

CUTTING EDGE SERIES

# BUILDING INSTITUTIONAL CAPACITY FOR DATA-INFORMED DECISION MAKING

No. 3



Achieving the Dream™

Community Colleges Count

 PUBLIC AGENDA

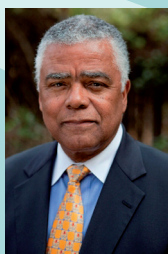
Dear Colleagues:

Achieving the Dream is pleased to partner with Public Agenda to offer you this important publication, *Building Institutional Capacity for Data-Informed Decision Making*. The final in a three-part series, this guide will help more colleges build institutional research (IR) and information technology (IT) capacity and create a culture of evidence in which data and inquiry drive broad-based institutional efforts to close achievement gaps and improve student outcomes overall.

The origin of this series is the recent interim report by MDRC and the Community College Research Center, *Turning the Tide: Five Years of Achieving the Dream in Community Colleges*. The evaluation identified areas of great progress as well as aspects of Achieving the Dream's work that need deeper focus. Achieving the Dream designed this series with our Founding Partner, Public Agenda, to address those recommendations and ensure that every Achieving the Dream Institution has the tools necessary to move the needle on student success and completion. This guide advises colleges on how to strengthen their IR and IT capacity and provides examples of promising practices at several Achieving the Dream Institutions.

On behalf of the entire team at Achieving the Dream, I'd like to extend my appreciation to Public Agenda for their diligent and thoughtful work on this timely series, and my best wishes to each institution in pursuit of greater student success outcomes.

Sincerely,



William E. Trueheart  
President & CEO  
Achieving the Dream

# Building Institutional Capacity for Data-Informed Decision Making

## How to Use This Guide

*Building Institutional Capacity for Data-Informed Decision Making* is the third installment of the Cutting Edge series, which aims to help colleges engage faculty, scale successful interventions, and create a strong culture of evidence through use of data to strengthen their institutional change and student success efforts.

Since data generation and use are at its core, Achieving the Dream has developed a range of materials to help colleges understand the basic roles of institutional research (IR) and information technology (IT) and how to align them with the student success mission at community colleges. These resources, available on the Achieving the Dream website<sup>1</sup>, present a wealth of knowledge from Data Coaches as well as other evaluation, IR, and IT experts—many of whom were also participants in the Public Agenda work group that informed this guide. Rather than duplicate the recommendations and guidance, the current work aims to act in concert with earlier publications, drawing attention to different aspects of the IR and IT capacity challenge: building institutional commitment to data-informed change and facilitating more and better usage of data that is produced.

Though we begin by presenting a review of the most common challenges and pitfalls to aligning capacity in these areas with student success (Section 1), the focus of this guide is on promising practices that institutional leaders, IR and IT personnel, and faculty and staff can use at their colleges (Sections 2 and 3). Throughout the guide we offer examples of how these practices have been applied at community colleges, including detailed examples of two colleges that have strengthened their IR capacity through their involvement in Achieving the Dream: El Paso Community College and Montgomery County Community College (Section 4).

In Section 5, we offer colleges using this guide a self-assessment tool for evaluating their institutional capacity for data-informed decision making. This tool is heavily based on the readiness assessment colleges submit to Achieving the Dream when they begin participation; thus, we have named it the Augmented Assessment Tool for Achieving the Dream Principle 2: Use of Evidence to Improve Policies, Programs, and Services. Rather than use this tool as a grading device, we recommend that colleges and leaders use it as a way to prompt careful thinking and thoughtful discussions with a range of stakeholders from across the college.

The Appendix includes a list of resources that have been consulted during the course of our work. These resources contain a wealth of information and expertise that we encourage colleges to access regularly to support their institutional change and student success efforts.

---

<sup>1</sup> Achieving the Dream guides available at <http://www.achievingthedream.org/CAMPUSSTRATEGIES/GUIDES/default.tp>.

## Introduction

This guide is based on findings from Public Agenda's exploration of the most promising practices for increasing institutional research (IR) and information technology (IT) capacity at community colleges.

The current study was prompted by an interim evaluation report by MDRC and the Community College Research Center (CCRC) titled *Turning the Tide: An Examination of Round 1 Achieving the Dream Colleges' Progress After Five Years in the Initiative*. As part of an analysis of the early experience of the first 26 community colleges that have participated in Achieving the Dream since 2004 (Round 1 colleges), the report observes that the colleges that made the greatest progress toward improved student achievement shared several key features: broad-based engagement of college stakeholders, especially adjunct and full-time faculty; successful scaling of student success and institutional change interventions; and strong IR capacity that facilitates the establishment of a culture of evidence. The purpose of this third guide in the Cutting Edge series is to help more colleges build IR and IT capacity that promotes the integration of data analyses and inquiry into decision making about programs and policies that enhance student success.

The use of data and evidence to improve programs and services is a key component to any institutional change effort and a core principle of the Achieving the Dream model for improving student success. Achieving the Dream urges colleges to translate this principle into practice by aligning their IT and IR capacity with the student success mission, establishing processes for identifying achievement gaps, as well as formulating and evaluating solutions. Throughout their participation in Achieving the Dream, colleges receive support in the form of data coaching from seasoned professionals with

a working knowledge of using data and institutional research to a) identify areas of weakness and b) opportunities for improvement, and to guide changes in policy and practice that lead to better outcomes for students. As described in the MDRC interim evaluation, however, despite this support and guidance, some colleges have struggled to build a strong culture of evidence, particularly those that began their participation with weak data capacity and those facing especially strained resources.

Even amid these and other challenges, a number of colleges have demonstrated practices that strongly support evidence-based decision making. The MDRC report notes a number of these specific practices and recommends that Achieving the Dream investigate promising practices and principles to help more colleges succeed. To this end, Public Agenda, an Achieving the Dream Founding Partner, conducted a multi-method study, consisting of a deep literature review, an online discussion, and an in-person work group of 14 diverse stakeholders, practitioners, and experts in IR and higher education reform. The work group, facilitated by three Public Agenda staff, took place over one evening and one day in New York City in June 2011 and was recorded by multiple note takers. This guide offers recommendations and insights drawn from these sources.

Meeting the challenge of adequate IR and IT capacity goes beyond training capable staff; it extends to building institution-wide commitment to using data to inform change efforts. Consequently, the central question addressed by this report is how to build the commitment to data-informed change and increase the practice of using data effectively to improve decision making.

Given that tight resources present a major limitation on what colleges can do to bolster their IR and IT capacity, this guide focuses on practices that most colleges can apply regardless of size, resource availability, personnel, or infrastructure. That being said, resource constraints have very real impacts that cannot be ignored, even as the recommendations encourage colleges to think beyond their limits. Further, practicing all the recommendations contained in the following pages will be difficult, even for established, well-run, highly productive IR offices. Rather

than dismiss these challenges, this guide urges colleges to consider making strategic decisions based on institutional priorities and commitments and to think about how they will analyze existing resources for potential budget reallocation or even external funding to support capacity building. As underlined in the MDRC report, robust IR and IT capacity is not optional if colleges are to reach their student success goals.

