

## 2014-2015 Innovation of the Year Application

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College	Project title		
Glendale	Optimizing Classroom/Schedule Enrollments		
Team members – List the team members involved in this project, including yourself. Provide name, job title, email for each. One person per line.			
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A team photograph including all members must accompany this application. Photograph must be 5"x7" and 300dpi or larger. Create a caption for this photograph Identifying team members (using full names) in order of appearance from left to right.			
The current team photo is of Michael Holtfrerich and Phil Arcuria. We are in the process of trying to coordinate a photo of the entire team to serve as the official, final photo. We will contact our campus IOTY coordinator to facilitate swapping the photos in the event our efforts are successful.			
Executive summary (50 words or less)			
GCC engaged in a broad-based collaborative effort to create a data-informed process for optimizing classroom/schedule enrollments. The process resulted in reducing GCC's instructional budget deficit by approximately \$2,000,000 while minimizing the adverse impact on students. The process doesn't require any hard costs and can be easily replicated at other colleges.			

Innovations should include information that addresses all of the criterion below and is in alignment with the [Maricopa Vision, Mission, and Value Statements](#).

<b>Quality:</b> It is evident that the innovation increases "quality" in the course, program, office, or institution.
The new course scheduling process increases the quality of GCC's course schedule and, most importantly, the student experience. This is achieved by right-sizing the schedule and minimizing course cancellations.

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Cancelling courses during registration is extremely caustic to students, departments, and the institution as a whole. When courses are cancelled students are sent scrambling to find replacement courses to fit within their academic, personal, and professional schedules. GCC's research, along with anecdotal evidence, shows that a substantial percentage of students do not re-enroll in the institution once their course has been cancelled. This creates yet another barrier to student success and progression. Course cancellations are also very disruptive at a departmental level. If the cancelled course had a residential faculty member as an instructor, the department chair must quickly find a course where the residential instructor can supplant an adjunct to ensure the former meets their teaching load requirements. Adjuncts who are excited about teaching the course, and at times dependent on it for income, must then be told their services are no longer required. This can be an emotional process and one that over time can erode an adjunct's willingness to teach for the institution. The student and departmental effects are compounded at the institutional level. The effects ripple out to the entire campus creating a short-term crisis, especially for student-facing departments.

GCC's sought to minimize cancellations and the associated negative effects by creating a new course schedule development process that proactively tries to right-size the schedule from the start rather than rely on a reactive approach of using last-minute course cancellations to refine the schedule. The new process achieved this by focusing on the following areas:

### Standardizing & Documenting the Development Process

Standardization and documentation are key. GCC has always had a fairly standardized process for developing the course schedule. The limitation was that the process was not fully documented in a way that could be easily communicated to all stakeholders involved in developing a course schedule. The new process addressed this by documenting all the steps involved in developing a schedule, what the timeline is for each step, and who the responsible parties are.

### Connecting the Instructional Budget to Course Schedule Development Process

Language is important. One of the causes for GCC's FY 13-14 instructional budget deficit was that the main parties involved were not speaking the same language. The fiscal side of the house manages and discusses the instructional budget in terms of dollars and FTSE. The instructional side of the house operates and talks about the course schedule in terms of course sections and load hours. This created a disconnect between the two groups. The dollar figures provided by the fiscal office did not answer the critical question of the instructional deans and department chairs, "how many course sections and associated load can we afford to offer?" The course section and load figures provided by the instructional side of the house did not answer the critical question of Business Services Office, "will the proposed schedule be within budget?" There was no mechanism in place to convert one group's language and metrics into the language and metrics of the other group. As a result, course schedules were developed that were not fiscally sustainable, resulting in a multi-million dollar instructional budget deficit for FY 13-14.

The new process ameliorated this deficiency. The instructional deans, Business Services Office, and the office of Strategy, Planning & Accountability spent many hours and iterations developing a forecasting tool that converts a proposed budget into load hours. These load hours tell the instructional side of the house how large the schedule can be to be within budget. Once the overall budget has been

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established, the instructional deans use historical data on course enrollments to determine how many sections each academic department is able to offer. This starts by determining the number of sections in the prior two years that had enrollment > 14 or had at least 60% of its capacity filled. We used data about sections and enrollments at the start of a semester to develop a plan for reducing the number of low enrollment sections while still retaining all students. This becomes the idealized reference point of the number of sections to offer by department for the upcoming term. Next, the number of total sections offered the prior term is reviewed. As a last step, the instructional deans determine a target number of sections for each department that generally fall midway between the two numbers. This process provides the department chairs—from the very start of the course schedule development process—with guidance on the number of sections they will be able to offer. It also helps align the course schedule to the instructional budget. The process is still new and has not completely eliminated the instructional budget deficit (there are other factors at play outside of the scope of the development process), but it has resulted in a reduction in the size of the deficit by roughly \$2,000,000 or 67%.

