CCRC COMMUNITY COLLEGE RESEARCH CENTER
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Simplifying Complexity in the Student Experience: Using Data

In part one of this practitioner packet, we reviewed how colleges seeking to reduce complexity in the student experience can gather information through multiple methods and from multiple groups of college stakeholders in order to identify areas that need improvement. In this part, we discuss how colleges can use the collected data to devise and implement solutions to identified problems. We use examples from the redesign effort that Macomb Community College embarked upon in 2011 to aid the discussion.

This is part two of CCRC's practitioner packet on streamlining the student experience. For information on how colleges can gather data on the student experience, see *Simplifying Complexity in the Student Experience: Gathering Data* (part one). For information on how colleges can analyze data and evaluate and further refine reforms, see *Simplifying Complexity in the Student Experience: Evaluating a Redesign* (part three). For detailed examples of data collection and project management materials, see *Appendix — Sample Documents* (part four).

Analyzing Data and Reviewing Findings

In order to determine where to focus their energies, colleges should analyze the exploratory data that they have gathered (see part three for a discussion of data analysis). Once initial analysis yields findings, the data and findings should be reviewed widely. The goal of this review process is not only to identify the areas of the student experience that are most in need of improvement but to also create an appetite for change and to identify stakeholders who can help lead the change process.

In order to generate broad-based support for change, it is helpful to include as many people in the review process as possible. As the college's leadership prepares to share the findings with others in the college, they may find it helpful to first consider the following questions.

What strengths did students identify? Highlighting the college's current strengths and celebrating its successes will help soften the blow of any negative findings and will provide faculty and staff with a strong positive foundation on which to build future improvements.

What processes, activities, or departments were mentioned the most? The most important findings will need to be discussed in the most depth and detail with the personnel who are responsible for the relevant processes and activities. The conversation should focus on ideas for future improvement that emerged from stakeholder interviews rather than on past problems or who is to blame.

What should be emphasized is how processes and policies appear from the student perspective, and what can be done to improve the student experience.

Who should be involved in initial conversations? Any individuals who play key roles in the processes or activities targeted for change, who are highly visible players in campus politics, or who are deeply passionate about supporting student success should certainly be included in initial conversations. Although a given campus organization (e.g., a particular collective-bargaining unit) may not initially seem relevant to the issue at hand, it may nevertheless have influence over the change process; thus, the organization's leaders should be included in initial conversations and updated regularly.

Key Steps in Implementing Redesign Changes

Assembling Work Teams

Campus-based conversations about the findings will help shape and solidify a set of recommendations for improvement. At that point, leaders can assemble work teams which can fill out the details of each recommendation and oversee the nuts-and-bolts work of the improvement process.

Work teams should harness the varied knowledge of a broad group of stakeholders. For example, to oversee changes to the student intake process, Macomb Community College assembled a team that included not only academic advisors but also representatives from enrollment, financial aid, and other frontline student services. Again, any departments involved in processes targeted for change should be well represented on the work team. Personnel from these departments should be allowed to directly participate in imagining and implementing solutions, rather than being unilaterally compelled to implement someone else's ideas.

Negative staff responses to suggested improvements may signal concern and commitment to student success, which can be harnessed for positive change.

Potential Faculty and Staff to Include on Work Team	
READY TO ACT: SHOULD BE HEAVILY REPRESENTED	
Doers	These individuals typically have positive attitudes about change and have a track record of getting things done. They know the system extremely well and are often turned to for creative troubleshooting and problem solving.
Team players	These individuals have positive attitudes, get the job done, and follow procedure. They turn to the doers for direction or when they run into trouble. They are critical to any team.
RESISTANT TO CHANGE: AT LEAST SOME SHOULD BE INCLUDED	
Ambivalent	These individuals are neither active proponents nor opponents of change, but are important to include if they play a key role in processes targeted for improvement. They often become proponents of change if they are exposed to real student stories documenting the need for change and are given a role in imagining potential solutions for improvement.
Naysayers	These individuals have strong negative opinions about the proposed changes. Their inclusion should be considered carefully: Some may become the strongest and most effective proponents once their concerns are taken into account, while others may continue to resist change regardless of the work team's best efforts.

As leaders recruit work team members, it is helpful to remember that faculty and staff attitudes toward the suggested improvements will vary; some will be ready to act, while others will be resistant to change. Initial conversations about the findings may have sparked emotions, both positive and negative. In some cases, negative emotions signal deep levels of concern and commitment to student success, which can be harnessed for positive change.