## What are IR and IT?

The descriptions of institutional research and information technology functions at community colleges are neither one-size-fits-all nor stagnant. Throughout this guide, we encourage readers and practitioners to think beyond the traditional functions and the walls of individual departments to find ways to meet their institutions' data needs to inform decision making on behalf of student success. Nevertheless, it may be useful to begin with the traditional and basic elements that comprise IR and IT functions at most community colleges. The following are partial descriptions of IR and IT in the words of practitioners.

- ▶ Institutional research (which can include research, learning outcomes assessment, planning, institutional effectiveness, and accreditation) generally maintains ultimate responsibility for completing all internal and external reporting requirements.<sup>2</sup>
- ▶ In the context of Achieving the Dream, IR is the locus of activity aimed at assessing student success to help colleges decide where to concentrate improvement effort and to measure the impacts of these interventions.
- ▶ IR professionals increasingly perform major work in regional and specialized accreditation activities. IR offices are no longer just a place where data is kept but a place where data is converted to actionable information for clientele to use for a wide range of purposes, from grant proposals to space utilization.
- ▶ IR is a management process, not a single action, which includes collecting data, analyzing it, and reporting information that can be used for decision making. At both ends, this is a people process.
- ▶ IR is the process by which critical decision makers across the college are provided timely guidance for action planning based on findings from the analyses of institutional data.
- ▶ Information technology's role generally focuses on data processing and storage; information systems design, operation and maintenance; technical support; and user access and training. Increasingly IT departments are also responsible for providing support for instructional technology and campus telecommunication systems.<sup>3</sup>
- ▶ IT is heavily engaged in establishing a platform for online instruction and internal communications.

<sup>2</sup> Glover, 2009

<sup>3</sup> Ibid

## SECTION 1:

# Key Obstacles and Common Pitfalls

## Key Obstacles to Building the Commitment to use Student Success Data

- ▶ **Reporting requirements weigh heavily on colleges.** For small and medium-size IR and IT offices in particular, the demands of compliance reporting and enrollment tracking duties force staff to de-prioritize the kind of analytical work that Achieving the Dream encourages, such as evaluation research and responding to faculty or administrative requests for data to support student success efforts.
- ▶ **IR and IT functions are not widely visible or understood on many campuses.** Not only are IR and IT often overloaded by compliance duties; faculty and staff tend to view them in that light rather than as partners in institutional change for student success. This tendency is reinforced by a common belief among IR and IT personnel that institutional leaders are their only audience, preventing their greater visibility to the college community as a whole and faculty in particular. This lack of visibility, in turn, makes it less likely that others will trust and make use of their work.
- ▶ **Silos between IR and IT and between academic departments complicate coordination.** The who, how, and when of data access generates tension in many institutions. This is further complicated when there are multiple databases in use within a college; for example, academic departments collecting their own data, or IR and IT collecting redundant data in separate systems. These systems may not be integrated, and though centralized systems are desirable for efficiency and coordination, they are also expensive.
- ▶ **Making data accessible to a broad audience is difficult.** Data systems can be vast, and data is unclear or not tailored for specific audiences; thus, finding information even in a centralized system can require technical skills possessed by only a few individuals.
- ▶ **Concerns about data integrity inhibit widespread use.** Many college data systems are cluttered with unreliable data and data entry errors, especially when those entering data lack adequate training or supervision. Without resources such as data dictionaries, which describe the contents of a database, and validation tables, which define variables, data entered is even more questionable. Faculty, staff, and other college stakeholders will resist using data if they believe it is untrustworthy or inaccurate.

## Common Pitfalls to Building Commitment to use Student Success Data

- ▶ **Hiring data people who don't share student success goals or have good communication skills.** In addition to possessing essential technical skills, the best data personnel are mission driven, have strong interpersonal and broader social scientific skills, and know how to distill and present data in ways that help internal and external audiences understand complex issues.
- ▶ **Treating data as if it speaks for itself.** Staff and administrators can hold a misperception that data reveals its implications simply and directly: If the data is positive then something definitely worked; if it's negative then something failed. Data, however, requires interpretation in context and rarely leads directly to simple answers. One should not assume that answers will flow effortlessly from data without deliberation and careful judgment.
- ▶ **Making it impossible for the data to speak at all.** When databases are complex, analytic capacity is low, or presentations are weak, there is a high chance that data will be misunderstood and misinterpreted. Care on all these levels is important to make sure data improves, rather than confuses, your institution's efforts to increase student success.
- ▶ **Hiding or ignoring "bad-news" data.** When data shows poor program performance or learning outcomes, college leaders may be tempted to sweep the bad news under the rug so the institution will not be portrayed negatively or to maintain morale among their hardworking, underfunded staff. Bad-news data must be handled skillfully, but to put it aside inhibits the very culture of inquiry that Achieving the Dream colleges must create to make a difference for their students.
- ▶ **Using data as a hammer.** On the opposite end of the spectrum is using data to point fingers and assign blame. This almost always generates fear and resentment, and it can stifle the formation of a culture of inquiry and evidence.

## SECTION 2:

# Promising Practices for Building Widespread Commitment to Data-Informed Change

Building a strong commitment to data does not happen overnight, and colleges may be thwarted by their prevailing culture—for example, a history of leaders who made decisions based on gut feelings rather than evidence; a mind-set in which qualitative data is considered inferior to quantitative data; or a buildup of mistrust between faculty and administration that may have originated elsewhere but that now thwarts new efforts at data-informed change. Working through such dynamics can be critical for building a culture that values quality data and attempts to use it well.

### 1. Institutional leaders must set the tone of commitment to data

As noted in the Achieving the Dream framework for student success<sup>4</sup>, committed leadership is central to establishing a culture of continuous improvement that is grounded in inquiry and evidence.

- ▶ *Model the Behavior you Espouse.* Presidents, department heads, and other institutional leaders should model behaviors that support a culture of evidence and inquiry throughout an institution. They should regularly review and explore student outcome data with diverse stakeholders in ways that spur thoughtful problem solving for student success.
- ▶ *Connect Data and Vision.* Inspire inquiry by connecting a commitment to evidence-based decision making to the mission of access and success. Leadership that is driven by its moral obligation to students should be committed to facing up to the data in order to identify whether the institution is doing all that it can to help students achieve their dreams.
- ▶ *Use the Hiring Process to Build a Culture of Evidence.* When hiring for leadership positions, make an appreciation for data inquiry and continuous improvement a key criterion of evaluation. Expectations for data-informed decision making should be made clear during the interview process
- ▶ *Recognize and Support the Champions.* Elevate the efforts of your campus's greatest data champions and bring experienced and successful exemplars and coaches from outside the campus to inform and inspire faculty and staff.
- ▶ *Walk the Walk Through Resource Allocation.* The president and board of trustees should commit to a culture of evidence and inquiry by allocating resources to IR and IT.

