



# Resource Companion for Online Exam Management & Invigilation

## Summary & Key Points

This document is a companion resource from our November 17<sup>th</sup> workshop for Online Exam Management and Invigilation. Hear from your colleagues about their experiences for exams online: pros, cons and lessons learned – Access the Recording & Timeline Details under “Workshop Recordings and Descriptions” at <https://ctl.ok.ubc.ca/opportunities/events/>

You have a number of options for your remote final exams. Please keep in mind that it is not recommended to change the type of exam that you have outlined in your syllabus. Use the information below to optimize your exam delivery based on the type of exam you have outlined for students. You can also use the information below to think about different types of remote exams as we continue in the remote learning environment.

## **Key Points**

- There is no one “best” method. Various factors will determine the type of exam and the method of delivery based on your specific course (e.g., learning outcomes, level, size, accreditation requirements, TA support, etc.).
- Clearly communicate the format and delivery of the exam to students.
- Explain why you have chosen the particular design and delivery as this often helps students better understand the rationale and can increase understanding.
- Provide students the opportunity to practice (e.g., similar questioning in low-stakes assessments, practice the technology set-up).
- Ease student concerns by taking time to answer questions and providing documentation that clearly outlines instructions for the exam as well how to get in touch with you if something unanticipated happens.

## **Questions?**

- If you have questions around final exam or grading policies, please consult with your Department Head, Director, or Dean.
- If you have questions or need help with designing or delivering your exam online email the CTL helpdesk - [ctl.helpdesk@ubc.ca](mailto:ctl.helpdesk@ubc.ca)



## Main Types of Exams

1. **Take Home Exams** - Exams where students have several days to complete the exam.
  - Typically, these are designed to be open-book where students are permitted to use their course resources.
    - A reminder to clearly communicate to your students about what resources they are permitted and/or not permitted to use. You can include an [integrity pledge](#) in your exam to re-iterate this message.
  - This type of exam works well when you use questions that are focused on application or integration of material and elicit original student responses.
  - These exams are also most effective if deployed as a [Canvas Assignment](#) as it gives students a convenient place to submit their work.
  - Here is a resource for exams that involve students having to scan and upload files: [Using a File Upload Question for Written Work Submission](#)
  - Resource for document scanning for file uploads: [Quick Guide to Document Scanning Solutions](#)
2. **Scheduled Exams** – The majority of our final exams fall into this category. Scheduled exams should begin at the date and time in the Final Exam Schedule.
  - In the remote learning environment some instructors have provided flexibility around the start and end time (e.g., an exam that opens at the time the final exam is scheduled for but is open for students to access for an extended period of time). In this scenario the exam itself can be timed – once open the student has 120 or 180 minutes to complete it but the student has flexibility on when to open the exam based on their current circumstances. *Please ensure you check whether your unit has any current policies in place that would impact decisions around the timing/flexibility of your exams.*
  - These exams can be closed book (no access to resources) or open book (access to resources specified by the instructor).
    - Dr. Charlene Strumpel from Nursing shared her experiences of changing her exams from closed book to open book and shared this resource to help her students prepare for open book exams - [Student Open Book Study Guide \(Strumpel, Charlene NRSNG 2020\)](#).
  - You can set up scheduled exams as a [Canvas Assignment or Quiz](#)
    - An important note is Canvas Assignments does not integrate a countdown timer (which Canvas Quizzes does include), so students should be aware of this when writing.



