

Recommendations for Online Proctoring with AI-powered Proctoring Tools

Distance Learning Committee (DLC), October 27, 2020

The use of Proctorio, an integrated proctoring tool in Canvas, has been a source of student apprehension. “Compromised privacy, increased student anxiety, technical failures, and lack of equitable access to technology and appropriate testing spaces” are cited as major areas of concern.

Specific Recommendations

The Distance Learning Committee recommends:

1. That faculty carefully consider their need for proctored exams, particularly the decision to require a webcam. Requiring the use of webcams has raised equity concerns. (Ideas for alternative assessments are listed below.)
2. That Mt. SAC continue to offer an online proctoring option and increase transparency for faculty and students.
 - a. Proctorio is the current proctoring option. Since the subsidized use of Proctorio expires on December 31, 2020, the DLC recommends that the college contract to continue Proctorio through the end of the school year for consistency.
 - b. In spring, the DLC recommends the creation of an online proctoring software review group, led by the FCLT and consisting of faculty, students, and classified staff, to evaluate other proctoring service options.
3. That Mt. SAC continue its Student Laptop Loaner Program (SLLP) to enable student access to technology essential to successfully complete courses and meet program accreditation standards.
4. That FCLT provide additional resources to faculty regarding the use of this tool.
 - The FCLT has already presented training for Proctorio in fall and will offer training in winter.
 - The FCLT is updating the Proctorio Handbook course shell (for faculty) and the Mountie Student Hub (for students) so that they contain the most up-to-date information.
 - The FCLT will publicize where faculty and students can find this information.
 - The Proctorio Handbook is a Canvas course that can be accessed through the Mt. SAC Canvas Faculty Center.
 - The Mountie Student Hub is accessed through the Canvas global navigation menu.
5. That instructors attend training before they use online proctoring tools so they are aware of all setup options and can choose the most effective and necessary options.
6. That faculty should inform students at the start of the semester, preferably in the syllabus:
 - software/hardware requirements
 - information, fact sheet, or reference to Mountie Student Hub
 - scheduled "practice" tests for troubleshooting

Suggested Syllabus Wording

The DLC highly recommends that, if instructors choose to use Proctorio, they notify students on day 1 to increase transparency and ensure that students are adequately prepared for proctored assessments.

Sample statement

This class uses Proctorio, an online proctoring tool that gives students the flexibility to take exams at the time and in the location of their choosing (within assignment parameters), and helps the professor ensure that everyone is held to the same standard of academic integrity.

Proctorio requires the use of a Chrome browser on a laptop or desktop. Your phone or tablet will not work. Proctorio is an extension that does not download onto your hard drive or transmit information from your clipboard or browsing history. It does give information on your IP address and it does lockdown your browser. For more information on Proctorio, please visit the **Mountie Student Hub** (inside Canvas).

[Download Chrome \(free\)](#)

[Request a laptop from Mt. SAC](#)

(If you require recording) To perform the necessary authentication, your computer needs a webcam. This recording is only seen by me. (It may be privately shared with school administrators if necessary.) Students should select an appropriate place to take the exam, away from disruptions, and should dress and behave appropriately given that the professor will have the ability to view a recording of behavior during the exam.

I invite you to practice using Proctorio! The first practice quiz is scheduled for _____.

Proctorio may have limitations in its accessibility for students reliant upon screen readers and keyboard navigation. If you have concerns about using an online proctoring tool, please work with me early in the semester (at least 5 business days before the exam) to make arrangements for an equivalent alternative.

Rationale

Proctorio Requirements and Options

Proctorio is an online proctoring service platform that is integrated into Canvas and can easily be enabled in Canvas quizzes and exams. Proctorio has the following requirements:

- Students and faculty both must use a computer (not a tablet or a mobile device).
- Students and faculty both must use a Chrome browser. Proctorio works by installing an extension into the Chrome browser – therefore it is *not* downloaded into anyone's hard drive. This extension can be uninstalled after the exam and reinstalled before the next exam.
- Faculty must set up a timed quiz that is shorter than 8 hours.
- Proctorio measures user location based on an IP address, which cannot be disabled.

Proctorio allows faculty to make choices about the security settings they enable. Proctorio does not require the use of the webcam or microphone. The instructor chooses which lockdown options to enable on a per-exam basis, and the instructor can exempt individual students from these requirements. Faculty can choose one or more of the following options.

- Disable student clipboard so students cannot have a copied item ready to use or cannot copy and distribute the exam. (Proctorio does *not* capture what is on the student clipboard.)
- Clear and lock down student browser so students cannot make a new internet search on the computer. (Proctorio does *not* access browsing history.)
- Manage downloads so students cannot download information.
- Identify storage devices. Proctorio cannot view any of the contents of the user's storage drives. Proctorio can only identify drives during the exam, but not read them.
- Detect multiple monitors and require disconnection.
- Disallow changing HTML code via page "inspect."
- Activate webcam to record students while taking an exam.
- Record entire student computer screen.
- Record student audio.
- Record the room. If enabled, Proctorio will ask the student to manually position the camera in a way that helps scan the surrounding area. This happens at the beginning of the quiz attempt, and periodically throughout the attempt.