<sup>4</sup> Achieving the Dream's framework for student success is based on the premise that to make substantive improvements colleges need to fundamentally change the way they operate. Achieving the Dream colleges are encouraged to adhere to four principles: 1) Committed Leadership; 2) Use of Evidence to Improve Programs & Services; 3) Broad Engagement; and 4) Action Aimed at Systematic Institutional Improvement.

## 2. Integrate IR and IT into systemic student success initiatives

At many colleges, the IR and IT offices are seen as peripheral actors in the effort to retain and graduate students. They are not in the classroom, are not providing direct student services, and are not making decisions that impact a student's success. This

philosophical and even physical separation of IR and IT from the student-centered mission perpetuates silos and limits a broader commitment to elevating the importance of data.

There are a number of practices that can help accelerate the integration of IR and IT into the student success mission.

### Leadership in Action

#### **Dr. Alex Johnson, President, Community College of Allegheny County, Pittsburgh, Pa.**

When the Coach and Data Coach at the Community College of Allegheny County (CCAC) encouraged the board of trustees to seek a data-savvy, student-focused candidate in the third year of the college's Achieving the Dream participation, Dr. Alex Johnson became the new president. For several months after Dr. Johnson's arrival, the data showed poor results in the college's developmental education (dev ed) improvement efforts, and not enough faculty were supportive of those endeavors. In an effort to turn these results around, Dr. Johnson became an active leader, personally visiting all campuses and engaging dev ed faculty in productive dialogues about student-outcome data, seeking their input on possible solutions to improve student success. The ideas and energy generated through the dialogues were critical to the improvement of CCAC's dev ed success rates, which helped CCAC earn the title of Leader College in 2011. Leadership's commitment to using data to improve student success was also evidenced by the addition of a qualitative researcher to the IR department and Dr. Johnson's regular presentation of qualitative research results to college stakeholders. Furthermore, his leadership prompted dialogues organized by the college assessment director (also the Achieving the Dream coordinator) to engage faculty in conversations about Community College Survey of Student Engagement (CCSSE) and Community College Survey of Faculty Engagement (CCSFE) data. As a result of these dialogues, faculty developed and helped implement plans to remedy the shortcomings in their CCSSE outcomes. Overall, Dr. Johnson's strong leadership and collaboration helped the college to institute significant changes based on data.

#### **Dr. Sanford Shugart, President, Valencia Community College, Orlando, Fla.**

Valencia College (VC), a Round 1 college, is entering its eighth year of participation in Achieving the Dream. When the college began its work, President Sandy Shugart tied the Achieving the Dream goals to the mission of the original charter establishing community colleges: to help students succeed. He spoke college-wide about the alignment of Achieving the Dream efforts with the college's existing strategic planning and accreditation processes. In a call to fulfill the college's mission, he insisted that all stakeholders shift their perspectives of the student-college relationship and place themselves in the mind of the student. He wanted a paradigm shift that would include student-outcome data presentations based on the way students experience the college, not disjointed reports about student success and completion. He also asked stakeholders to embrace the philosophy that all students can learn and it is up to the stakeholders to help them do so. In addition to holding frequent meetings grounded in student-outcome data, Dr. Shugart authorized considerable college funds to purchase data warehouse servers and software to support expanded data access and reporting. In so doing, he became a prime example of a leader building the commitment to data-informed change.

- ▶ *Use Qualitative Data to Change the Dynamics.* IR and IT personnel must understand their roles as part of the broader mission of increasing student success, as well as within the context of accreditation. Supplementing quantitative data with qualitative data—a key recommendation from *Achieving the Dream Coaches and Data Coaches*—helps IR and IT personnel not only to expand their own understanding of the student experience, but to help others see the connection between these roles and student success.
- ▶ *Break Down Silos.* Seize opportunities to integrate IR and IT into reform or planning efforts that involve diverse stakeholders. For instance, institutional leaders might include IR and IT staff in strategic planning. The development of online courses offers a prime opportunity for instructors, researchers, and IR and IT personnel to collaborate on student success efforts. Infrastructure renovations and hardware or software upgrades are a chance for IR and IT to open up new channels of communication beyond accreditation and work with other staff to enhance student success.
- ▶ *Connect the President to the Data.* Better communication and access between IR, IT, and college presidents not only serves the president’s decision making; it sets the tone for the rest of the organization. This can be facilitated when IR and IT leaders report directly to the president and her or his top-level administrators. Helping build the capacity of college leadership to engage data as a vehicle for institutional change should be viewed as a vital function of IR and IT, pursued with purpose and skill.
- ▶ *Make Data Systems More Visible and Accessible.* Create a clear and workable system for data requests, and make sure faculty and staff know it exists and how to use it.

### 3. Cultivate research leadership geared toward student success

Whether housed within an IR, IT, administrative, or academic department, there should be some individual or committee that takes ownership of the college’s research efforts and, with the support of leadership, is empowered to carry them forward. Regardless of its composition, research leadership at the college should undertake a number of common goals:

- ▶ Sharing the student success mission embodied by *Achieving the Dream* and believing in the value of data to work toward that mission.

#### Mixing Methods: The Importance of Pairing Qualitative and Quantitative Data

Qualitative and quantitative research methodologies each have their strengths, and most of the time, neither type of data alone will answer a question fully. For instance, analyses of quantitative data often lead to the development of “why” and “how” questions that qualitative data can answer best. In its turn, qualitative inquiry often generates hypotheses that quantitative methods can test with greater precision. Therefore, a mixed-methods approach is often best. It can:

- ▶ generate and test a grounded theory
- ▶ answer a broader and more complete range of research questions,
- ▶ provide stronger evidence for a conclusion through convergence and corroboration of findings, and
- ▶ produce more complete knowledge necessary to inform theory and practice.<sup>5</sup>

<sup>5</sup> Johnson and Onwuegbuzie, 2004.

- ▶ Coordinating data collection and sharing arrangements across the college and even among different institutions; for instance, between a two-year and a four-year school to support student transfer.
- ▶ Leveraging student success and institutional data to meet various reporting requirements, including regional accrediting agencies' compliance reports. The Achieving the Dream report *Using Achieving the Dream to Meet Accreditation Requirements* provides practical advice for doing so.<sup>6</sup>
- ▶ Facilitating collaboration among IR, IT, and faculty researchers to foster effectively coordinated systems.
- ▶ Serving as a liaison between IR and IT personnel and executive leadership at the college.
- ▶ *Build on Existing Knowledge.* Leverage the research and work experience of adjunct and full-time faculty to supplement research skills; or offer professional development to others in order to add to the college's analytic capacity.
- ▶ *Facilitate Departmental and IR Collaborations.* Establish channels of communication so faculty can work with IR personnel and college leaders to suggest performance measurement indicators based on their firsthand knowledge of their students.

#### 4. Cultivate faculty researchers for student success

Given that many IR departments are already taxed by reporting or compliance requirements and are understaffed and under-resourced, colleges need to find creative ways to fill gaps in analytic capacity and ability. One of the richest resources at the community college is, of course, the faculty. The first publication in the Cutting Edge series, *Engaging Adjunct and Full-Time Faculty in Student Success Innovation*, includes recommendations for institutional leaders and researchers on engaging faculty around data and establishing a culture of evidence. Here we add to and highlight a number of those recommendations.

