

## Case Study:

# Leveraging reporting to improve curriculum and student performance

## BACKGROUND

The Ohio State University College of Medicine is a four-year program, with a curriculum that integrates foundational and clinical science. Throughout the program, students work alongside expert faculty and staff at one of the nation's top academic centers, and gain hands-on experience through a longitudinal, practice-based clinical setting. The College of Medicine is driven by the mission to improve lives through innovation, research, education, and patient care.

## THE PROBLEM

The Ohio State University College of Medicine wanted to implement an assessment solution that would enable faculty members to use student performance data to impact student learning outcomes during the semester, actively improve the curriculum, and support accreditation documentation. The institution's existing testing system did not offer faculty members the ability to categorize exam questions, provided limited reporting capabilities, and was often unreliable on exam day.

While faculty members were able to make broad assessments class performance, assessing individual or specific performance was much more difficult. Faculty members could not easily pin-point areas of weakness, limiting their ability to improve the curriculum or address student specific learning needs. In addition, faculty members were unable to accurately predict student performance on the United States Medical Licensing Examination (USMLE), and lacked the data to assess students on the required competencies tested by the USMLE. Finally, students could not easily determine their own strengths and weaknesses - they often spent a considerable amount of time studying the wrong material, wasting valuable study time.

In addition reporting shortcomings, the existing system was often unreliable, and did not save or upload student answers properly. Moreover, students were forced to take exams in multiple shifts due to computer lab seating limitations, creating inconveniences for students, staff, and faculty.

## RESULTS

- Empowered students to improve performance with real-time data and personalized feedback
- Enabled faculty to generate valuable reports for curriculum evaluation and improvement
- Improved testing reliability and flexibility

*“We needed a solution which would provide accurate, timely feedback to students by a wide range of subjects, to help us improve our remediation process, USMLE prep, and accreditation documentation.”*

- Eric Ermie  
Program Manager for Assessment & Evaluation

Discussing their TEDEQ system while presenting at the CGEA Conference in March 2011

## THE SOLUTION

ExamSoft gives the Ohio State College of Medicine the ability to easily create assessments, and categorize questions in a variety of ways, including by subject, competency, cognitive process, learning objective, and USMLE focus area. With one click of a button, faculty members easily generate reports containing robust information on student and exam performance. This information is then used to identify areas of low performance, and dedicate more class time to discussing those problem areas. Faculty members also use this data to predict students at risk of failure, and intervene.

The College of Medicine also values the ability to provide students with the resources needed to help them succeed throughout their academic careers. According to the College of Medicine's white paper, *Improving Student Learning Outcomes: How Real-Time Performance Data Helped Students at Different Levels of Academic Performance*, real-time data and personalized feedback not only removes the guesswork from self-directed learning efforts, but also assists students in reaching their academic goals. With ExamSoft, students can use performance and longitudinal reports to engage in self-directed learning, and improve areas of poor performance. Now, students easily identify their own strengths and weaknesses, and create targeted plans for improvement by course, as well as throughout the entire program.

ExamSoft transforms the testing environment for faculty members, staff, and students by delivering exams securely onto student-owned laptops. The institution is no longer limited by the capacity of its computer lab, and reliably delivers exams to all medical students at the same time. Internet access and dependency are eliminated during exams, and student responses are saved every 60 seconds, allowing students to focus more on the exam, rather than the functionality of the software. Lastly, the College of Medicine receives support from a dedicated account manager and service team, and is encouraged to provide feedback to ensure the ExamSoft solution is fulfilling the institution's current and future testing needs.

*“With ExamSoft, we provide personalized student feedback, which eliminates the guesswork from their self-directed learning efforts and enables faculty to target their interventions, and directly impact individual student learning outcomes.”*

- Eric Ermie

Program Manager for Assessment & Evaluation

Discussing usage of categorical data for predicting student board exam performance at the 2012 IAMSE Conference

## Other Key Takeaways...

### How do faculty members use the reports provided by ExamSoft to improve the curriculum?

“The reports indicate specific areas of strengths and weaknesses in our curriculum. Rather than overhauling an entire block of information, faculty members can focus on specific areas, and dedicate more time to helping students who are struggling.”

### How does ExamSoft improve student retention of knowledge?

“Using ExamSoft, we can continue to assess students on basic science information, as well as their ability to apply core concepts throughout their entire academic career.”

## About ExamSoft

ExamSoft offers a market-leading exam management solution, which delivers powerful, actionable data to assess learning outcomes and improve student learning, engagement, and retention. Its software suite enables clients to more efficiently and practically administer exams and analyze resulting data to improve curricular design, test design, and accreditation compliance. ExamSoft has served hundreds of prominent academic, certification, and licensing institutions for more than 14 years and has successfully administered millions of exams.