How Proctorio Works

Proctorio uses artificial intelligence to monitor students during exams. No "real" human at Proctorio sees any of the information transmitted from the student's computer to Proctorio. Transmitted data is encrypted and secured so it cannot be accessed by outside entities.

Proctorio provides AI-generated reports to professors with various "suspicion levels" based on events or behaviors that occurred during the quiz attempt, e.g., if a student looks away from the screen a lot. Proctorio uses information from every student's quiz attempt and compares it against each other to determine the "suspicion levels." Only the course instructor can see the report generated by Proctorio upon completion of the exam by the student. The generated report only informs instructors of suspicious activity. Proctorio doesn't determine an end result. The instructor makes that determination.

Student Input

Students were concerned about lack of access to laptops or webcams. Courses might require technology they do not own.

Students described their concerns about webcams. They felt that having their rooms recorded violated their personal space. (This concern is mirrored in concerns about requiring cameras online for Zoom sessions.) Using a webcam also requires good Wifi and bandwidth, which students often do not have access to. Students also noted that being at home exposed them to interruptions out of their control, e.g., if a younger sibling knocks or runs into the room and the student looks away from the computer screen.

After the October 1 meeting with the FCLT and the Proctorio rep, students were surprised and relieved to learn that Proctorio was not collecting their online browsing history or their clipboard data. Proctorio does collect IP data – but so does Canvas. Students would benefit from understanding more about what Proctorio does and does not do.

Faculty Input

Mt. SAC faculty expressed the importance of having a proctoring software option for them. One faculty member wrote that her accrediting agency requires that exams are securely proctored. Another wrote, "At this point, if there were not an online proctoring option (with strict protocols), I would be hesitant to put our program's examinations online." Another wrote, "Most of our department is using Proctorio or an alternative to allow live proctoring during synchronous exam blocks. We have found this is the only way to give exams which are remotely comparable to the exams that would be given in in-person classes" while admitting the equity and bandwidth difficulties inherent in their use.

A survey of other community college's Distance Education coordinators finds that while some coordinators feel proctoring apps constitute [unnecessary surveillance](#), others find reassurance that "a recent independent data audit confirmed ... that Proctorio fully encrypts the streams they collect, leaves the keys with the instructor, and stores only that encrypted form."

Proctorio is considered an authentication tool by the California Virtual Campus (CVC).

Using Zoom for Online Proctoring

Faculty may wish to proctor an online exam using Zoom. An online exam via Zoom would entail the same setup as an online class via Zoom. There are some disadvantages to using Zoom for exams. The DLC discourages using Zoom for online proctoring for the following reasons.

- Students would set up their cameras to show their workspace as well as their faces, which is difficult, cumbersome, or potentially impossible.
- Students would be able to see each other (and each other's workspaces) as well as the professor.
- Zoom is not as secure as Proctorio. It does not prevent online searches by locking down browsers. Faculty would need to be ultra-alert to "catch" students doing suspicious head or hand movements, and then would have to deal with their findings whilst continuing to proctor other students in real time. In addition, recordings can be hacked and shared without permission.
- Students with unreliable Wifi can get "booted" out of Zoom, sometimes on a regular basis. What if the professor's computer freezes or the professor is "booted" out of the exam session? Faculty should address that possibility before setting up the exam.

If faculty wish to use Zoom for exam proctoring, the DLC recommends Harvard's "[Proctoring a Closed-Book Exam in Zoom](#)" for important considerations.

- Zoom requires more trust than software like Proctorio and makes fewer demands on students.
- Faculty should hold a practice proctored session before the live session.
- About 20 students is the maximum to see on one screen (gallery view). Harvard suggests breaking classes into smaller sessions and using TAs as proctors.
- Set the Chat so students can only interact with the Host (professor).
- Set up timed exams in Canvas so that the professor gives instructions to everyone first, then gives the password to the exam so everyone starts at the same time.

Other Methods for Encouraging Online Academic Integrity

Many online professors do not use proctoring software at all. Consider if any of the following methods would work in your class.

- Reduce the number of high-stakes proctored assessments and include more low-stakes, formative assessments, such as open-book or untimed quizzes, discussions, and short essays.
- Use quizzes with randomly selected questions from quiz pools. Shuffle quiz answers.
- Create discussions or collaborations that require an individual response or that students incorporate their own data or experiences into the response.
- Ask students to write a transformative reflection or do a metacognition task, like explaining a correct answer to an answer they got wrong on a previous test.
- Have students research and write papers for the subject in a progressive-build project, in which students submit different parts over different times.
- Change essay prompts and problems. Regularly check Chegg, Course Hero, OPPapers, Quizlet, Spark Notes, and other “study sites” to see if your prompts appear and if there are answers that students can download.

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