Robust Evaluations Integration and Flexibility Made Real with Blue 8.0 and The Question Bank





Ouanessa Boubsil Adam Flanders

August 1, 2022

Institutional Data

- Today, almost 82 percent of UMGC enrollments are online and more than 98 percent are either online or in a hybrid format
- FY2021 total enrollments: 89,904
- In FY2021, 15,425 degrees and certificates awarded
- In FY2021, 352,085 online course enrollments worldwide





History

- Founded in 1947, UMGC has maintained a singular focus on the needs of adult and military students for whom a traditional education is impractical or impossible
- In 1949, answered U.S. Department of Defense (DoD) call to teach American troops stationed in post-WWII Europe; in 1956, in Asia; in 2005, in the Middle East
- Taught in war zones including Vietnam, Kosovo, Iraq, and Afghanistan
- Today, UMGC operates on U.S. military installations in more than 20 countries under three DoD contracts: Europe, Asia, and Middle East
- In 1970, became independently accredited
- Among first universities in U.S. and the world to develop and offer degrees fully online
- Today, UMGC is America's largest online public university



Schools and Campuses

Schools

- School of Arts and Sciences (SAS)
- School of Business (BUS)
- School of Cybersecurity and Information Technology (CIT)

Specialized units

- Academic Operations (Academic Pathways courses)
- Student Affairs (First Term Experience Courses)

Campuses (Several different locations per campus)

- Adelphi (US)
- Asia
- Europe



Academic Calendar

- Semester (Term) based 4 terms a year
- Sessions within terms 3 to 50 sessions
- Variable session lengths 4-17 weeks
- Variable course lengths 1-8 weeks
- Staggered, overlapping term/session start and end dates
- Over 7000 courses in spring and fall terms



Solution Requirements

- Scalability
- Automation
- Flexibility
- Compatibility



Current Active Blue Projects

| | Course Evaluations | Certification Survey | Capstone Survey |
|------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Who Gets the Survey? | Given to every student in every class | Given to all students that have taken and passed a computer course that corresponds to a computer certification | Given to students in the last course of their program (Capstone Course) |
| When Does the Survey Start? | 75% of class completion | 6 months after the class completion | 50% of class completion |
| Numbers? (Per Term) | 6100 Total courses | 14 courses (multiple sections of each) | 66 Programs or Specializations |
| Course\Student Pairs (Per Term) | 125000 | 5100 | 5200 |
| Survey Format | Standard Blue Questionnaire | Standard Blue Questionnaire | Blue Q-Bank |







Course Evaluations Structure

- 18 Questions, all students get in every course
 - Aggregated into: Course Overall, Instructor Overall, Course Design and Course Objectives
 - 2 open-ended questions
- 4 NPS (Net Promoter Score) questions
 - 11-point scale ratings and comments
 - 2 questions every student gets in every course
 - 2 school, University questions that students only get in their first course of a term
- Special Adhoc questions
 - Number varies by term(s)
 - By requests from different academic units





Course Evaluations Challenges

- Identifying and generating demographics to trigger questions at the correct time
 - Challenge: Asking certain questions only once in the first course of a student's term
 - Solution Add a field in the course\student relationship file that indicates the students first course.

| Source | Target | course_retaken | first_class_in_term | grade_indicator |
|-------------------------|----------|----------------|---------------------|-----------------|
| 000104-01-2218-OL3-7382 | Student1 | N | Y | N |
| 000104-01-2222-OL1-6382 | Student2 | N | N | N |
| 000104-01-2225-OL1-6380 | Student3 | Υ | N | N |
| 000104-01-2218-OL2-6981 | Student4 | N | N | Y |

- Challenge: Asking certain questions in a student's first term at UMGC
- Solution Add a field in the user data source that indicates what term the student started

| Student97 Student97@umgc.edu Student 97 3 2202 PSCI-MAJ GVPT 495 BS Political Science Y Student98 Student98@umgc.edu Student 98 3 2192 HIMS-MS HIMS 670 MS in Health Informatics Administration Y | | | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|-----------|----------|-----------|---------|------------|-----------------|----------------------|-------------------------------------------|---------------------|
| Student98 Student98@umgc.edu Student 98 3 2192 HIMS-MS HIMS 670 MS in Health Informatics Administration Y | OriginalID | FullEmail | FirstName | LastName | Blue_Role | new_to_ | umgc_terms | acad_plan_codes | plan_capstone_course | plan_survey_name | capstone_course_ind |
| | Student97 | Student97@umgc.edu | Student | 97 | 3 | | 2202 | PSCI-MAJ | GVPT 495 | BS Political Science | γ |
| | Student98 | Student98@umgc.edu | Student | 98 | 3 | | 2192 | HIMS-MS | HIMS 670 | MS in Health Informatics Administration | Y |
| Student99 Student99@umgc.edu Student 99 3 2185 ACCTFIN-MS MSAF 670 MS in Accounting and Financial Management Y | Student99 | Student99@umgc.edu | Student | 99 | 3 | | 2185 | ACCTFIN-MS | MSAF 670 | MS in Accounting and Financial Management | Y |