#### IR/IT Integration in Action

##### South Texas College, McAllen, Texas

South Texas College (STC) began transitioning to an integrated data system prior to joining Achieving the Dream, but even after converting to Banner, an integrated enterprise resource planning (ERP) system, the issue of specific data owners for the various modules and need-to-know data permissions continued to create barriers to the data for IR personnel. With pressure for more and deeper analyses of data, it became evident that IR did need to know all institutional data. The chief information officer (CIO) agreed that if IR personnel were expected to respond to questions regarding institutional data, they must be given access to that data. Historically at STC there had been no problem with IT having access to data, since that department is charged with developing and maintaining the systems that store it, but the college decided that IR needed to be viewed in the same way. "You're one of us!" the CIO told the IR director; this comment changed the whole picture, as IR and IT began to work together to impact student success.

<sup>6</sup> Manning, 2009.

- ▶ *Directly Involve Faculty in Student Success Data Analysis.* Develop vehicles for IR and faculty to collaborate on research that aligns with institutional change and student success efforts. For instance, faculty can help to identify meaningful data elements for analysis, provide feedback on presentation formats, or colead presentations of data to colleagues.
- ▶ *Support Faculty Innovations and Inquiry.* Create innovation at the college by promoting faculty inquiry and research. Many colleges have instituted versions of FIGs—faculty inquiry groups, faculty interest groups, and faculty innovation grants (competitive funds to develop and test innovative practices). These structures, formal or informal, provide venues for faculty to look deeply at institutional data and ask critical questions that can help move the needle on student success.
- ▶ *Support Collaborative Action Research (CAR).* The CAR approach to inquiry involves multiple researchers combining their expertise and interests toward the common goal of changing the practices, policies, and knowledge of their shared environment—in this case, the community college or the department. CAR combines data-informed methods with a problem-solving orientation to effect real change.
- ▶ *Provide Appropriate Compensation.* Honor the time and expertise that faculty members contribute to engaging with institutional research by providing appropriate release time, stipends, and public recognition.

## Integration and Research Leadership in Action

### Trident Technical College, Charleston, S.C.

Trident Technical College (TTC) has found a number of ways to integrate IR and IT into student success initiatives and to share data by developing routine processes for data to influence student success, strategic planning, and institutional improvement processes. First, TTC aligned its Quality Enhancement Plan (QEP)—a Southern Association of Colleges and Schools (SACS) accrediting requirement—with its Achieving the Dream efforts to improve developmental math outcomes. In a show of strong leadership, one of TTC's Achieving the Dream Core Team members, a math faculty member, began holding math summits with math faculty, and information from these summits was eventually incorporated into their QEP. The college received a perfect review from SACS, which had zero recommendations for improvement—a rarity for that group of accreditors.

Second, TTC collected considerable qualitative data from focus groups and administered nationally validated surveys in order to inform its student success efforts. It sent focus group facilitators to another Achieving the Dream Institution (Orangeburg-Calhoun Technical College), and that institution sent its facilitators to conduct focus groups at TTC. This experience was a unique sharing and learning opportunity, which promoted unbiased facilitation.

Third, through strong IR leadership, TTC established systems to meet the research needs of college stakeholders. Not only is the director of IR a talented data presenter, she made a smart decision to hire a statistician from the college's faculty for an IR position. This new IR person was able to develop a number of analytical and statistically validated studies and reports that were useful to stakeholders. The number of requests for data increased so much that the IR director began working with IT to develop an online request system to prioritize and document these requests. This is a perfect example of both strong research leadership and IR and IT integration.

Finally, data is now routinely integrated in college leadership and annual strategic planning meetings to ensure student success. The directors of TTC's Achieving the Dream effort present data at division meetings and have used it to convince faculty to enact significant policy changes. As a result, certain students are now required to take student success courses, further demonstrating the importance of data in improving institutional processes and student outcomes.

## SECTION 3:

# Promising Practices for Facilitating Data Usage

At many community colleges, the problem is not a shortage but an overabundance of data. The issue becomes how to think strategically and analytically about which data matters, how it will be used, and who needs to use it. Planning a new program, policy, or initiative that addresses both data needs and data analysis and involves key stakeholders can help to give a bigger return on investment. The following practices can help with the overload problem and foster a community college culture of inquiry into the data.

### 1. Plan for data use, not just data collection

Determining even which data to collect should be done mindfully and strategically; then, once collected, the raw data needs to be turned into *information* through thoughtful analysis and inquiry. For instance:

- ▶ Research leadership must think critically about which data elements will produce the most meaningful insights to vital questions of student success.
  - ▶ Track the experience of student cohorts over time to help identify problem points along students' path through their education and to monitor how institutional changes have influenced different cohorts. Achieving the Dream Institutions are expected to build their capacity for longitudinal cohort analysis;
- Achieving the Dream has provided principles and practices of this method in *Basics of Longitudinal Cohort Analysis*.<sup>7</sup>
- ▶ Disaggregate cohort and other data by various student characteristics (e.g., age, income, gender) to get a deeper understanding of students' experiences as well as to identify barriers and compare gaps in achievement. Looking at overall or average scores can mask disparities in achievement.
  - ▶ While breaking data down into segments is important, it is also essential that data presentations keep the full landscape in view by putting the numbers in context, thus avoiding focusing on small problems that have small impact. Further, without a vision of the larger context, big-picture issues such as access and equity can be obscured.

<sup>7</sup> Voorhes and Lee, 2009.

- ▶ Emphasize the importance of program evaluation data by encouraging IR and the program leads to work together to articulate the actions, success factors, and intended outcomes of an intervention on the front end and then create a schedule for testing milestones and impacts in concrete ways. Colleges may wish to institute a policy of IR sign-off at the beginning of an initiative and a series of periodic checkpoints to confirm that an appropriate evaluation plan has been incorporated. Achieving the Dream provides principles and practices of this method in *Evaluating Student Success Interventions*.<sup>8</sup>
- ▶ Ensure that the various phases of data analysis will be conducted with the appropriate tools and by those with the most appropriate skills. IR personnel with professional skills in analytic software such as SAS, SPSS, and Stata can apply these tools to explore raw data, while administrators and staff might engage only data relevant to their immediate questions through Microsoft Excel and other spreadsheet applications. Leaders should consider investing in professional development for those who are inclined to learn more advanced analytic techniques. The Association of Institutional Researchers (AIR) has provided exemplary professional development opportunities to IR officers from more than 150 colleges through its Data and Decisions® Academy.
- ▶ Promote robust qualitative data analysis. As noted earlier, qualitative data collected through focus groups, surveys with open-ended questions, interviews, and observation can help to answer questions of “why” and “how” that result from quantitative data, and they offer rich fodder for important conversations that shed light on problems and solutions.