By including "naysayers" who initially seem to resist change, work teams can craft solutions that address these individuals' valid concerns and ensure greater buy-in during a reform's implementation and refinement. However, some individuals will likely remain resistant regardless of the nature or extent of proposed changes and may not represent the best selection for a work team.

Orchestrating the Change Process

After a work team is assembled, it takes over the leadership of the change process and performs the "heavy lifting" of developing solutions and moving the change process steadily forward. At Macomb, team leaders orchestrated the change process by identifying low-hanging fruit, establishing sound goals, involving information technology specialists, creating realistic timelines for task completion, and holding structured meetings in which team members' responsibilities were made clear.

Identifying Low-Hanging Fruit

As work teams begin the process of devising and implementing solutions, it may be helpful to first identify which problems could be addressed fairly quickly at minimal cost. Team members, particularly frontline staff who have the greatest insight into new students' struggles, should develop and implement simple changes that address some of the more straightforward issues that emerged from the data.

Team members, particularly frontline staff, can develop and implement simple changes that address the more straightforward issues that emerge from the data.

Establishing Goals That Make Sense for Students

While early wins are important, developing a long-term vision for students lays the foundation for more ambitious goals. To realize this long-term vision, the team might discuss: What is the outcome desired by the institution? Do students' perspectives reveal problems that must be addressed before that outcome can be reached?

For example, if the college's goal is for students who have decided on a program to enroll only in courses that fulfill their program requirements, but findings indicate that decided students do not understand their program's requirements, then work teams could think through how and where to make requirements more clear.

As work teams devise potential solutions, frontline faculty and staff can gather input and feedback on these solutions from the students they see every day, which can lead to further revisions and refinements.

Involving Information Technology Specialists Early On

Many redesigns will impact, or will be impacted by, the college's information technology infrastructure. Thus work teams should involve information technology staff early on. In some cases, an information technology staff member will need to formally join the team to ensure that process redesign and technological tools work seamlessly together; in other cases, regular communication between the team's leaders and technology staff will be sufficient. If the needed technical expertise is not available on campus, and if the budget allows, it may be helpful to enlist consultants.

Developing a Timeline and Setting Deadlines

To develop a realistic timeline, the team's leaders should work backward from the desired outcome. For example, if a new college catalog is the desired outcome, when does the finished product have to be available on campus? At what point does the printer need it to meet that deadline? Working backward from that date, how much time will the graphic artist need to put the catalog together? Setting ambitious but realistic deadlines will help keep the team on task and prevent team members from wasting time in potentially interesting but ultimately unhelpful conversations.

Holding Structured Meetings

To maintain momentum, work teams should meet regularly and frequently (e.g., every two weeks) and develop structured agendas for each meeting with action items clearly identified (see appendix for a sample agenda). Team leaders should also hold team members accountable for tasks assigned.

Providing Leadership and Support

The work teams are responsible for leading the bulk of the change process. However, the college's leadership also plays a critical role in inspiring not only the work teams but also the larger college community in supporting and moving forward with the change process. Two key ways to inspire the community are emphasizing shared values and creating a culture of trust.

Emphasizing Shared Values

In their book on collaboration in the university setting, Kezar and Lester[1] argue that successful collaborative efforts occur when leaders clarify and emphasize how these efforts will promote individuals' preexisting values.

A fundamental shared value for most community college faculty and staff is that of student success. When communicating the need for change, leaders should consistently invoke the importance of designing processes that respond to student needs and that support their success. When leadership works to engage faculty and staff who will play a role in implementing change, they can use data on the student experience to frame the conversation and invoke these shared values. If and when group members disagree, the team's leaders can return to the touchstone question: "What did students have to say about that?"

Building a Culture of Trust

Cultivating trust among work team members and between the work team and the larger college community is critical. Kezar and Lester[2] point out that the most successful collaborations are supported by an administration that "leads by listening." College leadership should practice a lead-by-listening strategy when attending work team meetings, so that team members realize that they are genuinely responsible for devising and implementing changes. More generally, leadership can model the practice of leading by listening by regularly referring back to the student and staff perspectives gathered in the exploratory data collection phase.

The most successful collaborations are supported by an administration that "leads by listening."

A sense of trust and openness can also be developed among team members by conducting team-building exercises at the start of the process and by holding members to confidentiality standards when discussing sensitive topics.

