Software
SECURE

Scaling Up Online Exam Delivery
Clemson University improves the quality of its online learning program while increasing convenience and protecting integrity.

Overview

Clemson University (CU) degrees are built on a foundation of quality and integrity. In fact, the International Center for Academic Integrity (ICAI) resides on its campus. Clemson's rigorous academics are what make the degree so valuable. In fact the institution is ranked first in the state of South Carolina for value and return on investment.

Every semester, over 700 students enroll in the Principles of Management class at Clemson's College of Business and Behavioral Science (CBBS), co-taught by Tina Robbins and Kathy Clark. That's a pretty intimidating class volume, but perhaps even more daunting was the challenge of assessing that many students. The logistics of delivering exams for both on-campus students and online students were becoming increasing onerous – and of even greater concern, was that academic cheating was on the rise.

At the same time, the university wanted to expand its online program – but the trust and scalability issues would have to be addressed before this could happen. Clemson was determined to find a better way to offer exams more efficiently and securely to on-the-ground and online students.

Determined to improve the situation, the Clemson's administration, instructional technologists and faculty set out to find a test proctoring solution that would meet their security, scalability and accessibility requirements.

Challenge

AT A GLANCE

Client: Clemson University
Level: Undergraduate
Solutions: Remote Proctor Now

CHALLENGE:

- Reduce cheating in remotely administered exams

SOLUTION:

- Find proctoring model offering security and scalability

RESULT:

- Significant reduction in cheating

THE IMPORTANCE OF SCALABLE SECURITY

"At Clemson, the need to scale is important. By nature of the volume we're dealing with in some of these classes have necessitated the use of virtual proctoring solutions, says Witt Salley, Chief Online Learning Officer at Clemson University. "A lot of my research previously was about the efficacy of proctoring and online education. What a lot of the research shows was that it was counter-productive, the traditional ways of proctoring were not very effective, and cheating was still going on."

In the past, exams had been given using traditional methods, like test centers and personal proctor or utilizing various technology solutions. But the process was still burdensome for the faculty and instructional technology teams and largely ineffective. The technology

Challenge

solutions created more work for the faculty and in the end weren't effectively preventing cheating. And on-campus methods were untenable – the cheating in this environment was sometime even worse.

FACULTY OVERLOAD

Explained Kathy Clark, Senior Lecturer at CU-CBBS "In the past we used Tegrity, but we had to review all 700 of the videos. And that was just impossible to do. Prior to that, we gave the option of coming onto campus. But the problem was that there was no way to accommodate 700 students. And we had to use land lines because wireless wasn't working well. And so we would give the exam over the course of 3 nights because we didn't have enough proctors – so I would be running back and forth, up steps to different exams rooms - it was absurd! And the students still continued to cheat. But not surprising because in that case they knew we couldn't keep an eye on them."

"We also used Respondus Lockdown Browser," said Melissa Lockhart, Instructional Technologist at Clemson University. "And while Respondus helped to lockdown a person's computer, it didn't necessarily proctor what was going on in the exam environment."

OFF-CAMPUS OVERSIGHT

Online students come with their own challenges, particularly for those overseas. Lockhart explained, "The math department wanted to start teaching online classes but they needed to procure proctor sites where students that were doing internships could go to take exams – this was due to a requirement that all exams needed to be proctored. So we were helping to find them resources in India, China and all over the U.S. to take proctored exams. There were a lot of challenges and it was expensive, up to $100 or more depending on the location." On personal proctors, Lockhart said, "We tried to find a free resource for the student, but encountered issues with scenarios like "Joe's cousin is doing the proctoring at the local library" or the "boss who wanted them to pass the class" so they could get tuition reimbursement. You always run into issues with stuff like that with personal proctors."

WE KNEW WE HAD TO DO THINGS DIFFERENTLY

And while there was no specific compelling event that drove the search for more effective exam proctoring – curbing cheating was certainly an impetus. "We just knew it was something we had to do. People knew we needed better proctoring, and they wanted it."

The timing was right and bolstered by the fact that better proctoring solutions were available. Explained Salley, "I think there has been a larger acceptance of the fact that if we're serious about academic integrity, and if we're really going to curb cheating, then we have to stop fooling ourselves into thinking that traditional proctoring will work. Virtual proctoring solutions not only help us to stay true to our mission of providing flexible and accessible online education, but they actually provide a better proctoring method."

