University Professional and Continuing Education Association Center for Research and Consulting

2013 Student Authentication and Online Proctoring Report



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I. Overview

There are developing standards for online proctoring and authentication, but little consistency given the fast pace of online education. Online proctoring and authentication may include a continuum of services from "on-demand" scheduling and automated recording, to full-service, live monitoring by a proctor of a student writing an online exam, It may include the validation of student identity, recording of student and/or computer activity, and live interaction and monitoring of students writing online exams. For some institutions where proctoring or authentication is less of a priority, it may even mean a lack of controls and consistency.

The credibility of the online/distance learning field is at stake when controls and standards are not put in place. For example, in 2005, the U.S. Department of Education reported just 16 cases of fraud regarding online learning. In 2011, the department had over one hundred open cases, potentially representing thousands of potential fraud participants.

For those trying to deliver quality, online education, if even a single case of cheating or fraud happens and spreads through the media, it can hurt the entire distance education community as administrators, lawmakers, the media, faculty and others question the viability and quality of online instruction. More recently, a number of for-profit institutions were investigated for questionable practices that were driven by federal financial funding motivations where they "raced" their online students through courses.

Academic integrity and the solid reputation of a university are its most influential tools for attracting committed, high-caliber students, which translates to healthy graduation rates, leading to a stronger program and consistent accreditation. For this reason, ensuring the integrity of online education programs is essential to ensuring the integrity of the university itself.

Many questions need to be asked:

- Is this the person who is registered for the course? Are they alone in the room? Do they stay focused on their exam screen? Do they have unfair aids? Can anyone else see their screen?
- If live proctors are involved, is the proctor a trained professional? Can the proctor be monitored for quality assurance?
- How can online coursework and exams be monitored to protect the school from fraud, cheating, dishonesty, and manipulation? How does the university ensure that the person who enrolls is the person who participates, who takes the exams, and who deserves and receives the credit or degree?

2013 Student Authentication and Online Proctoring Survey

- How does an institution achieve successful monitoring of online education students without disrupting their ability to effectively take a test, and at the same time avoid violating the students' right to privacy?
- How might an institution best design and implement successful techniques for proctoring online exams, monitoring ongoing class work for irregularities and validating identification of individual students?

Institutional brand quality is at stake: academic integrity and the strength of online certificates, diplomas and degrees could be in jeopardy. Each institution needs to decide whether it continues to adhere to current minimum requirements of various regulatory bodies (e.g., regional accrediting association), or prefers to anticipate and stay ahead of future requirements from the regional accreditation agencies and local, state and federal government regulations.

There have been some preliminary steps taken by regulatory groups to begin the journey toward ensuring student authentication and exam integrity. The Higher Ed Opportunity Act of 2008 states:

Institutions that offer distance education must have processes through which the institution establishes that the student who registers in a distance education or correspondence education course or program is the same student who participates in and completes the program and receives academic credit.

Accrediting bodies, such as the Southern Association of Colleges and Schools – Commission on Colleges (SACSCOC), have built-in safeguards:

- (1) a secure login and pass code;
- (2) proctored examinations; and
- (3) technologies and practices that are effective in verifying student identification.

Today, these requirements would be viewed as *minimum* standards, but further tightening of these regulations is sure to come. In general, key stakeholders are looking for manageable, integrity-based solutions for proctoring online exams and/or servicing distance learners. Institutions want and need to provide evidence to accreditation agencies, students, and industry partners that their online programs have integrity.

The industry has begun to utilize a continuum of products and services for authentication, recording, and monitoring of online exams, from on-demand automated recordings, to student monitoring services, to full customization for each institution's processes.

While a number of events over the past two years have shaped the importance of having airtight protocols and processes for authentication and proctoring of online students, it will become even more important since the volume of students learning online is expected to increase. Higher education institutions will need to strengthen their protocols and standards, as well as be progressive in their use of technology to manage these processes.