Finally, to help cultivate trust among the larger college community, college leadership and members of the work teams can make frequent presentations to provide updates at administrative, faculty, senior academic staff, and advisor meetings, and they can solicit feedback on each team's unfolding plans.

Identifying Areas for Evaluation

In order to evaluate the effectiveness of specific changes, work teams need to measure relevant outcomes both "pre" and "post" any planned changes. Thus, once work teams have defined the changes they plan to implement, they should also identify which student outcomes they expect to be impacted by those changes and conduct an assessment of these outcomes prior to implementation.

In some cases, the exploratory data collection process (discussed in part one) will already have adequately captured appropriate pre-implementation outcomes. In most cases, however, the existing exploratory data will be too broad, complex, or imprecise to capture the specific outcomes of interest. Thus, the work teams will need to consider how to collect more precise measures of each outcome. For instance, at Macomb, CCRC collected additional pre-implementation survey and performance data to serve as a baseline for post-implementation outcomes (see part three).

Devising Solutions at Macomb Community College

After reviewing their findings, Macomb leaders settled on two areas in strong need of reform: the student intake process (particularly online orientation) and the provision of advising-related information resources. They assembled a work team to tackle each area (see appendix for organization charts of each work team).

Redesigning New Student Intake

The work team tasked with redesigning student intake met every two weeks over a working hour-and-a-half lunch. The dean of student success was the team's chairperson who kept discussions moving forward and refocused team members on the needs of students when the conversation drifted. The manager of counseling and advising acted as the project manager and kept the change process on-track by creating clear meeting agendas and holding team members accountable for assigned tasks (see appendix for a sample meeting agenda). Over the course of a few months, the team designed a new entry process, began to re-conceptualize online orientation, and created a new lab to assist students with the intake process.

The project manager kept the change process on-track by creating clear meeting agendas and holding team members accountable for assigned tasks.

Reorganizing the Entry Process

Upon review of the data, the work team discovered that students were confused about the college's entry process, termed the "Seven Easy Steps" (applying for admission, applying for financial aid, obtaining a student I.D., taking the placement exam, completing orientation and meeting an academic advisor, registering for courses, and paying for courses). For example, some students took a day off of work to come to campus and complete all seven steps in one day, only to find that this was not possible. As another example, students were often unaware of the purpose and consequences of the placement exam until after they had taken it.

The work team decided to reorganize the entry process into three broad steps (called "Easy Start 1–2–3") by using the college's new tag line —"Discover, Connect, Advance" —and to implement clear communication about what students needed to do, where they needed to do it, and how long it would take.

Step one ("Discover") tasks could be completed online: applying for admission, applying for financial aid, participating in the redesigned student orientation, and preparing for the placement test. Step two ("Connect") tasks were designed to be completed in person during a half day on campus: meeting with an academic advisor for a "Starting at Macomb" session, taking the placement exam, and meeting with a counselor for a course planning session. The final step ("Advance") consisted of tasks that could be completed online or on campus, such as registering for classes.

The new process created a more intuitive pathway for students and provided more opportunities for face-to-face connection. In addition, while some students had circumvented some steps in the old system, the new process was mandated through registration blocks. Although shifting to mandatory orientation and more in-depth advising might deter some time-starved students from enrolling, the work team and college leadership felt that these activities would help create a strong foundation of success for the students who needed it most.

Redesigning New Student Orientation

Findings from CCRC's exploratory data collection suggested that most students neither remembered the content of the college's online orientation nor perceived it as helpful. Thus, the work team focused on how to redesign online orientation to be more interactive, personalized, and engaging.

The work team focused on how to redesign online orientation to be more interactive, personalized, and engaging.

The team first focused on defining the learning outcomes of orientation. Then they considered specific content that would support those learning outcomes and envisioned interactive activities that would help teach and reinforce key outcomes. For example, in order to help students understand course requirements, they decided that the orientation might include a hands-on activity that required interpreting the course catalog.

To personalize orientation, the team identified different categories of students with different needs (such as veterans or students transferring from another college) and determined which activities would be required or optional based on a student's category. Finally, to make orientation more engaging, the team conceptualized a series of videos that would introduce real Macomb students and their perspectives on key orientation content.

The redesigned orientation was technically ambitious and was implemented in collaboration with the college's website redesign consultant as well as with the college's information technology staff. A little more than one year after the work team's first meetings, new students received newly redesigned content and videos; approximately one year later, interactive activities were added.