## 2. Improve methods of data sharing and translation

The way numbers, analyses, and information are translated and presented to various audiences can have a profound impact on levels of comfort with institutional data.

- ▶ Simplify technical presentations and make them audience specific to avoid paralyzing and frustrating institutional leaders and other college stakeholders. Specific guidance on simplifying presentations is offered in the Achieving the Dream guide *Strengthening Institutional Research and Information Technology Capacity through Achieving the Dream*.<sup>9</sup>
- ▶ Develop presentations with a representative of the group to which the presentation will be given. For example, engage faculty leaders in creating data presentations that are relevant and meaningful to other faculty; pique their curiosity and inspire their engagement with the data.
- ▶ Hire IR personnel who can turn data into information and then communicate that information to others. While technical and analytic skills are critical, in addition, strong social and communication skills characterize the most effective and desirable IR personnel. Where these skills do not exist, pursue professional development and other opportunities to cultivate them. One way to develop these skills is for IR staff to copresent with faculty at local, state, and national conferences. These kinds of engagements give IR personnel experience in managing the give-and-take of questions and answers about the data, preparing them for similar interactions at the college.

<sup>8</sup> Rincones-Gómez, 2009.

<sup>9</sup> Glover, 2009.

- ▶ Initiate systems that give more people who are doing research access to raw data without compromising its integrity. For instance, when sharing raw data between an IT and an IR office, give clear definitions of the data elements to reduce the possibility of misinterpretation; establish file-freezing policies and make them well known; and/or implement role-based security or drill-down access so that different constituencies in the college have different levels of access and can manipulate data accordingly.

### Translation in Action

#### Community College of Beaver County, Monaca, Pa.

Dr. Joe Forrester, president of the Community College of Beaver County (CCBC), changed the institution from one that occasionally reviewed its data to one consistently focused on mining data to improve performance and presenting that data in a concise, easily understood manner. Dr. Forrester regularly presents data at college-wide events, often with the help of the IR director, Brian Hayden, who was hired in part because of his excellent presentation skills. In May 2011, the two presented the story of their Achieving the Dream progress at the National Institute for Staff and Organizational Development (NISOD) to strong reviews. Hayden regularly presents CCSSE data to faculty and engages them in dialogue to ensure their comprehension and comfort with the data. As a result, the college raised its CCSSE mean scores in a single year and was awarded Leader College status in August 2011, ultimately illustrating that translation and sharing of data are crucial factors in ensuring student success.

### 3. Create an environment conducive to conversations about the meaning and implications of data for improving student outcomes

Meaningful dialogue should always accompany the presentation of institutional and student success data, though the format of the dialogue will vary. More and thoughtful discussions among diverse stakeholders about what data means can prevent common pitfalls, including misinterpretation of data, use of data as a hammer, and ignoring “bad-news” or uncomfortable data. When faculty or staff discuss and analyze student data, their comfort level with it increases, leading to more frequent and sophisticated use and propelling the college’s student success efforts. The following recommendations can help to create the right setting and tone for conversations about numbers and data analysis.

- ▶ Encourage the president and other executives, in addition to IR leaders, to be presenters of data in dialogue sessions and college-wide forums. Leadership’s presence, knowledge, and ability to communicate the data will send a message that the data is important and that the college is committed to both using data to inform decisions and engaging those gathered in deciphering its meaning.
- ▶ Reduce fear of data by being transparent about how it was collected and analyzed and what will be done with it. Providing background in a clear, concise, and nontechnical manner up front can prevent confusion and skepticism down the line.

- ▶ Start dialogues with a good question and be ready to probe with additional questions. One properly worded question can spark lively discussion. Framing the conversation with questions rather than answers also honors the knowledge and experience of the audience.
- ▶ Both college leaders and IR personnel should be prepared for and open to questions from participants. The use of skilled facilitators, when possible, can help the questioning and conversation stay on a productive course
- ▶ Build data reflection into existing gatherings and consider new opportunities for collaborative data inquiry. For instance, utilize faculty orientations, professional development days, and department meetings as opportunities for data dialogue. Convening a data summit can be a strong strategy for bringing together a range of stakeholders at the college to focus on student data.

## Conversations in Action

### South Texas Community College

South Texas Community College has created an environment that promotes continuous conversations about data and its implications for the college's student success efforts. Making discussion of data a priority has helped the college confront the risks of misinterpreting data and failing to use it to inform actions. To avoid these common pitfalls, STC developed a research protocol that includes the typical steps for a good study (e.g., literature review, appropriate methodology) as well as a step for developing actions. Once the research is available, developing recommended actions involves discussion of the findings from the data with the staff or faculty most closely associated with the study. For example, if the data is about classroom activities, the faculty or students will be convened to discuss the data. This interactivity greatly enhances the researchers' knowledge of the context of the data as well as the quality and feasibility of the recommendations that are offered in a final research report.

The commitment to having these conversations extends to the leadership level as well. At STC, the president regularly reviews data with the IR director and then discusses the data at her administrative meetings. This leads to deeper data discussions, follow-up questions, and analyses with lots of back-and-forth between the researchers and the administrators. Again, the interactivity can greatly enhance the depth of the study as well as the interpretations of the findings. Once specific analyses have gone through this discussion, they are ready to be shared with broader audiences by the president, who is well prepared to answer questions about the data.

Finally, STC has successfully built data discussions into existing gatherings on its campus. For the past seven years, the school has convened a community Summit on College Readiness, during which data is provided from local, state, and national levels. The summit is heavily attended by educational entities in the region, as well as business, industry, and local news agencies. While the first year's summit was marked by considerable anxiety about openly sharing data, over the years, the desire for collaboration—which requires transparency—has overtaken the fear of sharing. The region has realized dramatic improvements in the levels of college readiness of high school graduates, in part, it is widely believed, due to this summit and the conversations it inspires.

## SECTION 4:

# Case Studies

### **El Paso Community College, El Paso, Texas: *Faculty Data and Research Team***

El Paso Community College (EPCC) began its Achieving the Dream journey with the collection of data on how First Time in College (FTIC) students performed on their placement exams upon entering the college. This data was shared with a variety of audiences, including the community Advisory Committee, which comprised the superintendent of the 12 local school districts, the president of the University of Texas at El Paso (UTEP), local business and industry representatives, and local press. The information was also shared with faculty teaching developmental courses in math, English, and reading at EPCC, as well as with the rest of the college, through town hall meetings held at all five of the campuses and the Administrative Service Center.

As a result of this extensive sharing of FTIC placement-exam data, EPCC was able to determine that regardless of whether students were entering the college directly from high school, less than one year after graduating, or later in life, 98 percent were placing into developmental courses, especially in mathematics. The use of this data allowed the college to have very candid conversations with diverse constituencies, resulting in the creation of the College Readiness Consortium with the local school districts and UTEP to reduce the number of incoming EPCC students requiring remediation, as well as bringing the faculty together for a common purpose—to enhance development education in order to reduce the length of time students were required to be in remediation.