2013 Student Authentication and Online Proctoring Survey

II. Objective and Methodology

To establish a benchmark for the University Professional and Continuing Education (UPCEA) study, a survey of 119 institutions was conducted. The study was underwritten by B Virtual Inc., an online authentication and proctoring company. UPCEA's Center for Research and Consulting (CRC) conducted the research independently and objectively. Distance education professionals from UPCEA's membership were invited to participate via email, and an invitation was sent out from UPCEA's Innovation Fellow for Digital Learning, Ray Schroeder, via his blog. Thirty-seven responses were received from Professor Schroeder's blog invitation, with the remaining eighty-two received from direct UPCEA channels. It is important to note that Professor Schroeder's blog has significant overlap with UPCEA membership.

The survey was conducted in January 2013 and took respondents about eight minutes to complete.

The goal of the survey was to address or identify the following:

- What percentage of higher education institutions are utilizing proctoring and authentication for online exams and assignments?
- What processes and tools are they using to ensure proper monitoring and authentication of online students?
- How effective are institutions in utilizing technology to prevent fraud?
- How satisfied are institutions with their current processes for proctoring and authenticating online students?

III. Executive Summary

- Seventy-seven of 119 survey respondents conduct some form of student authentication and/or proctoring for online exams and assignments.
- Sixty-nine percent of participating institutions have enrollments of 5,000 or less. Institutions with more than 5,000 online enrollments are more likely to use student authentication or proctoring than those with 5,000 or fewer (73% vs. 48%).
- More than two-thirds of respondents represent public, 4-year institutions (69%). Public universities and colleges are more likely to use student authentication or proctoring (69% and 75%, respectively), while just 22% of private, nonprofit institutions do.
- Out of the responding institutions that report proctoring or authenticating, approximately 83% utilize a source such as a library, public school, or other organization for proctoring online examinations.
- Just one-third require that students take exams only at particular facilities chosen by the institution, yet this method produces the most satisfaction and confidence out of all listed processes.
- Online proctoring services are utilized by 45% of institutions that conduct proctoring. Sixty-one percent are "very" or "extremely" satisfied with their proctoring processes and 83% are "very" or "extremely" confident with their online proctoring services.
- In most cases, the student pays for proctoring.
- All of the responding institutions who participate in student authentication require students to have unique identification names and passwords, and most (90%) use a secure learning management system to manage quizzes and exams.
- None of the participating respondents utilize voice recognition or fingerprint identification when authenticating students.
- Eighty-three percent of institutions that authenticate students do so at the onset of an exam. Half authenticate at the time of course registration, and one-third authenticate throughout the life cycle of the course or at regular intervals.

- FERPA plays an important role in decision making concerning student privacy, with 70% of respondents believing FERPA's involvement is extremely important.
- Sixty-five percent of institutions proctor or authenticate their students internally, without the aid of an outside company. Fifty-nine percent believe that the solution should ultimately be owned by the institution.
- There exists a general belief that there is no foolproof technology for authentication and proctoring online exams and assignments, so instructors should still create exams and assignments that reduce the risk of academic dishonesty.
- Student privacy remains a concern for colleges and universities when considering authentication and proctoring processes.
- The threat of academic dishonesty keeps online proctoring and student authentication solutions important to most colleges and universities.
- It is important that online authentication and proctoring businesses provide solutions that are reliable, easy to use, and can be integrated into the institution's existing systems.

IV. Recommendations

- There needs to be a greater awareness of models for managing authentication and student honesty.
- More institutions need to commit to a stronger process for authentication and student honesty, as it impacts the entire online teaching community. One visible occurrence of impropriety has the potential to negatively impact other institutions, as confidence in online teaching could decrease if unsupportive faculty and administrators discourage campus adoption of teaching in this modality.
- UPCEA and other leading organizations should offer greater educational opportunities to promote best practices in the processes and technologies for authentication and student honesty. Poor applications of technology and inadequate processes have the potential to adversely impact the learning and/or testing environment.
- Greater collaboration between institutions and the business community is encouraged, since the corporate sector is often at the forefront of innovation in developing new technologies.