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"I believe that in many cases – academic integrity is kind of the red herring of online education. At the same time, we've got questions from legislators and accreditors that want to know what we're doing to protect academic integrity. I think this is a great way of demonstrating we're putting a requirement and solution in place – without overburdening any one person or group."

Witt Salley, Chief Online Officer

Clemson University

Solution

SELECTING A SOLUTION

According to Lockhart, "Once Witt came aboard, I asked my previous boss if I could do a pilot of some of the remote proctoring solutions. We received funding for the initiative and we selected Remote Proctor Now (RPNow) as the solution to rollout on campus."

UNBURDENING FACULTY

Capabilities that ranked high in importance to Clemson were flexibility for students and scalability for faculty. They liked the fact that RPNow combined the best of both worlds, leveraging technology to provide convenience, scalability and security – and using certified proctors on the backend to review the student exam videos. Salley said, "Above all we did not want the faculty to have responsibility of going through all the video recordings themselves." Added Clark, "I agree, that's what made the prior solutions impossible with our large classes. Faculty having to look at the videos themselves – that was just impossible!

LET THE EDUCATORS FOCUS ON EDUCATING– NOT PROCTORING

Salley said, "From an administrative standpoint, unfortunately I've seen where the burden is increasingly placed on the faculty member – and their time is increasingly being pulled in many different directions. So I'm constantly looking at solutions and approaches that can unburden the faculty member a little bit more so they can focus on instruction. We need to have educators focused on teaching, directly mentoring students, providing feedback and interacting with them, conducting their research and doing their service – not tied up in administrative functions of verifying student identity, and making sure they're not cheating. The fact that RPNow does help to unburden the faculty is very important to me."

AUTHENTICATION

"Laws and standards are making it more necessary than ever before to use authentication and proctoring solutions," said Lockhart. "A good example: for the VA educational benefit, we have to have certain requirements met, and one of those is proof of the person attending the class is actually the same person signed up for the class. And using RPNow is one of the ways we can do that because the tool asks the learner to validate their identity with a student ID or driver's license – to verify they are that person.

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"The aspect that I liked best about RPNow is that we could sell it to the faculty and teach them about the possibilities with it," remarked Lockhart. "We didn't have to support it, and it wouldn't be another tool we'd have to learn how to support. We can serve as mediators if faculty needed help. That was a huge selling point for me."

Melissa Lockhart, Instructional Technology

Clemson University

Solution

Result

ROLLING OUT REMOTE PROCTORING

"Given the volume of students, you have to consider the percentages. There were some issues, but the vast majority had no trouble at all using RPNow,"said Clark. "Sometimes there's confusion of whether they should be calling Blackboard or RPNow support to pinpoint the origin of the issue. But regardless of their origin, if there were technical glitches – the company was very responsive in addressing these issues. It's important that we keep complaints down with parents and students, so it's important that we have a close relationship with Services and Support."

EXAM VIOLATION EVIDENCE

Faculty report finding great value in RPNow's recording feature. Explains Clark, "Last semester we had a student cheating. This student is actually contesting it right now – but as we have the recordings of all her exams, we're able to provide evidence of the incident to the Academic Integrity Board. "It's pretty easy, so I love that."Salley said, "As an administrator, this is a great story to hear – because it illustrates the power of the RPNow solution versus what we had done in the past. Because with traditional proctoring, we'd often have suspicion of cheating regardless of the fact that it was being proctored, but we didn't have a record to allow us to do any further investigation. So while we do want the product to continue improve and respond to these types of challenges, it's great that we have this evidence to go back on."

INCREASED CONFIDENCE IN EXAM INTEGRITY

While it's still early to quantify cheating statistics since implementing RPNow, the staff and faculty have reported other valuable quantitative benefits. "The proof is found in faculty and student satisfaction – and increasing the adoption of online learning," said Salley. "In the past, faculty wouldn't put their pro-

Result

Benefit

grams online because of concerns of over academic integrity, so to be able to go to a faculty group and say, we have a solution available is pretty powerful," he said. Clark added, "We analyzed our grade distribution and it was clear that grades overall had gone down. And clearly that's the result of not being able to cheat."