This positive experience with sharing and using data resulted in faculty requesting additional data to answer questions about curriculum development that they were proposing. This, in turn, led EPCC's president to create an integrated faculty data and research team, made up of faculty from the three development education areas of mathematics, English, and reading, along with representatives from the college's IT, IR, and development areas. The team reviews its Achieving the Dream end-of-year self-evaluations and continues to identify data needs for evaluating its Developmental Education Initiative (DEI) as well as other programs.

Perhaps the greatest accomplishment for EPCC is that now faculty members are largely involved in using data and gathering evidence to answer increasingly robust questions regarding the success of pilots, initiatives, grant-funded activities, and interventions implemented in many areas of the college. By using and sharing data, integrating IT and IR with student success initiatives, and encouraging collaboration among various departments, EPCC has demonstrated its commitment to using institutional research and technology to ensure successful student outcomes.

## Montgomery County Community College, Bluebell, Pa.: *Engaging the College Through Student Success Data*

Montgomery County Community College (MCCC), an Achieving the Dream Institution since 2006, began its path toward data-informed initiatives in 2002 with the goal of placing learning first, followed by the development of an institutional effectiveness model (IEM) to determine where improvements were needed. The IEM data includes five-year trends and national and state peer benchmarks in student retention, persistence, completion, and success in developmental and college level courses. When MCCC joined Achieving the Dream, data-informed decision making had been valued and integrated at the leadership level. Since then, through the student success initiatives, the culture of evidence has spread deeper into the organization.

To start, MCCC expanded IR and IT resources to meet the data and evaluation needs of its staff. The Achieving the Dream grant initially funded the creation of two part-time research analyst positions, which have since been institutionalized as a single full-time position. In addition, to make data easily accessible throughout the organization, IT purchased a data warehouse and an end-user reporting tool that allows staff to extract their own data, rather than relying on IR personnel to access the data for them. Key decision makers enjoyed similar benefits, thanks to the purchase of data tools with Title III funds. The new efficiencies allowed IR personnel to focus more time on complex research and analyses.

Illustrating the importance of data use and sharing to foster evidence-based decision making, the college's data team, co-led by the IR director and a faculty member, shared disaggregated data on student success with the Achieving the Dream Core Team. In addition, qualitative data was collected through focus groups, helping to identify three key factors in student outcomes: 1) developmental mathematics was a significant barrier to student success; 2) a significant achievement gap existed for African American males; and 3) certain subjects should

become gateway courses. Thanks to these focus groups and a clearer understanding of the data they had collected, MCCC introduced a series of evidence-based interventions, including Concepts of Numbers, a redesign of the first developmental math course from a topic-based arithmetic approach to a conceptual approach; and the Minority Male Mentoring Program.

Continuing with the concept of sharing and translating data, the Institutional Research Office publishes a monthly newsletter, *Research and Practice*. Each issue is e-mailed to the college community, posted on the faculty/staff web portal, and made available to the public through the *Think Success* news blog, at <http://mc3success.wordpress.com/>.

Finally, MCCC uses data to engage faculty and evaluate results of new initiatives. Through the Gateway Faculty Academy, faculty members start with an initial data packet consisting of charts and graphs showing trends in course completion. Analysis of this data—in this case, disaggregated by gender, race/ethnicity, age, Pell status, and academic readiness (determined by placement into one, two or more, or no developmental courses) – often leads to additional research questions to inform their work. In a shining example of collaboration and integration, IR staff work hand-in-hand with faculty to help answer those questions through additional data analysis and, when appropriate, collect data through focus groups. As faculty implement interventions, assessment plans are developed to ensure learning outcomes are met and to evaluate effectiveness.

As an Achieving the Dream Institution, Montgomery County Community College continues to dig deeper into its student success data to engage the faculty, pilot and evaluate interventions, and inform policy changes. Increasing student success through data-informed decision making remains an anchor for the strategic plan.

## SECTION 5:

# Augmented Assessment Tool for Achieving the Dream Principle 2: Use of Evidence to Improve Policies, Programs, and Services

The Achieving the Dream Self-Readiness Assessment has been developed to help stakeholders assess the extent to which their college has implemented practices that reflect the principles of the Achieving the Dream model for increasing student success through institutional improvement.<sup>10</sup> The assessment is designed to help stakeholders decide whether Achieving the Dream is a good fit, given the college's existing and desired goals and priorities. As stated in the Achieving the Dream Field Guide for Student Success: "Colleges are not expected to have implemented all of the practices listed under the principles. In fact, the Achieving the Dream improvement process is designed precisely to help Achieving the Dream colleges adopt practices like those enumerated in the readiness assessment." The tool is intended to spur thoughtful discussions among college administrators, faculty and staff leaders about existing policies and practices, strengths and weakness, challenges and opportunities for change as they relate to the four principles. Once completed, the assessment serves as a launch point for a college's work with the Achieving the Dream Coaches and Data Coaches.

Use of Evidence to Improve Policies, Programs, and Services is the second of the Achieving the Dream core principles, and the self-assessment asks colleges to evaluate their capacity, process for identifying achievement gaps, and process for formulating and evaluating solutions. In the Augmented Assessment Tool below we have revisited the self-assessment tool with an eye toward aligning it with the promising practices shared in this guide as well enhancing its use as a tool for continuous self-assessment throughout a college's involvement in Achieving the Dream and beyond.

We hope that you will use this tool to prompt critical thinking and open conversations about the IR and IT activities and capacities at your college. We have added elements to the existing sections 2.1 – 2.3 and have added a new section, 2.4, as a way for you to consider specifically how you use data to inform change. We encourage you to build on this self-assessment and use it as a flexible tool that can be adapted to your institution's needs and context.

<sup>10</sup> The four principles of the Achieving the Dream model for increasing student success through institutional improvement are: 1) Committed Leadership, 2) Using Evidence to Improve Policies, Programs, and Services, 3) Broad Engagement, and 4) Systemic Institutional Improvement.