V. Detailed Findings

Survey Demographics

Out of 114 survey respondents, 64% conduct some form of student authentication or proctoring for online exams and assignments.

More than half (57%) of the respondents hold the title of Director or Manager of Distance Education. Fifteen percent are Deans, 11% are Program Managers/Directors, 6% are Associate Deans, 6% are Directors/Managers of Technology, and the remainder (5%) are Instructional Designers.

Do you conduct student authentication or proctoring for online exams and assignments?



Sixty-nine percent of participating institutions have 5,000 or fewer online enrollments, and just three (4%) enroll more than 20,000 students online. The institutions with the fewest online enrollments are less likely to use student authentication or proctoring – just 38% of institutions with fewer than 1,000 online enrollments and 53% of institutions with between 1,000 and 5,000 online enrollments use such services.

The majority of respondents represent public, 4-year institutions (69%), with 26% representing private, nonprofit 4-year institutions, and the remaining 5% community colleges. Both public and community colleges are more likely to use student authentication or proctoring (69% and 75%, respectively), while 78% of private, nonprofit institutions do not.

Authentication, by number of online enrollments



Authentication, by type of institution



Current Proctoring and Authenticating Processes

Out of the responding institutions who report proctoring or authenticating, 83% use a source such as a library, public school, or other organization for proctoring examinations. Seventy-eight percent use an official at an institution located near the student, and 63% allow students to find and validate their own proctors. Just one-third of respondents require that students take exams only at particular facilities chosen by the institution. Forty-five percent use an online proctoring service.

Out of the possible listed choices, the most satisfied survey participants represent those institutions where students are only allowed to take exams at facilities chosen by the institution. Institutions that allow students to find and validate proctors are least satisfied, with 12% reporting that they are "not very satisfied" with their current proctoring processes. Sixty-one percent of those who use an online proctoring service are "very" or "extremely" satisfied.



Proctoring methods



Satisfaction with current proctoring processes

Extremely satisfied Very satisfied Somewhat satisfied Not very

Not very satisfied

Similar to the preceding graph, out of the choices listed, the most confident survey participants represent those institutions where students are only allowed to take exams at facilities chosen by the institution. Institutions that allow students to find and validate proctors are the least satisfied, with 8% reporting that they are "not very confident" with their current proctoring processes. Eighty-three percent of those who use an online proctoring service are "very" or "extremely" confident.

In most cases, the student pays for proctoring. This is true for all the listed proctoring processes. However, students are least likely to be responsible for payment if they are only allowed to take exams at facilities chosen by the institution (69%). They are most likely to be responsible when the institution utilizes an online proctoring service (89%).

3% 5% 8% 15% 17% 16% 24% 23% 20% 72% 77% 71% 59% 61% 60% 14% 12% 12% 11% 10% Use an official at an Use a source such as Allow students to find Only allow students Online proctoring Use a corporate service institution near the library, public school, entity, such as a test and validate the to take exams at student or other organization proctor facilties chosen by the center institution Not verv confident Somewhat confident Very confident Extremely confident Who Pays for Proctoring The student The institution 69% 77% 79% 84% 86% 89% 31% 23% 21% 16% 14% 11%

library, public school, such as a test center

or other organization

Confidence with current proctoring processes

Use an official at an

institution near the

student

Online proctoring

service

take exams at facilties

chosen by the

institution

Use a source such as Use a corporate entity, Allow students to find Only allow students to

and validate the

proctor

All of the responding institutions who participate in student authentication require students to have unique identification names and passwords, and most (90%) use a secure learning management system to manage quizzes and exams. Sixty-eight percent use a secure server for authentication purposes. None of the participating respondents utilize voice recognition or fingerprint identification when authenticating students.

