

# Streamlining Exam Administration through Continual Stakeholder Engagement and Training

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# Abstract

#### **OBJECTIVES**

The objective of this project was to use analytics to improve stakeholder training and preparedness.

### METHOD

Using comprehensive guides, one page sheets, in person trainings, and practical application of skills, the School developed a model for effective training and support. Training consisted of two separate phases of examination administration. The first phase focused on high level concepts, such as examination policy, and the second on the development of practical skills. To develop and refine skills, trainees completed a skills assessment within the ExamSoft portal receiving feedback throughout the process.

#### RESULTS

This multi-phased approach resulted in trainees having a better grasp of examination policy as well as an increased proficiency with the ExamSoft portal. The completion of a skills assessment provided trainers with insight into each individual's abilities as well as an awareness of common trouble areas. This informed the creation of targeted communications, refined training approaches, and proactive consultations to improve the exam administration abilities of faculty, staff, and teaching assistants. Tracking all support interventions further shaped the communications and focus of the training and support material offerings.

# Historical Background

#### **EXAMSOFT TRAINING AND SUPPORT**

ExamSoft has been used by the School since the fall 2014 semester. After the completion of a successful pilot, ExamSoft was offered to all required courses.

As adoption increased, all faculty and graduate students using the application received training. Typical training consisted of a one on one meeting with the faculty member to cover policy, procedure, and provide an ExamSoft tutorial. A similar training was provided to graduate students serving as TAs, but in a group setting. As assement numbers increased the demand for training also increased.

Deficiencies in retention of training and persistent questions regarding exam administration issues piled up. Additionally, no tracking mechanism was in place to report on the types of issues students were experiencing. Both of these issues affected exam administration and support. Beginning in spring 2018, the Office of Academic Affairs (OAA) staff began tracking exam support interventions with a Qualtrics form to allow for faster identification and reporting of the support requests received by students. Using that data, modifications were made to the training and messaging provided to students, faculty, and TAs.

# Data Collection & Entry

### **REVISING OUR APPROACH**

OAA endeavored to improve the training and exam administration processes by reviewing internal help desk tickets, emails from faculty/staff/students, and soliciting in person feedback from proctors and students after exams. Using this information, OAA revised the exam administration and training processes.

The exam administration process was altered to minimize the burden on faculty and TAs by shifting their focus to question entry and quality assurance. Remaining tasks related to exam preparation were shifted to OAA staff.

The training process was revised to consist of two distinct sessions: one focused on policy and procedure and the other on software/skills training.

### IDENTIFYING AND TRACKING SUPPORT REQUIREMENTS

In order to better understand ExamSoft support requirements, OAA created a Qualtrics form containing the most common support issues encountered and entered every support instance into the form. The form data was then placed into Tableau to create a visual dashboard. The infromation was used to craft messaging sent to faculty and students.

## ExamSoft Error Tracking

Code	Error
E01	Application service unavailable
E02	Tamper failure warning
E03	Black screen after exam
E04	Login/username issue
E05	Exam download issue
E06	Exam upload issue
E07	Examplify installation issue
E08	Action required/Close Program
E09	Other error/I'm not sure

## Qualtrics Form

	ExamSoft	Issue Tracking	
Enter your OneCard	number		
Enter your first nam	<u> </u>		
Enter your last name	:		
Enter your email ad	Iress		
Select your class ye	ar		
O P1			
O P2			
O P3			
O P4			
What is your operat	ng system?		
O Windows	.9 0,010		
O Mac OS			
- Mac OG			
Please select your is	sue from the list below	1	
	▼		
Description of issue			

## STEP #1: Support Entry

All support instances are entered into the Qualtrics form using the appropriate error code. Entries are reviewed and re-categorized as needed.

# STEP #2: Data Export

Data is imported to Tableau and refreshed periodically to ensure the information is up to date. Qualtrics offers a Tableau API simplifying the process.

## STEP #3: Building the Visualization in Tableau

Data visualizations and dashboards are created. Every student support interaction from the semester is logged. Support interactions consist of face to face, email, and telephone interactions.