### Fostering Empowerment and Transparency

A healthy organization empowers its personnel and operates openly and transparently. In the past, the course schedule development was reactive, isolated, and opaque. The new process addressed these shortcomings. First, it made the process proactive by providing each department chair guidance on the number of sections to offer to fit within the budget and yet offer enough seats in each area to meet the student demand. This helped create a right-sized schedule that required less last-minute, reactive course cancellations. Second, the new process is collaborative and iterative between the instructional deans and chairs. Departments no longer build their portion of a course schedule in a vacuum. Everyone knows up front the expectations for their department as well as for the institution as a whole. This enables them to see the interconnectedness of each department toward a common goal and eliminates any surprises. The new process further strengthens the sense of interconnectedness by fostering transparency. The targets for each department are shared with all of the instructional deans and department chairs. Everyone knows what is expected of them and their peers. This has the added benefit of creating a self-regulating environment among the department chairs to ensure everyone sticks to the targets provided.

### Data-Informed Decision Making

The new process is built based on the philosophy of data-informed decision making. The institution collects vast amounts of data on courses, however, in the past the data were not always accessible to the instructional deans and department chairs in a format that supported the development of the course schedule. The office of Strategy, Planning & Accountability met with the instructional deans and department chairs to understand what data were crucial to the development process. The result was the creation of the Course Analysis Report. The report provides key metrics that can be aggregated all the way up to the institutional level or disaggregated down to a specific course section. The report also classifies each course as “Green”, “Yellow”, or “Red” based on criteria developed by the instructional deans. Green courses have enough enrollment to run “as is”, yellow courses are borderline and require dean approval to run, and red courses do not have enough enrollment to make and must meet specific “exception” criteria in order to be allowed to run. This has standardized and simplified the Go-No-Go process. The report provides the department chairs with critical data needed to continually refine the schedule. The first Course Analysis Report is provided at the very start of the development process and is updated numerous times throughout the process up to the end of the term.

**Efficiency:** There is evidence that the innovation contributes to a more efficient way of doing things.

By creating target numbers for each department, as to how many sections their department could offer

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in the schedule, the percent of course cancellations dropped from 18% in fall 2013 to 10% in fall 2014. We have also seen improvement in the percentage of seats filled in each course.

**Cost effectiveness:** There is evidence that the innovation adds a value to the institution while at the same time containing or reducing costs.

The process resulted in reducing GCC's instructional budget deficit by approximately \$2,000,000 while minimizing the adverse impact on students. One of the wonderful things about the process is that it does not require a single cent to implement. The only cost involved to develop it was the collective time and input from the participants. It took a lot of hard work and a number of iterations to create and refine the process, but now that it is built and operational it does not require any hard costs to maintain and requires less personnel time than the previous course scheduling process.

**Replication:** The innovation selected can be replicated in other institutions with a minimum of difficulty.

This innovation can easily be replicated at all the colleges. Our team could help others learn how to gather the data and how to set target numbers in order to make their schedule more efficient and save budget money in the process. A single half-day meeting is all that would be required to show another campus how to implement the process. The data queries and associated reports used to support the process are portable and can be easily adopted by any college institutional research/effectiveness office.

**Creativity:** The innovation should be as original as possible or the adaptation should be creative.

Our approach of calculating sections that made threshold (more than 14 students enrolled) and those that did not (sections with less than 14 students enrolled) from historical data and selecting the mid-point between total sections offered and those that made threshold is a creative and innovative approach to creating schedules for departments. With these target numbers department chairs then make the tough decisions about which courses should be offered and how many.

**Timeliness:** The innovation should not be more than five years old in the institution, but it must have been around long enough to be tested so that it meets most of the criteria.

In fall 2013, GCC had an instructional budget deficit of approximately \$3,000,000, requiring it to cut 18% of its courses and contemplate not offering summer courses. This was unacceptable and unsustainable. GCC's administration, instructional deans, department chairs, office of Strategy, Planning & Accountability, and office of Business Services rallied together to find a solution. The new course schedule development process was created and rolled out for spring 2014. Although GCC continues to refine and improve the process, it has already resulted in producing a more efficient and sustainable course schedule.

**Learning:** The results of the innovation have been shared with others for the benefit of students throughout Maricopa.

GCC is very open to sharing what it has learned with the other colleges. To date, GCC's instructional team has shared its new course scheduling process with two of the other colleges.

**Collaboration:** The innovation successfully demonstrates collaboration, teamwork, and cooperation to ensure continuous process improvement efforts on behalf of students throughout Maricopa.

We involved the whole campus! We began with an initial meeting that included all the VP's, academic deans, department chairs and members of other departments like the office of Strategy, Planning & Accountability, and the office of Business Services, to name a few. This was really a whole campus endeavor but the vast majority of the work was done by the chairs of the departments and the deans who worked closely together to get the schedule as student and budget friendly as possible.