All of the institutions who use digital recording or facial recognition are "very" or "extremely" satisfied with their authenticating process. Institutions that use webcams are also relatively satisfied, with 87% reporting being "very" or "extremely" satisfied.

Authentication methods



6% 13% 30% 33% 31% 60% 86% 67% 52% 58% 56% 40% 20% 15% 14% 10% 8% Require students to Use a secured server in Use a secure learning Webcams for monitoring Digital recording of Facial recognition for have unique IDs and your authentication management system to student exams authentication passwords manage your quizzes and exams Not very satisfied Somewhat satisfied Very satisfied Extremely satisfied

Satisfaction with current authenticating processes

Eighty-eight percent of survey respondents that require authentication report that they perform student authentication at the onset of an exam. Approximately half authenticate at course registration, and one-third authenticate throughout the life cycle of the course or at regular intervals.

FERPA plays an important role in decision making concerning student privacy and online proctoring, with all respondents indicating at a minimum that it is at least "somewhat important," and 95% believing it is "very" or "extremely" important.

When authentication is performed



Importance of FERPA in decisions around student privacy and online proctoring



Online Proctoring and Outsourcing

Sixty-five percent of survey participants who proctor or authenticate their online students do so internally and the remaining 35% employ an outside company. Fifty-nine percent believe that the online proctoring solution ultimately should be owned by the institution, and 41% believe it should be outsourced as a business service provided by a third party.

Do you use an outside company to proctor or authenticate your students?



The online proctoring solution utlimately should be...



Additional Thoughts

Some respondents provided their thoughts concerning online proctoring and authentication. The verbatim responses suggest that there exists a general belief that no technological system is infallible and that the burden to create valid, fair exams and assignments to reduce academic dishonesty still lies with the instructors. There is also some concern with student privacy and FERPA requirements for some of the online proctoring and authentication technologies. However, the threat of academic dishonesty and its negative effect on the university keep online proctoring and authentication a viable and essential option for most institutions. For businesses operating in the online proctoring or authentication field, it is important that their programs are reliable, easy to use, and can be integrated into the institution's existing systems.

> "There is no technological solution to prevent cheating. All products that rely on a student's personal network or personal computer are very unlikely to be successful."

"Ensure the organization that you deal with understands FERPA."

"Keep refining your products to ensure reliability and ease of authentication and verification." "We aren't there yetwe need real solutions." "We've explored webcams and other remote proctoring services. Seems somewhat intrusive, plus the difficulty (exists) of getting equipment to/from the student."

"Security & authentication technologies can and will be defeated (not just for online courses). Course assessments should be carefully designed by instructors to measure the authentic learning ability of each user (i.e. writing samples, essays, short answers-all of which should require critical thinking on the spot and in a limited timeframe) such that they will prove as valid online as they are in the face-to-face classroom."

"Consider remote proctoring when all other approaches to creating exams have been exhausted."

"Online exam proctoring and identity authentication needs to be integrated with our learning management system. For us, online proctoring would be one option, along with face-to-face proctoring. We also need to determine how the fees will be charged (as a course fee or student fee) and paid for (by the student or institution)."

"All strategies employed along the lines of proctoring and identity authentication are risk mitigation strategies, not risk avoidance strategies. No system will be 100%."

"Determine if such authentication is 'really' required and/or necessary. There could be some cases where it is justified and a company is hired to assist."

"Reliability is key."

"One of the major concerns we have regarding almost all of the online proctoring services we have seen is one of student privacy. Requiring students to record visual or audio data from their private location can be seen as a possible invasion of privacy, especially if the service doesn't have policies and procedures to properly insure disposal of such data. Also, while many solutions certainly make cheating harder, it's still not fool proof. There is some concern that such services may result in complacency and lessen the effort to build more authentic assessments."

"Proctoring is becoming cumbersome and a technological solution which is seamless, owned by the institution, and managed by faculty members is needed. However, the fulcrum which will tip the scales in favor of proctoring support (financial, personnel, technological, etc.) is academic dishonesty."