Certification Survey Structure

- Sent to every student that, the previous semester, has taken and passed a computer course that prepares them to take a certification exam
- Questions trigger based on the course
- Questions skip logic
- Timing
 - Sent to students 6 months after the course has ended
 - Survey is open for 2 weeks
 - Students are loaded into the project at the same time as the course evaluations (50% of completion of the course)





Certification Survey Challenges

- Slightly different question wording for each course
- Can't use pipping because demographics for certification name is not available in our data
- Can't use Q-Bank because of question skip logic

Solution

- Include each question for each course and use triggers to populate them
- Timing of survey and reports (shifted 6 months from course end date)

Solution

- Continuously running the project and classes populate in project at the same time as course evaluations
- Keep data source data for 1 year





Capstone Survey Structure

- 13 University level questions
 - All students taking a capstone course receive these questions
 - Additional questions triggered by demographics or student responses
- 5 to 18 School level questions
 - Triggered by the school demographic of the capstone course
- 6 to 28 Program level questions
 - Questions to assess program outcomes\goals



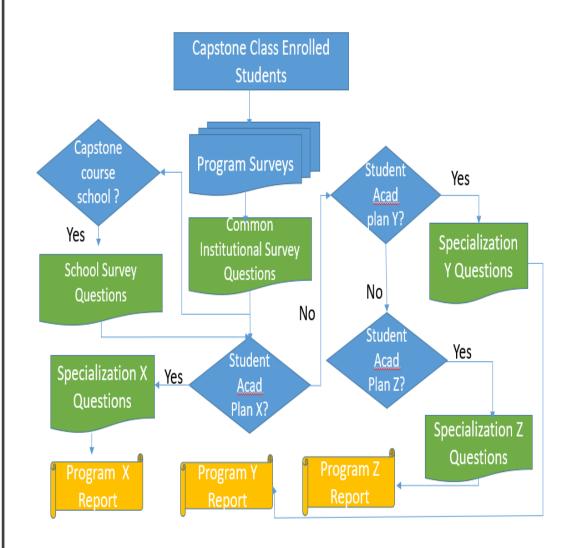


Capstone Survey Programs

Graduate Programs BUS (7) CIT (11) SAS (9) Undergraduate Programs BUS (7) CIT (6) SAS (13) MGMT 670 SAS (4) BUS/CIT (9)

Total: 66 Programs/Specializations

Capstone Surveys and Reports Flow





Challenges

Blue Limitations handling the Large number of survey questions in one project (500)

Programs with more than one capstone course

Same capstone course for more than one program

Integrating to combine all surveys into a single project



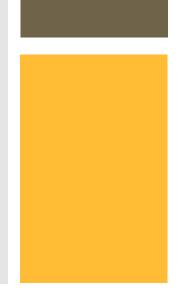
Solution: Rethinking Q-Bank

Q-Bank is normally used to populate **only the questions needed** based on the course.

We use Q-bank to populate any question that **could be used** based on the course and then we use **triggers to show only the questions we want** for each student based on their program.



- Before Q-Bank and Blue 8 -We had 5 projects for the Capstone Survey
- After We combined everything into 1 project



Solution for same capstone course for more than one program

- Additional fields to user file
- Field value must be unique for each program
- Field value used for triggers and for generating reports in shared capstone courses

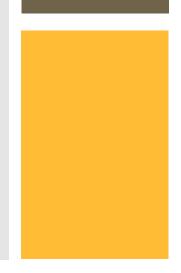
| | | plan_survey_name |
|-------------------------------|----------|---------------------------------------------|
| User1 User1@umgc.edu User 1 3 | BIOT 670 | Masters - Biotechnology: Bionformatics |
| User2 User2@umgc.edu User 2 3 | BIOT 670 | Masters - Biotechnology: Bionformatics |
| User3 User3@umgc.edu User 3 3 | BIOT 670 | Masters - Biotechnology: Regulatory Affairs |
| User4 User4@umgc.edu User 4 3 | BIOT 670 | Masters - Biotechnology: Biotechnology Mgmt |
| User5 User5@umgc.edu User 5 3 | BIOT 670 | Masters - Biotechnology: Biotechnology Mgmt |

Solution For Programs with more than one capstone course

Use question bank mapping or triggers to populate the correct questions

Use the "plan_survey_name" demographic to generate a "group-by" report

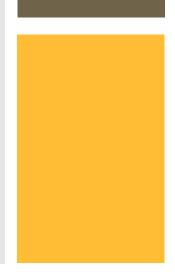




Solution -Developing and organizing so capstone projects can be combined into 1 project

- Easy to understand labels for Q-Bank mapping, filters, triggers, and demographics
- Well thought out demographics
- Well organized Q-Bank Mapping
- Set the number of columns needed to map each section based on the largest number of questions a program in that section will have









Benefits

- Provides incredible flexibility and a new way to run a complex project
- Provides flexibility for triggering questions
- Allows different reports to be generated based on demographics
- Allows for a maximal number of questions to be used in a single project

Future Strategy



- Issue Complex triggers and Question Bank build for the capstone project
- Considered Strategy Request a BLUE enhancement to make the Question Bank mapping use User demographics and not just Course data
- Issue Expanding the data warehouse fields to upload
- Considered Strategy– Adding fields that will not require additional programing or manual updates at the Blue level





Questions?

- Email:
- course-evaluation-support@umgc.edu