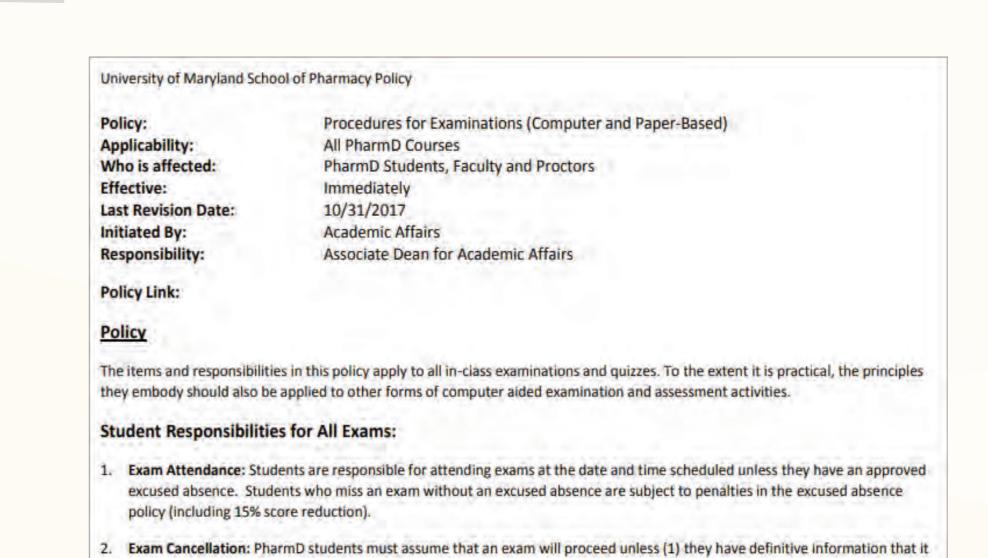
Messaging to faculty, TAs, and students throughout the semester incorporates data from the support entries to ensure up to date support strategies. Periodic feedback is also sent to ExamSoft when specific recurring issues are identified.

