A mixed-methods analysis plan was used to identify any implementation challenges multiple choice exams as a workload management strategy. However, these exams include the disadvantage of de-personalized demonstration of learning and real cheating potential.

We examined the use of ProctorU as our proctoring strategy with the following objectives:

- to identify any implementation challenges
- to understand the impact of using an online proctor on the student experience

### Purpose and Objectives

This study explored new ways to maintain academic integrity for large enrollment, completely online courses. Many instructors feel compelled to utilize multiple choice exams as a workload management strategy. However, these exams include the disadvantage of de-personalized demonstration of learning and real cheating potential.

We examined the use of ProctorU as our proctoring strategy with the following objectives:

- to identify any implementation challenges
- to understand the impact of using an online proctor on the student experience

### Results

#### Materials and Methods

- Two of our large enrollment undergraduate courses utilized optional online proctoring (ProctorU) for the 2013-2014 academic year. Students had the option of using ProctorU or in-person testing sessions proctored by a teaching assistant.

- A student survey administered fall semester 2013 focused on the operational implementation. Responses were collected in a series of post-exam surveys fall semester 2013 in both courses.

- Based on the preliminary findings of the fall student survey, ProctorU-related questions were included in the course evaluation that was administered at the end of spring 2014.

- A mixed-methods analysis plan was used to examine the results, including quantitative analysis and qualitative analysis of open-ended survey questions.

**Emerging Themes**

**Question:** “How was your experience with online/in-person proctoring?”

<table>
<thead>
<tr>
<th>Positives</th>
<th>Negatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Convenience</td>
<td>• Issues with timelessness</td>
</tr>
<tr>
<td>• Autonomy</td>
<td>• Cumbersome</td>
</tr>
<tr>
<td>• Good experience with proctor</td>
<td>• Technical issues</td>
</tr>
</tbody>
</table>

#### Purpose and Objectives

**Discussion**

- In fall 2013, a total of 436 post-exam surveys were completed during the semester.
- Of those who completed surveys, 78.9% took the exams using ProctorU and 21.1% took the exam at in-person testing sessions on campus.
- In the post-exam surveys from fall 2013, 88.95% of students reported being satisfied with their experience using ProctorU.

- For the Spring 2014 course evaluation, the response rate was 79% (N=234).
- Most students rated the overall experience of online proctoring positively.
  - Interestingly, even those rating the experience as good listed concerns with the overall experience and the impact of online proctoring on the educational context.

- Of most concern were the quality of the experience (online proctor reliability and professionalism), sense of intrusion by the learner, and practical difficulties (online proctor computer requirements greater than university standards).
- Most students seemed to accept the negative parts of the experience because of the convenience benefits online proctoring provided.

- The instructors for these courses chose to stop using online proctoring based on the student expense, impact on experience, and general lack of need for these very basic introductory assessments.

### Conclusions

The question of how to maintain academic integrity with online courses is still an ongoing question, but this project demonstrates that online proctoring does impact the educational experience in ways that must be considered when determining the risk and benefit balance of proctored and un-proctored assessments.