CHEATING INCIDENCES REDUCED

As awareness of the use of RPNow has grown, the incidents of cheating appear to be going down. Clark explains, "I used to report up to 10 cheating incidents at a time. Now it's rarely more than one incidence per exam time. And it's often someone that just doesn't think they're going to get caught. So we feel very comfortable with it.

A MISSION TO ACCOMPLISH

Proctoring exams is a critical component of establishing a credible online education program. Salley said, "When I came to Clemson, I was challenged with three objectives,

1. Improve the quality of the online learning experience
2. Curb cheating
3. Grow the online learning program

The first was to improve the quality of the online learning experience and, from students directly, it was to curb cheating, and while Clemson wanted the courses to improve in terms of quality, they also wanted to see considerably less cheating. We were charged by our Admin to grow the program, so that meant instilling trust in faculty departments and relieving some of the burden from faculty. I feel that Software Secure, the RPNow solution, and basically the virtual proctoring concept itself have helped me to achieve all three of these simultaneously."

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"We don't have to spend nearly as much time as we used to during exam time. In the past, we used to have three dedicated evenings to give the exam -- not counting all the side activities like make-ups and other things. RPNow allows us to focus on the course - improve it and allowing faculty to focus on students. It's taken an immense time load off of us."

Kathy Clark, Faculty/Instructor

Clemson University

Benefit

NEWFOUND RESPECT FROM STUDENTS

Even the students are noticing and spreading the word about online proctoring. And it's a good thing. "We've gained respect from students on campus regarding the integrity of the course," remarked Clark. "In the past, we had students as well as parents complaining about the cheating. I feel RPNow has contributed to the overall validity and integrity of the course as well as freeing up our time from "proctor-sitting" students for hours on end," she added. Salley said, "When I've spoken to the undergrad students about the solution, they've reported that they've heard about it from their friends. They trust what we're doing (process) much more. And the rate of adoption of online learning programs has increased as well."

CONVENIENCE, FLEXIBILITY AND REDUCED COSTS

"My goals were to be able to offer a more reliable solution for proctoring than looking for libraries that offered free proctoring solutions or having large testing centers where students would have to spend hundreds of dollars to pay for proctored exams, and provide a more flexible experience for students and faculty," said Lockhart. "I think it's all about being able to offer faculty a tool that helps elevate their comfort level to give courses and exams online. And I think RPNow did that. To be able to provide a solution like this was ideal and rewarding," explained Lockhart.

WE'RE IN THIS TOGETHER

With any technology solution, there will always be challenges. Having a solid foundation is key, and that starts with the company. The staff all agreed it was an imperative. Salley states, "It's not just a transaction, or a vendor supplier relationship – we are partners. And what we need in a partner is someone who is responsive and committed to constantly researching and improving their product and delivery of service. I tremendously value the fact that I'm able to take the feedback I get from my staff, faculty and students -- and share that with your team to help contribute to the evolution of the product. They're always very responsive."

Future

EXPAND AND INNOVATE

The online learning staff has a clear vision of the future of proctoring solutions. "I don't want to define any artificial metric, but what success looks like to me is that we have use of RPNow in every discipline that we offer online, said Salley.

"That doesn't necessarily mean in every single course (that we offer that discipline online), but at least we have some sort of representation where it makes sense. There will be some faculty that don't feel like it makes sense for them. But I think we can actually work with them to help them see how it could work, i.e. English – we don't give exams, we do writing, different projects and various other things. But there are ways we could use this to ensure the authenticity of the identity of the person doing the work.

Sometimes it's just getting faculty to see beyond that this is a way to prevent cheating – that it's also a way to verify identity. The onus is on me to do that – to help them see that even though they don't give exams, or cheating isn't a concern, it's still a way to enrich the experience. If we assume out of the gate as we're able to absorb the cost institutionally – then we can

expect to see adoption and use of RPN in every single discipline we offer online. In a few years, we'll probably have more defined quantitative metrics that will help define our decision making processes."

About Clemson University

Clemson University is a recognized "Top 20" institution located in Clemson SC and boasts graduates who are among the most innovative and brilliant minds in the U.S. The university's academic rankings prove it as Clemson currently resides at No. 20 among all public universities in U.S. News & World Report's annual rankings.

CONTACT SOFTWARE SECURE

Tel: 617-340-6381
Fax: 617-340-6388

Web: www.softwaresecure.com
Email: sales@softwaresecure.com

Twitter: @software_secure