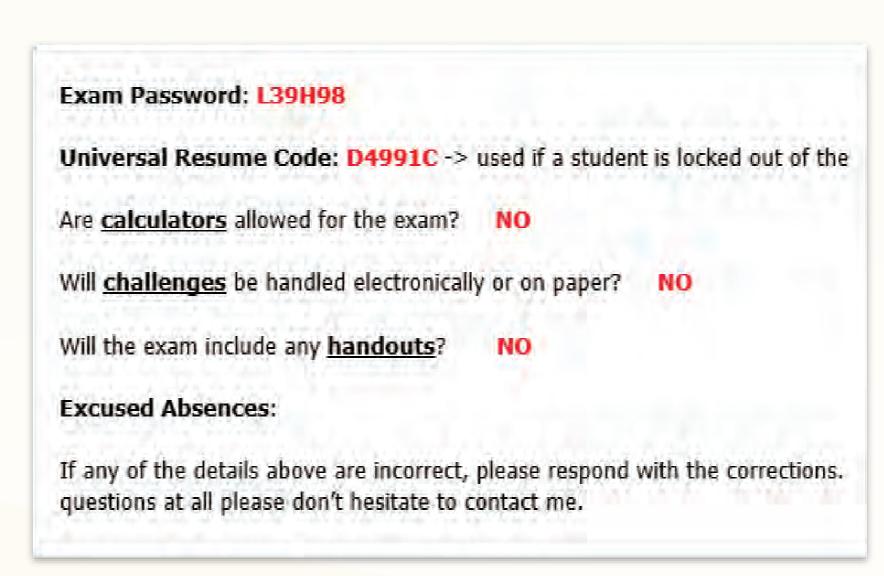
# Multi-phased Training Approach

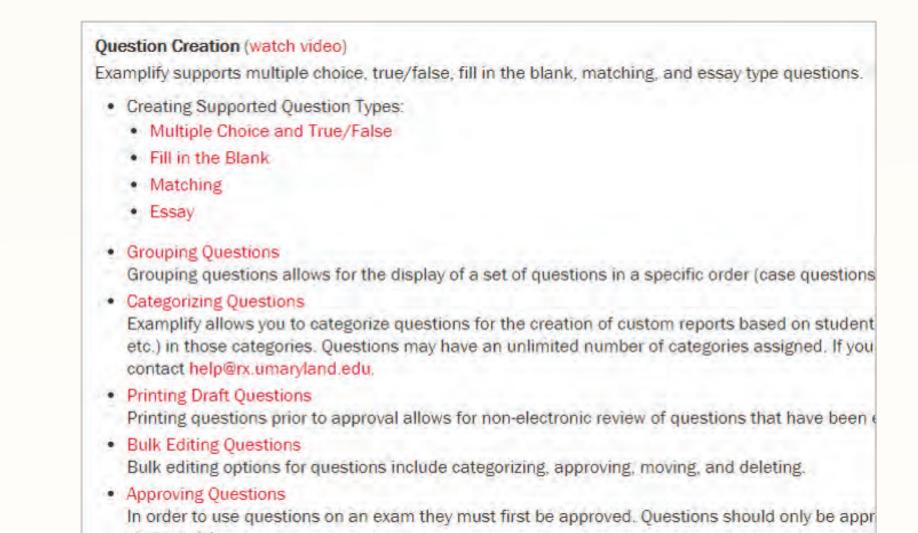
#### IMPROVING THE EXAM PROCESS

The change to a multi-phased training approach allowed faculty and teaching assistants to better retain crucial information related to policy and exam procedures contributing to the improved exam experience. Using data collected to shape available materials reinforced their training and reduced anxiety.

Additionally, OAA increased its involvement in the exam process. The added involvement decreased technical errors in exam postings and allowed faculty to focus more on question quality assurance.