## CTL Resources for Canvas Quizzes

Our [Canvas Assignments and Quizzes](#) page includes some key considerations. We have additional resources to help you:

- Create an exam using [Canvas Classic Quizzes](#)
- [Create Exam Questions](#) or [Groups of Exam Questions](#)
- Eliciting original work from students is one way to reduce academic misconduct (e.g., Googling or sharing answers) – check out this resource to help you do this: [Eliciting Original Work from Students](#)
- Resource for file uploads as part of an exam: [Using a File Upload Question](#)
- Resource on for document scanning for file uploads: [Quick Guide to Document Scanning Solutions](#)

On [the Scheduling Exams in Canvas](#) page you can learn about:

- Setting your default time limit and available dates.
- [Canvas Classic Quiz](#) and [Canvas New Quiz](#) settings for multiple dates and times

We recommend you add 15-30 minutes to the length of your Canvas Quiz (Time Limit), to allow for slower internet and to allow students to upload any documents that are part of the exam. For example, if your exam is scheduled for 1:00 pm – 4:00 pm, set the **Time Limit** to 210 minutes (instead of 180 minutes). Consider making the quiz available for an additional 30 minutes (**Available from 1:00 pm Until 5:00 pm**) in case there are other issues.

If you have Students with Time Accommodations, check your Quiz Settings and contact the DRC for help: [DRC.exams@ubc.ca](mailto:DRC.exams@ubc.ca)

## Monitoring & Invigilating Exams in Progress

Online exams do not allow for the same level of supervision that you are accustomed to with in-person exams. While you can't be in the same room as your students as they are writing their exams, there are steps you can take during exams to monitor (support and moderate quiz settings) or invigilate students. Monitoring differs from Invigilating is that the goal of the monitoring is that you are making yourself available to the students to troubleshoot issues that may arise during the exam (e.g., setting up ways for students to ask questions, change settings in real time when problems occur). On the [Monitoring and Invigilating Exams in Progress](#) page you can learn more about:

- How to be present and available via Collaborate Ultra or Zoom
- Facilitating instructor or TA availability during the exam
- Moderating your Canvas Quiz (e.g., grant extra time, unlock a quiz, etc.)
- Adjusting the settings within a Canvas Quiz while in progress
- Various options for Invigilating Exams

A number of our workshop presenters provided key tips and information about using Respondus Lockdown, Zoom and Proctorio for invigilation and *we highly recommend*



reviewing the [workshop recording](#) and also review the resources provided below. Keep in mind, the form of invigilation you choose may vary based on a number of factors and there is no one right answer as is whether your exam is closed or open book. (See Appendix A for Tables that outline the constraints of each option).

- Respondus Lockdown Browser:
  - [Monitoring Exams in Progress](#)
  - Respondus Lockdown Browser [Support Documentation](#)
- [Invigilating using Zoom](#)
- [Invigilating with Lockdown Browser and Zoom](#)
- Invigilating with Proctorio:
  - [Monitoring Exams in Progress](#)
  - Proctorio [Support Documentation](#)

Remember, the CTL is here to support you. If you have questions about any of the resources and information provided feel free to reach out to our helpdesk - [ctl.helpdesk@ubc.ca](mailto:ctl.helpdesk@ubc.ca)

# Canvas Quizzes

	Instructor Constraints	Student Constraints
<b>Canvas - Classic Quiz</b>	<ul style="list-style-type: none"> <li>• Only multiple choice, true/false, and multiple answer question types have the option for regrading.</li> <li>• If multiple graders are grading the same quiz, they may override each others' grades and comments.</li> <li>• If multiple "file upload" questions are displayed on the same page and students upload video files (or large files), the files will not upload successfully.</li> <li>• To view the files students have attached to "file upload" questions, the instructor must download the files.</li> </ul>	<ul style="list-style-type: none"> <li>• If an exam is timed, the timer continues running even if the student loses internet connection.</li> </ul>
<b>Canvas - New Quiz</b>	<ul style="list-style-type: none"> <li>• unreliable,</li> <li>• not compatible with Proctorio, Respondus Quiz, HTML editor, Kaltura videos, API, Student analysis statistic reports, canvas import content</li> <li>• due date does not submit quiz.</li> <li>• can't be graded by TAs</li> <li>• cannot share question banks</li> <li>• <a href="https://community.canvaslms.com/t5/New-Quizzes-Users/New-Quizzes-Feature-Comparison/ta-p/243761">https://community.canvaslms.com/t5/New-Quizzes-Users/New-Quizzes-Feature-Comparison/ta-p/243761</a></li> </ul>	
<b>Canvas - Assignment (file upload) submission</b>	<ul style="list-style-type: none"> <li>• Cannot grade by individual question.</li> <li>• If multiple graders are grading the same assignment, it may override each others' grades and comments.</li> <li>• it does not submit for the student before due date. Can be submitted late if upload is delayed.</li> </ul>	<ul style="list-style-type: none"> <li>• File size cannot exceed 5GB per upload</li> </ul>

