoring not stop the exam, but in an effort not to distract students as they are testing, it does not notify the student that a testing anomaly has been detected.

Myth #6

Testing is **Not Necessary** to Assess Learning Mastery



As the entire world experienced the life-changing phenomenon of the pandemic, many questions have been raised and processes improved in several aspects of our lives. At all levels of education, there was a rapid shift from classroom instruction to emergency remote teaching. As faculty and administrators grappled with how to do this, the issue of assessing learner mastery was a topic of much discussion. One approach that was taken by some organizations and faculty was to utilize some form of authentic assessment as opposed to traditional testing.

As defined by Edutopia, authentic assessment takes many forms and for the measurement of mastery of some skills, it is a very appropriate method. Authentic assessment can be done using essays, interviews, demonstrations, portfolios, journals, and more. Many of these methods can be done online using document sharing, video conferencing, etc.

But along with all of the promise that authentic assessment makes, there are concerns from faculty and students. Many faculty members are resistant to utilizing much authentic assessment because of the greatly increased level of administrative burden of grading such artifacts. The time required to review, grade, and provide feedback on such projects can be quite labor and time-intensive. Students have expressed concern that the process seems too subjective even when utilizing a grading rubric. They fear that the faculty member's own bias toward the topic and/or demographic factors could influence their grade.

Finally, while authentic assessment is appropriate for the demonstration of many skills, there are some subjects for which assessment of knowledge does need to involve a more traditional test. This may especially be true in STEM courses in which students need to demonstrate mastery through a math or science test.

Myth #7

Proctoring Does Not **Make a Difference**

Finally, critics of remote virtual proctoring often contend that proctoring itself just does not make a difference. They maintain that the cost and effort associated with proctoring is not justified and they are content to utilize honor codes.

A recent study titled *Cheating in Online Courses: Evidence from Online Proctoring* conducted at Radford University in Virginia concluded that virtual proctoring is an effective deterrent to cheating in online courses. After controlling for multiple variables (aptitude, gender, ethnicity, etc.), grades were substantially higher in online courses that did not require virtual proctoring.

The research compared test outcomes in identical, online, asynchronous courses, one without proctoring and one with remote, recorded proctoring of the exams. The authors of the paper concluded:

> *The main implication of these results is that academic dishonesty is indeed a serious issue in online courses. Despite a series of mitigation measures that were adopted without direct proctoring – such as the use of a special browser, a restricted testing period, randomized questions and choices, and a strict timer – it appears that cheating was relatively commonplace. Cheating apparently also paid off handsomely, at least when it comes to exam performance, often raising scores by about a letter grade. A related implication is that some form of direct proctoring is perhaps the most effective way of mitigating cheating during high-stakes online assessments. The fact that a technological solution such as the one examined in this study (online proctoring through a webcam recording software) does an effective job in mitigating academic dishonesty is thus reassuring for all stakeholders. The results in this paper do not suggest that the solution is perfect – for that matter, there is no evidence that in-person monitoring is either – but they are significant enough to indicate its efficacy. Coupled with the relatively low-cost, user-friendly nature of this type of technology, the results should broadly encourage its adoption by concerned faculty and institutions. From these results, one can also infer that online proctoring of assessments is a viable strategy to mitigate cheating in online courses.*

Another article was recently published in the *International Journal for Educational Integrity* that illustrates the fact that proctoring matters. It analyzed the skyrocketing usage of the homework help site – Chegg. The website which does utilize an honor code that prohibits cheating allows students to post a question, potentially from an exam, and receive an answer from someone typically in less than thirty minutes. The authors of this article found that the number of questions posted on the site in five different science, technology, engineering, and mathematics disciplines increased by 196.25 percent in April to August of 2020 compared to the same period in 2019. The authors concluded, "Given the number of exam-style questions, it appears highly likely that students are using this site as an easy way to breach academic integrity by obtaining outside help."

When an exam is proctored using Automated Virtual Proctoring, students' physical and computing environments are controlled, prohibiting them from accessing such resources.

Thank you!

We hope that this eBook has been thought-provoking and useful. When students and faculty have concerns about an issue, we must give their concerns consideration. At SmarterServices, we are constantly thinking about these matters and by design, SmarterProctoring has been created to reduce these concerns that lead to myths related to privacy, security, accessibility, and bias.

SmarterServices™