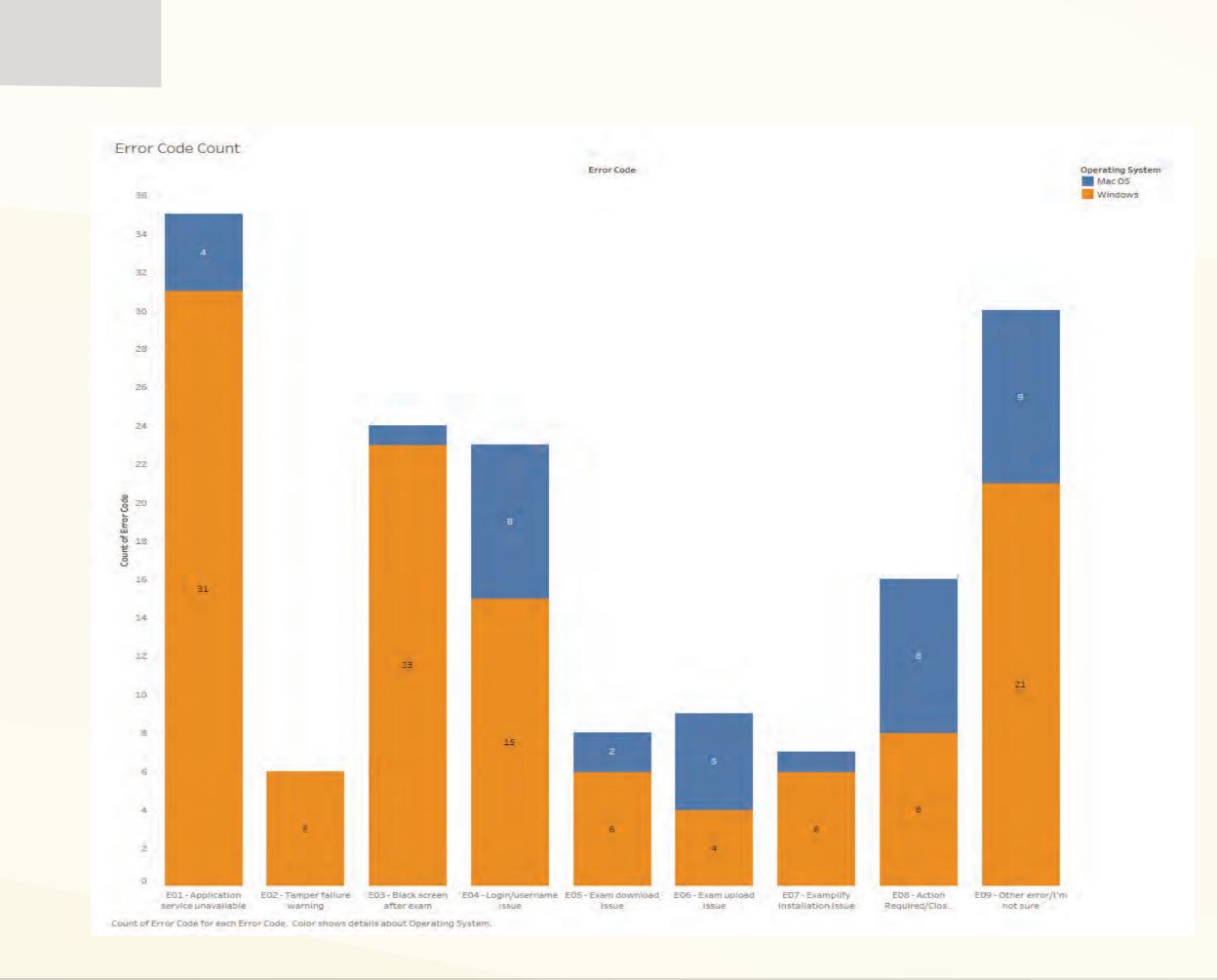


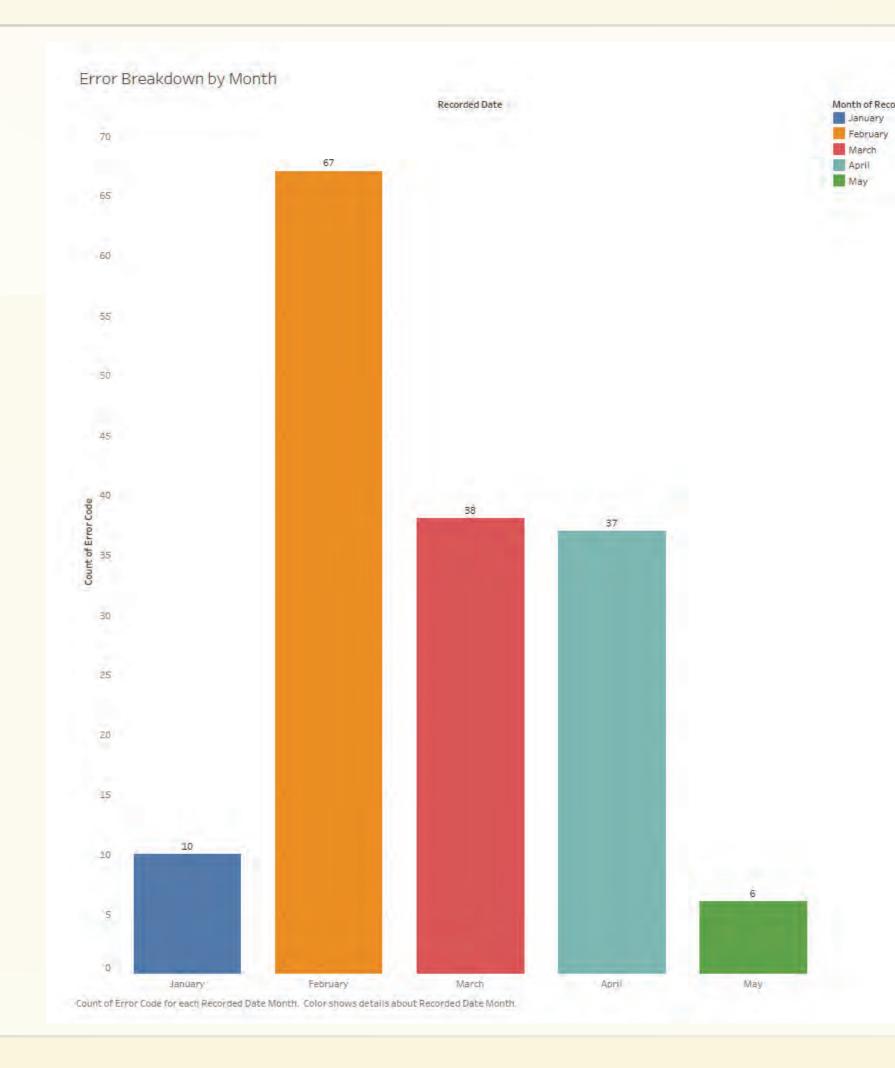
# Visualizing the Data

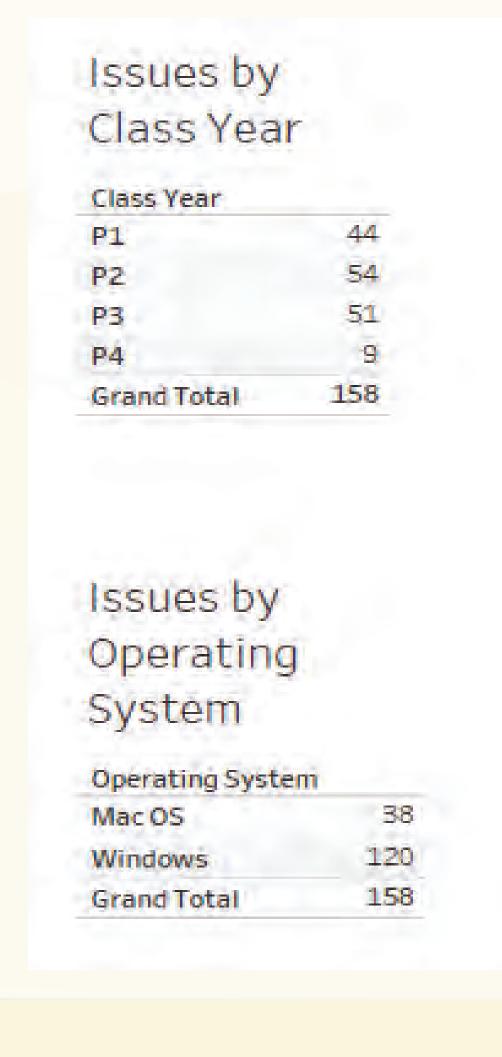
#### DISCOVERING MEANINGFUL INFORMATION

Tableau visualizations provided insight into OAA support efforts and where they were focused. For example, there were 35 support instances for a single error type. Identifying this recurring error allowed OAA to share resources for self-solving the issue. Additionally, it was determined that 88% of support interactions for that issue were on Windows computers which was shared with ExamSoft.

OAA was also able to monitor how many support interactions came from each class year, how many support interactions there were for each individual student, and how many issues were experienced by Mac vs. Windows Users. This information will be used to update computer requirements (previous minimum requirements were outdated) and the training given to students at the beginning of the semester.







# Focusing Our Effort

#### DATA IN ACTION

Increased tracking of issues allowed OAA to take a more proactive approach with its communication strategy, support, and training. OAA's additional responsibilities in the exam posting process ensured exam settings and naming conventions were consistent and that each exam was available on time. Combined, the new approach reduced common technical errors and reduced stress among stakeholders.

The shift to a multi-phased training approach ensured faculty and TAs were not overwhelmed with content all at one time. Focusing on high level concepts and procedures in one session ensured all questions were answered and ambiguities clarified prior to live exams taking place. Focusing the second training on skills building created a stronger foundation for our user base as they had both hands on instruction and self guided activities. The self guided activities also gave OAA an opportunity to determine individual skill levels early on in the process.

# Future Implications

ExamSoft continually releases updates to their procucts to help improve the exerience for its users. Like any software, new problems arise that are unforeseen and can have unintended outcomes. Continued tracking of exam support interactions will allow OAA to remain ahead of the curve and identify recurring problems before they disrupt exams broadly. Updates to the support tracking form will be made to introduce new categories that were previously categorized as "other" issue types. This will provide richer data and help determine if fixes released in software updates have been successful.

The multi phased approach to training will continue for all new faculty and teaching assistants. Using data from the support tracking and feedback from stakeholders, OAA will continue to refine the process in an effort to provide the best instruction possible. Stakeholders will continue to receive guided instruction as well as be asked to complete self guided activities prior to being given access to ExamSoft.