# Respondus Lockdown Browser

## Instructor Constraints

## Student Constraints



## Respondus Lockdown Browser Constraints

- It is a web browser; **it does not invigilate the student. It just blocks their access to the rest of their computer while in the quiz.**
- if combined with Zoom or Ultra those have to be run on another device.
- the instructor can allow access to another website but to the whole domain - not just the specific URL.
- the instructor can lock the student in the quiz until submitting, but if there is a network failure or a student emergency, the student can't get out or go to another device.

- Obtain the Lockdown Browser application from inside Canvas - not elsewhere.
- Once installed, you run the Lockdown Browser application, navigate to Canvas, and access the quiz
- Does not work on Chromebook
- Apple Catalina OS - and even Windows - may have privacy settings that interfere with Lockdown Browser closing other applications.
- It only works on iPad if the instructor enables that setting
- may not work with student screen reader etc.
- If an exam is timed, the timer continues running even if the student loses internet connection.


# Zoom for Exam Invigilation

## Zoom Constraints




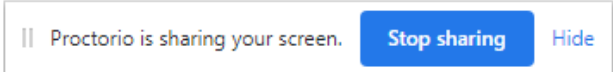
Instructor Constraints	Student Constraints
If Zoom is used for exam invigilation, it would be difficult to identify where the noise is coming from if all the students have their audio enabled.	Students need to have a webcam and microphone if Zoom is used for invigilation purposes.
The video quality is unpredictable and is dependent on internet connection. The video feed on Zoom can be blurry and pixelated if there is poor connection.	Students may have privacy concerns.
<b>Breakout Rooms:</b> <ul style="list-style-type: none"><li>A maximum of 50 breakout rooms can be created for each session.</li><li>Only the host of the meeting can assign participants to the breakout rooms. There can only be one host per meeting.</li></ul>	When joining a session using the web client (e.g. joining from your browser), certain browsers do not support all the features in Zoom. The recommended browser is Chrome (see <a href="#">this link</a> for details on what is supported)
Anyone who has the meeting join URL will be able to join the session.	When joining a session using the Zoom desktop application, students cannot private message the host/co-host (works if joining via web browser) in the breakout room. They can only send a message that will be visible to everyone in the breakout room.

# Blackboard Collaborate Ultra Constraints

Instructor Constraints	Student Constraints
<p>The number of attendee videos that can be displayed at once depends on the browser and device one is using (ranges from 2-4 video feeds):</p> <ul style="list-style-type: none"> <li>▪ Chrome, Safari, Microsoft Edge (Chromium): 4 videos</li> <li>▪ FireFox: 2 videos</li> <li>▪ Sessions greater than 250: 2 videos</li> </ul>	<p>Students need to have a webcam and microphone if Blackboard Collaborate Ultra is used for invigilation purposes.</p>
<p>If used for exam invigilation, it would be difficult to identify where the noise is coming from if all the students have their audio enabled.</p>	<p>The dial-in phone number is a US number and may incur long distance charges, depending on the student's phone plan</p>
<p>The video quality is unpredictable and is dependent on internet connection. The video feed can be blurry and pixelated if there is poor connection.</p>	<p>It can be distracting to other students if the instructor/teaching team asks each student to share their screen after they are made Presenters</p>
<p><b>Breakout Groups:</b></p> <ul style="list-style-type: none"> <li>▪ You can create up to 20 groups.</li> <li>▪ Breakout groups are only available in sessions with 250 or fewer attendees.</li> <li>▪ What is said or viewed in a breakout group isn't captured in recordings.</li> <li>▪ Collaborate stops recording your session if all attendees leave the main room to join breakout groups.</li> </ul>	
<p>If you want to supervise private chats or allow participants (students) to only chat with moderators (instructors/teaching team), you must select each option in Session Settings BEFORE the session starts.</p>	
<p>When the moderator (instructor) removes an attendee, the participants (students) are not allowed to rejoin the session if they joined from Canvas.</p>	
<p>Only Moderators (instructors/teaching team) and Presenters can share screens. Only one screen can be shared at a time.</p>	