Creating Student Services Labs

The exploratory data collection revealed that many students needed help in completing intake steps online. Only one location on each of Macomb's two campuses provided an open computer lab and personnel who were somewhat knowledgeable about student entry processes: the career services office. Some students discovered the lab by word of mouth and asked the staff to help them navigate the intake process; other students were unaware that it existed. While career services staff were happy to help students, they also worried that intake-related tasks distracted from their primary mission of helping students with career counseling and job placement.

With these findings in mind, the intake redesign team repurposed an existing computer lab on each campus (previously used only for scheduled online orientations) into student services labs, each staffed with a full-time technician. The labs were a huge success from the beginning: During the first two registration periods after their inception, nearly 8,000 students used the labs, primarily to participate in new student orientation and complete other steps in the intake and registration process.

Redesigning Information Provision

The data collected in the exploratory research phase indicated that many students were self-advising as they selected courses, programs, and transfer schools; that both students and advisors were uncertain about students' abilities to accurately self-advise; and that some of that uncertainty was due to poorly organized, inconsistent, and difficult-to-apply information provided by the college.

Students were confused by conflicting information related to course program, transfer, and career options they received from various sources.

To tackle these issues, the information provision work team was charged with conducting a college-wide audit of communications regarding program, transfer, and career information, as well as developing a master information resource that would provide clear, accurate, and consistent information on key topics. Similar to the intake team, the information provision team met every other week, with the assistance of a team chairperson and a project manager, who created clear agendas and action items.

Conducting an Information Audit

Student feedback made it clear that they were confused by conflicting information related to course, program, transfer, and career options, which was available from multiple sources (e.g., the information office, orientation, the career services office, counselors and advisors, individual instructors, the online portal, program web pages, and printed communications such as the course catalog).

To understand what type of information students were receiving and how to improve it, the team began by performing a college-wide communications audit. They requested that each academic program and administrative department provide copies of all relevant information shared with students, either online or on paper. The team then began to design a new process of coordination to ensure that the information was clear, consistent, and regularly updated across multiple sources.

The team decided that the master information resource should be centrally stored and updated, and that it should be used to help populate all relevant online and paper resources. The team quickly realized that the college's course catalog should comprise the core of this master resource.

Redesigning the College Catalog

Based on the exploratory data regarding the kind of program and course information students would find helpful, the team developed a new template for course and program descriptions appearing in the college catalog. The new template required every department to generate information about course sequencing, transferability, and career opportunities for each program of study, and ensured that the information was consistent across all programs.

The new template required approval from the college's curriculum committee (similar to many colleges' faculty senates). Accordingly, the work team's academic members, including several deans and a key member of the curriculum committee, worked closely with program faculty to ensure that the faculty understood the need for the new template and how to appropriately populate it (see the appendix for a comparison of the old and new course catalogs).

Conclusion

Using exploratory research data to drive the change process provides multiple advantages. Data provide clarity and concrete evidence that change is needed, give direction and shape to reforms, and serve as a tool to generate trust, momentum, and enthusiasm among staff.

Work teams that represent a broad array of campus stakeholders can design solutions that are creative, responsive to students' needs, and feasible to implement. However, implementation does not represent a one-time end goal but rather a long-term process of ongoing assessment and refinement. In part three, we describe how colleges can assess the effectiveness of their reforms and use these data to inform ongoing improvements, using Macomb as a case study.

Endnotes

1. Kezar & Lester (2009).
2. Kezar & Lester (2009).

Sources

Kezar, A. J., & Lester, J. (2009). *Organizing higher education for collaboration: A guide for campus leaders.* San Francisco, CA: Jossey-Bass.

This practitioner packet was prepared by Shanna Smith Jaggars, Jeffrey Fletcher, and Georgia West Stacey of the Community College Research Center, Teachers College, Columbia University, and by Jill M. Little of Macomb Community College. Funding was provided by The Kresge Foundation.

Suggested citation: Jaggars, S. S., Fletcher, J., Stacey, G. W., & Little, J. M. (2014). *Simplifying complexity in the student experience: Using data.* New York, NY: Columbia University, Teachers College, Community College Research Center.

Community College Research Center
Teachers College, Columbia University
525 West 120th Street, Box 174
New York, New York 10027
Tel: 212.678.3091 Fax: 212.678.3699
ccrc@columbia.edu
http://ccrc.tc.columbia.edu