Principle 2: Use of Evidence to Improve Policies, Programs, and Services		Extent of Implementation				
		Little/None	Increasing	A lot		
<b>2.1</b>	<b>Information Technology (IT) and Institutional Research (IR) capacity</b>					
a	IT capacity is adequate to meet the demand for data and institutional research aimed at student success.	1	2	3	4	5
b	Information system or ERP system is integrated or institution has the capacity to easily integrate data from the various systems if not integrated.	1	2	3	4	5
c	Policies and procedures are in place to ensure integrity of data collected.	1	2	3	4	5
d	IT provides researchers with adequate definitional and operational information regarding data elements and databases.	1	2	3	4	5
e	IT and IR have developed a protocol for managing data and research requests from college personnel such as administrators and faculty.	1	2	3	4	5
f	IR staff capacity is adequate to meet demand for data collection, analysis, and research aimed at student success.	1	2	3	4	5
g	IR staff has reporting software and tools to extract and analyze data and produces summary level reports.	1	2	3	4	5
h	IR staff effectively educates and assists college personnel to understand and use data to improve programs and services.	1	2	3	4	5
i	IR staff effectively presents (written and oral) data in ways that are easily understood by readers or audiences.	1	2	3	4	5
j	Professional development opportunities are made available for IT and IR personnel.	1	2	3	4	5
<b>2.2</b>	<b>Process for identifying achievement gaps</b>					
a	College routinely collects, analyzes, and reports longitudinal data on cohorts of students to track student progression and outcomes.	1	2	3	4	5
b	College routinely disaggregates student cohort data by age, race, gender, income, and other factors to identify gaps in achievement among student groups.	1	2	3	4	5
c	College regularly uses qualitative methodologies (e.g., interviews, open-ended surveys, and focus groups) for research with students, faculty, and staff to identify strengths and weaknesses in programs and services, as well as opportunities for improvement.	1	2	3	4	5
<b>2.3</b>	<b>Process for formulating and evaluating solutions</b>					
a	College routinely engages faculty, staff, and others from across the campus community to review data on student achievement and help develop and refine strategies for addressing priority problems.	1	2	3	4	5
b	College routinely evaluates the effectiveness of efforts to improve student success and uses the results to improve policy and practice.	1	2	3	4	5
c	IR staff consults with faculty and other college researchers on program evaluation design, execution, and analysis.	1	2	3	4	5
<b>2.4</b>	<b>Widespread commitment to and capacity for data-informed decision making</b>					
a	Organizational structure at the college reinforces strong lines of communication between IR, IT, and executive leadership.	1	2	3	4	5
b	Executive leaders regularly review data reports and make requests for analyses to IR.	1	2	3	4	5
c	College leaders and IR personnel copresent research findings at both institutional gatherings and external conferences.	1	2	3	4	5
d	There are opportunities for college personnel at varying levels to develop questions for research and analyze data collaboratively.	1	2	3	4	5
e	There are multiple college stakeholders involved in reviewing longitudinal and cohort data to identify trends and gaps, diagnose problems, and contemplate interventions.	1	2	3	4	5
f	IT and IR personnel are included in institutional strategic planning conversations.	1	2	3	4	5
g	Hiring decisions for staff—executive leaders, faculty, IT and IR personnel—consider candidates' alignment with the institution's commitment to data-informed decision making for student success.	1	2	3	4	5

## APPENDIX

### List of Resources

- Allen, L., & Kazis, R. (Oct. 2007). *Building a Culture of Evidence in Community Colleges: Lessons from Exemplary Institutions*. Boston: Jobs for the Future. Retrieved 1 June 2011 from <http://www.jff.org/sites/default/files/cultureofevidence.pdf>.
- Bashford, J., & Slater, D. (2008). *Assessing and Improving Student Outcomes: What We Are Learning at Miami Dade College*. New York: Community College Research Center. Retrieved 25 May 2011 from [http://www.achievingthedream.org/publications/research/Bashford\\_paper.pdf](http://www.achievingthedream.org/publications/research/Bashford_paper.pdf).
- Bers, Trudy (ed). *Student Tracking in the Community College*. San Francisco: Jossey-Bass. 2008.
- Birnback, L., & Friedman, W. (2009). *Engaging Faculty in the Achieving the Dream Initiative*. New York: Public Agenda/Achieving the Dream. Retrieved 15 May 2011 from [http://www.achievingthedream.org/docs/guides/ATD\\_Engaging-Faculty.pdf](http://www.achievingthedream.org/docs/guides/ATD_Engaging-Faculty.pdf).
- The Center for Comprehensive School Reform and Improvement/Learning Point Associates (Oct. 2006). *Research Brief: Practices that Support Data Use in Urban High Schools*. Washington, DC: Learning Point Associates. Retrieved 1 June 2011 from [http://www.centerforcsri.org/files/Center\\_RB\\_oct06.pdf](http://www.centerforcsri.org/files/Center_RB_oct06.pdf).
- Dougherty, K., Hare, R., & Natow, R. (Nov. 2009). *Performance Accountability Systems for Community Colleges: Lessons for the Voluntary Framework of Accountability for Community Colleges*. New York: Community College Research Center. Retrieved 20 May 2011 from <http://ccrc.tc.columbia.edu/Publication.asp?uid=728>.
- Dowd, A. C. (Dec. 2005). *Data Don't Drive: Building a Practitioner-Driven Culture of Inquiry to Assess Community College Performance*. Indianapolis: Lumina Foundation for Education. Retrieved 21 May 2011 from [http://www.achievingthedream.org/\\_images/\\_index03/datadontdrive2005.pdf](http://www.achievingthedream.org/_images/_index03/datadontdrive2005.pdf).
- Glover, R. (2009). *Strengthening Institutional Research and Information Technology Capacity through Achieving the Dream: Principles and Practices of Student Success*. Chapel Hill, NC: Achieving the Dream. Retrieved 5 May 2011 from [http://www.achievingthedream.org/docs/guides/ATD\\_IR\\_IT.pdf](http://www.achievingthedream.org/docs/guides/ATD_IR_IT.pdf).
- Gonzalez, K. (2009). *Using Data to Increase Student Success: A Focus on Diagnosis—Principles and Practices of Student Success*. Chapel Hill, NC: Achieving the Dream. Retrieved 2 June 2011 from <http://www.achievingthedream.org/docs/guides/ATD-FocusDiagnosis.pdf>.
- Haviland, D. (2009). *Leading Assessment: From Faculty Reluctance to Faculty Engagement*. Academic Leadership: The Online Journal 7. Retrieved 2 June 2011 from <http://www.academicleadership.org/>.
- Jenkins, D., & Kerrigan, M. R. (Dec. 2008). *Evidence-Based Decision Making in Community Colleges: Findings from a Survey of Faculty and Administrator Data Use at Achieving the Dream Colleges*. New York: Community College Research Center. Retrieved 25 May 2011 from <http://ccrc.tc.columbia.edu/Publication.asp?uid=653>.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher* 33, 7: 14–26.