# Proctorio, Artificial Intelligence Invigilation

Instructor Constraints	Student Constraints
No built-in consent form feature	Proctorio can only be used on Chrome. Students will need to download the Chrome browser and the Proctorio Chrome extension. Chrome and Proctorio extension may push out updates before the exam and students are unaware until the exam.
Proctorio does not force students to close these items before they take the quiz: <ul style="list-style-type: none"> <li>▪ Incognito Chrome windows</li> <li>▪ Private and non-private windows from other Internet browsers</li> <li>▪ Other Applications (such as note or calculator applications)</li> </ul>	If the Chrome extension is not installed, students will receive an error message. <ul style="list-style-type: none"> <li>▪ If they click “click here”, students will go to the download page to download the extension.</li> <li>▪ If they ignore the message, they will be prompted to enter an access code.</li> </ul> 
Proctorio can only be used with Canvas (Classic) Quizzes	Equipment requirements: <ol style="list-style-type: none"> <li>1. Proctorio does not work on mobile devices (e.g. iPad, iPhone, tablets, etc.).</li> <li>2. To record video of students during the exam, students MUST have an external/built-in webcam</li> <li>3. To record audio of students during the exam, students MUST have an external/built-in microphone</li> </ol>
A time limit must be set on a quiz in order for Proctorio to work	Students are recommended to have at least 2GB of RAM available on their computer, otherwise a warning will appear indicating that the program could crash.
The recordings are not processed immediately and can take some time before it gradually appears in the Proctorio gradebook (especially for large courses).	When students do the room scan, it takes a few seconds for the “Record Room” scan to start. The timer on the quiz does not pause during the room scan. It can be challenging for students to do a room scan with built-in webcams since it cannot be easily rotated.
The Proctorio “Exam Settings” cannot be changed once the first student has started the exam.	Proctorio support ( <a href="mailto:support@proctorio.com">support@proctorio.com</a> ) flags emails with a .gmail domain as spam. Students are recommended to contact support at <a href="tel:1-866-948-9087">1-866-948-9087</a> or inside an active exam, access live chat by clicking the shield icon located in the Chrome browser address bar, then clicking Live Chat.
Disabling Proctorio for one student leads to other students seeing two options when taking the exam: “Take the Quiz” and “Take with Proctorio”	The “Basic Whiteboard” (In-Quiz tool) is only one page long. If students clear the whiteboard, they cannot recover what they deleted. Limited space if using it as scrap paper.
	If students click “stop sharing” (at the bottom of the screen) during the exam, they will be kicked out of the exam, without any warning. 

# Recommended Proctorio Settings



- **The following Proctorio exam settings are recommended to be disabled:**
- *Recording Options:*
  - **Disable** “Room Scan: Intelligent Scan” - students may be required to redo their room scan multiple times during the exam
- *Lock Down Options:*
  - **Disable** “Force Full Screen” - this setting requires students to stay on the exam the whole time, which makes troubleshooting technical issues difficult
  - **Disable** “Prevent Re-entry” - this setting locks students out of their exam for potentially benign behaviour, requiring administrative work by the instructor to resolve
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- **Note:** Proctorio Exam Settings cannot be changed after a student has started the exam so it is important to verify that you have the correct settings before the exam starts (only Behaviour Settings can be changed after the exam has started).
- Please review the [Proctorio Instructor Guide](#) on the Keep Teaching website for additional recommended settings.