Playbook: Observing Top Hat Test

Who is this for:
Anyone observing the use of tophat test in the wild

Background:
Very often professors are nervous about conducting high stakes exams for the first time, and the environment of the exam room often differs from a regular classroom in significant ways. We offer support for tests in exchange for observation. This builds the relationship with a professor, and it helps us evaluate design decisions around test in the wild, where tests happen relatively infrequently.

People Support:
Bring at least one technical person and one product team member. We can collect details because we are acting to proctor and evaluate bugs in the field, which require people.

Participants: We look for diversity-- Big university class midterms or finals, low stakes quizzes, community colleges, areas with known connectivity failures.

Keeping record:
All observers should come with fully charged laptops and phones.

Answer these before authoring a test

Do you expect your students to use phones or laptops?

Question rendering on Mobile Currently (Nov 2019) mobile top hat test renders in a web container which is not fully responsive for all question types or setups-- this causes problems
with image distortion and with the usability of matching and sorting questions on mobile in particular.

**Mobile Device Risks** Currently students taking tests via mobile devices face a number of unrelated challenges. OS updates can cause unpredictability with the “secure” components: In fall 2019, the secure part of test interacted badly with an iOS update to unpredictably brick student devices.

**Some questions still demand scratch paper and scrolling. Do yours?**

We have observed students request paper copies for questions that require them to read a complex question or a question requiring calculations. Even on a laptop, test, as currently designed does not support a side-by-side view and can generate a lot of back and forth scrolling behavior with questions that feature tabular support data, complex diagrams, illustrations etc...

**Be careful of question types you choose:**

**Matching:** Observationally, students failed to properly manipulate matching questions under pressure.

**Sorting:** Students had difficulty with sorting but can work through it if options are kept very short and with few levels of sort.

**Click on Target:** This can be a difficult question for THT mobile due to the non-native container - its more difficult to manipulate than the native COT

**Formula:** This question type simply hasn’t matured sufficiently for high stakes testing

**Freeform answers (Word + LAQ):** There are no usability issues with these question types, but in effect they are manually graded in most observed situations. Manual grading sets up conflicts with students wanting immediate hand-back, and grade display which grade-book could handle much better. They also put a burden of grading on instructors. Not recommended unless professors have TAs or assistants to help

**What is the accommodation strategy?**

**Accommodation Strategy** The professor testing should articulate clearly how they will do accommodations. Two approaches work: A paper test for accommodation, or a separate test. Top Hat Test does not currently support selective assignment of a test to a set of students, nor does
it support un-proctored tests. Additionally multiple tests in course create problems for percent grading schemes. What does this mean? If you have a proctored test center, and if you use a point system for your class, then you can have two tests. One will be for the main test, the other will be turned on after the main test for a broad window (24hrs). It will be up to the instructor to insure that only accommodation students take the accommodation test. Failure to understand this will cause major complications.

**Attendance Checks?**

**Use of secure attendance in a capacity room** Because secure test does not implicitly check that students are in a room, many professors who tried test resorted to starting a secure attendance session just prior. This will introduce typical secure attendance issues including a 4% fail rate in classes taking tests via laptop. Test Proctors must expect to handle 4 students per 100 with secure attendance issues using manual means if they wish to take attendance. In a capacity room, running secure attendance and test simultaneously may introduce connectivity issues. This could also cause unpredictable behaviors such as lockouts if students switch from attendance on mobile to test on laptop.

**Protocol**

**2+ Weeks before the test (after AM introduction)**

The goal here is to reassure the professor, listen to any concerns and understand how they are running the test:

**What are we proposing?**

We hope to observe the test and understand better what happens during and after test: and how, where, & why our products aid or hinder the test. We do this by observing and supporting the professor. Professors can expect a unique level of support: extra people who understand how to handle technical issues, additional proctors, and hands-on guidance.

**Ask these questions:**

1. Special room or their normal class?
2. Types of questions: Long answer, Multiple choice etc...
3. Expected time to complete?
4. Attitude and approach to cheating?
5. Where / When to meet prior to test
6. Are there any TA or proctor orientations
7. # spare laptops to bring
8. What are the professors’ expectations for our support

Two Weeks before the test: Send professor this information via email

Dear << professor >>

We’ve written up a quick set of tips for conducting your test, and what to expect when we arrive to support you

FOR YOU

Timing: An engineer and I will arrive at the test room 30 minutes prior to the start of the exam. We will setup and monitor wifi in the room. It would greatly help if we had access to the university wifi, but it's not strictly necessary

Preparation:

Paper copies Plan on having enough paper tests for 10% of your students. Sometimes things just go south. When they do, we suggest a paper copy of the test as a backup.

The tophat team will help assist in manual entry of paper tests, and can help with creating paper tests for you.

2 week to test:
Try it out: Give a quiz in class using top hat test
This will condition students to what then need to do and make you comfortable using tophat test. Ideally try a 5 question quiz with a couple of question types that you expect to use in test.
1 week to test: Prepare Students Post the following in your LMS, in a slide or in whatever means you use to communicate with students in the class just prior to the test.

FOR THE STUDENTS:
In terms of conduct, a few handy reminders for taking an exam via a device you bring:

1. There is no power in the exam room, and the exam is <<n>> hours. Charge your battery fully before stepping in the room.

2. If possible, perform the exam using your laptop. If you are using a laptop, do not take out or use your phone. Some questions may benefit from having a laptop, and switching devices will lock you out.

3. Before starting the test, turn notifications off on your device.

4. Anything you do that is not the test will lock you out! Do not click on, respond, or attempt to dismiss any notifications appearing on your screen. Do not do social. This will lock you out of the exam. It’s safer if no other applications are running.

5. Do not tab out, close or minimize the exam. This will lock you out of the exam.

6. Do not refresh your screen/browser. This will lock you out of the exam.

7. If you have two devices on your desk during the exam, proctors will see it and we will lock you out of the exam.

8. If you experience a technical problem or run out of power, raise your hand and keep it raised (or whatever the proctor protocol is) and a proctor will come to you to help out.

9. Ensure that you have disabled energy saver/sleep mode on your device.
If you have any questions, please do not hesitate to ask

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**On Day of test**
Our team will arrive 30 minutes prior to class, we will bring several fully charged laptops for any students experiencing issues. We will add ourselves to your course in order to assist with proctoring the exam.

**Just Before test**
1) Take Attendance
2) Write join code on whiteboard or write down on paper to give to proctors.

**During test**
We will be among your students observing, responding to technical issues, helping with lockouts and verifying that no one is cheating.

**After Students Complete Test**
Have students keep their laptops or phones open and show you they have logged out before releasing them.

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**Day Before:**

**Spare Laptops:** Contact office@tophat for 5-10 spare laptops. Low spec, must have chrome and a tophat sticker on them to clearly identify as ours.

**Paper Tests:** Print and process paper tests, **assume 10-15% of class will need to do pencil and paper.**
Day of test:

What to bring:
All observers should bring a fully charged laptop and phone.
Open tabs in browser for recording feedback

Put all notes in #inclassobservation-- instead of writing notes separately, write them in the slack channel together. This will also facilitate communication during class.
Do the general reliability worksheet
The Top Hat test reliability worksheet