- Knight, W. E. (2010). *In Their Own Words: Effectiveness in Institutional Research*. Tallahassee, FL: Association for Institutional Research. Retrieved 1 June 2011 from <http://www.airweb.org/page.asp?page=73&appage=85&id=122>.
- Manning, T. M. (2009). *Using Achieving the Dream to Meet Accreditation Requirements: Principles and Practices of Student Success*. Chapel Hill, NC: Achieving the Dream. Retrieved 2 June 2011 from [http://www.achievingthedream.org/docs/guides/ATD\\_Accreditation.pdf](http://www.achievingthedream.org/docs/guides/ATD_Accreditation.pdf).
- Miller, B. (2010). *The Course of Innovation: Using Technology to Transform Higher Education*. Washington, DC: Education Sector. Retrieved 31 May 2011 from [http://www.educationsector.org/sites/default/files/publications/NCAT-Report\\_RELEASE.pdf](http://www.educationsector.org/sites/default/files/publications/NCAT-Report_RELEASE.pdf).
- Morest, V. S. (2005). *Using Data to Improve Student Outcomes: The Achieving the Dream Initiative* [PowerPoint slides]. Retrieved 25 May 2011 from Community College Research Center, <http://ccrc.columbia.edu/Publication.asp?uid=369>.
- Morest, V. S. (Spring 2005). *Institutional Research Capacity at Community Colleges: Preliminary Survey Results*. Retrieved 25 May 2011 from Achieving the Dream, [http://www.achievingthedream.org/\\_images/\\_index03/CCRC\\_Slides\\_Spring\\_05.pdf](http://www.achievingthedream.org/_images/_index03/CCRC_Slides_Spring_05.pdf).
- Morest, V. S., & Jenkins, D. (2007). *Institutional Research and the Culture of Evidence at Community Colleges*. New York: Community College Research Center. Retrieved 10 May 2011 at <http://www.achievingthedream.org/publications/research/institutionalresearchccrc.pdf>.
- Rincones-Gómez, R. (2009). *Evaluating Student Success Interventions: Principles and Practices of Student Success*. Chapel Hill, NC: Achieving the Dream. Retrieved 5 May 2011 from [http://www.achievingthedream.org/docs/guides/ATD-Eval\\_Interventions.pdf](http://www.achievingthedream.org/docs/guides/ATD-Eval_Interventions.pdf).
- Rutschow, E. Z., Richburg-Hayes, L., Brock, T., Orr, G., Cerna, O., Cullinan, D., Kerrigan, M. R., Jenkins, D., Gooden, S., & Kasey, M. (Jan. 2011). *Turning the Tide: Five Years of Achieving the Dream in Community Colleges*. New York: MDRC. Retrieved 11 May 2011 from <http://www.achievingthedream.org/Portal/Modules/133a5359-8084-4c0e-af92-f01d5662f044.asset?>.
- Talbert, J., Wood, A., & Lin, W. (Dec. 2007). *Evaluation of BASRC Phase II: Evidence-Based System Reform—Outcomes, Challenges, Promising Practices*. Palo Alto, CA: Stanford University Center for Research on the Context of Teaching. Retrieved 1 June 2011 from <http://www.stanford.edu/group/suse-crc/cgi-bin/drupal/sites/default/files/BASRCII-2008.pdf>.
- Tucker, B. (2010). *Putting Data into Practice: Lessons from New York City*. Washington, DC: Education Sector. Retrieved 31 May 2011 from <http://www.educationsector.org/publications/putting-data-practice>.
- Wierschem, D., McMillen, J., & McBroom, R. (2003). *Methodology for Developing an Institutional Data Warehouse*. Tallahassee, FL: Association for Institutional Research. Retrieved 1 June 2011 from <http://airweb3.org/airpubs/88.pdf>.
- Zachry, E. M., Coghlan, E., & Welbeck, R. (June 2010). *Investing in Change: How Much Do Achieving the Dream Colleges Spend—and from What Resources—to Become Data-Driven Institutions?* New York: MDRC. Retrieved 20 May 2011 from <http://www.mdrc.org/publications/559/full.pdf>.
- Zachry, E. M., & Orr, G. (2009). *Building Student Success from the Ground Up: A Case Study of an Achieving the Dream College*. New York: MDRC. Retrieved 25 May 2011 from <http://www.achievingthedream.org/Portal/Modules/ea400dd-a800-4338-b89a-d840434527dc.asset?>.

# Acknowledgements

The execution of this work would not have been possible without the expertise and experience of our work group participants. Their contributions and feedback have been critical to the development of this guide, which we hope will serve as a useful resource for community colleges' efforts toward student success. Additional thanks to Dr. Kathrine Swanson from Montgomery County Community College and Dr. Lydia Tena from El Paso Community College for submitting case studies; and Trudy Bers and Luzelma Canales for their contributions on the online forum. Finally, we are grateful for the generosity of Ann Kirschner and her staff at Macaulay Honors College in New York City for hosting the in-person work group events.

## Work Group Participants

### **J. Keith Brown**

Consultant  
Jobs for the Future

### **Brenda Cole\***

Director of Research &  
Analytical Services South Texas  
College

### **Bobbie Everett Frye**

Director of Institutional  
Research  
Central Piedmont Community  
College

### **Rhonda Glover\***

Data Coach  
Assistant Vice President  
Emeritus Institutional Research  
and Learning Assessment,  
Valencia Community College

### **Bill Law**

President  
St. Petersburg College

### **Fred Lillibridge\***

Associate Vice President for  
Accreditation, Compliance and  
Planning  
Doña Ana Community College

### **Laura Meeks\***

President  
Eastern Gateway Community  
College

### **Vanessa Smith Morest**

Dean of Institutional Effectiveness  
Norwalk Community College

### **Gail O'Kane**

Interim Vice President of Strategy,  
Planning, and Accountability  
Minneapolis Community and  
Technical College

### **Kent Phillipe\***

Associate Vice President of  
Research and Student Success  
American Association of  
Community Colleges

### **Rigoberto Rincones-Gómez\***

National Director of Data  
Coaching Achieving the Dream

### **Randy Swing\***

Executive Director  
Association for Institutional  
Research

### **Vasti Torres**

Program Chair of Higher  
Educational and Student  
Affairs  
Indiana University at  
Bloomington

### **Josh Wyner\***

Executive Director  
Aspen Institute's College  
Excellence Program

\* Reviewed and provided feedback on report drafts.



Achieving the Dream™

Community Colleges Count

[www.AchievingTheDream.org](http://www.AchievingTheDream.org)

Achieving the Dream, Inc. is a national nonprofit organization dedicated to helping more community college students, particularly low-income students and students of color, stay in school and earn a college certificate or degree. Evidence based, student centered, and built on the values of equity and excellence, Achieving the Dream is closing achievement gaps and accelerating student success nationwide by 1) guiding evidence-based institutional change; 2) influencing public policy; 3) generating knowledge; and 4) engaging the public. Conceived as an initiative in 2004 by Lumina Foundation and seven founding partner organizations, today Achieving the Dream is the most comprehensive nongovernmental reform movement for student success in higher education history. With 160 community colleges and institutions, more than 100 Coaches and advisers, and 15 state policy teams working throughout 30 states and the District of Columbia, Achieving the Dream helps 3.5 million community college students have a better chance of realizing greater economic opportunity and achieving their dreams.



**PUBLIC AGENDA**

Public Agenda, a Founding Partner of Achieving the Dream, was established in 1975 by social scientist and author Daniel Yankelovich and former U.S. Secretary of State Cyrus Vance. It works to help leaders, stakeholders, and the general public collaborate on sustainable solutions to complex issues. Our in-depth research on how citizens think about policy has won praise for its credibility and fairness from elected officials of both political parties and from experts and decision makers across the political spectrum. Our public engagement team provides technical assistance to leaders in communities and states across the nation. Our award-winning website, [publicagenda.org](http://publicagenda.org), offers information about the challenges the country faces and nonpartisan guides to solutions.

6 East 39th Street, New York, NY 10016 | 212.686.6610 | [www.PublicAgenda.org](http://www.PublicAgenda.org)

© 2012 Achieving the Dream, Inc

© 2012 Public Agenda