

Lumina Foundation
RESULTS AND REFLECTIONS
An evaluation report



*Making the numbers add up:
A guide for using data in college access and success programs*

ACKNOWLEDGMENTS

As evaluators of two important initiatives supported by Lumina Foundation for Education, the OMG Center for Collaborative Learning is thrilled to share lessons from the past six years of our work. We wanted to keep the guide brief yet useful, accessible, relevant and practical to a variety of stakeholders. We hope readers will find these lessons helpful in their daily work toward college access and success, whether as policymakers, executive directors of community-based organizations, university deans, counselors, nonprofit service providers, students or parents.

We want to acknowledge and thank those who made the Partnerships for College Access and Success (PCAS) and McCabe evaluations and this guide possible. We are grateful to Lumina Foundation for its leadership, vision and deep commitment to ensuring college access and success. As evaluators, we are privileged to witness the Foundation's leadership in using data to improve access to and success in college.

We also thank the grantees and local partners for welcoming us into their communities and sharing not only their work, but also their thoughtful and candid insights. Reflecting OMG's collaborative name, we formed strong relationships and friendships over time with many grantees, despite our persistent data requests and myriad questions. Thank you all for your patience and willingness to learn with us.

Finally, we thank the Academy for Educational Development (AED), the technical assistance providers for the PCAS grantees and our partners in this report. Our terrific working relationship has helped us learn in unexpected ways.

With gratitude,
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INTRODUCTION

From an early age, Manny, the child of immigrant parents, had set his sights on college. He wanted to be the first in his family to attain a college degree. An average student in an underperforming public school in Chicago's Pullman neighborhood, Manny had switched schools almost yearly, as his family moved from neighborhood to neighborhood. He had a mediocre behavior record, limited support for his academic aspirations from family and friends and minimal knowledge of the college application process.

With these obstacles, the path to his goal of a college education was unclear and challenging. Despite these obstacles, Manny is now a freshman at Northwestern University. However, many of his friends did not enjoy the same success. Although he had nine other friends who wanted to attend college, only three enrolled.¹

Manny's enrollment at Northwestern resulted directly from the efforts of many caring adults and helping hands. For instance, a teacher recognized his determination and expressive talents and provided ongoing emotional support and direction. A guidance counselor matched him with a math tutoring program, which helped boost his GPA and prepared him for the SAT and other college exams. A college fair, jointly organized by a local nonprofit organization and his high school, helped address his knowledge gaps about college options and opportunities. A friend took him for a weeklong college campus tour that solidified his aspirations. An ACT test fee waiver program helped ease the financial burden of the college application process.

Additionally, many policies, programs and supports played equally critical if less visible roles in

Manny's successful college quest. For instance, his school's newly adopted district-wide college-bound curriculum, developed with the local community college, served Manny's needs. Moreover, his school's leadership team tracked the progress of students such as Manny who were especially at risk. Northwestern University was actively seeking to enroll more minority students, and a redesigned federal bill for student aid offered colleges incentives to develop work-study opportunities for students. The combination of these policies and the guidance of individuals in Manny's community made his enrollment at Northwestern possible.

All of these supports — the individuals, organizations and institutions that contributed to Manny's enrollment and success in college — as well as the complex interconnections between these stakeholders constitute the *college access and success system*. Although Manny managed to take advantage of these multiple supports, many other students face a patchwork of well-intended but disconnected services and thus fail to attain a postsecondary education. Worse, they lose all of the opportunities that the college degree represents. To successfully prepare and enroll these students in college, both governmental and institutional policies must better coordinate and support this system of services. Data can drive this much-needed change and can strengthen the impact of discrete college access and success programs.

About this guide: why data?

The purpose of this guide is to help readers clarify their roles in the college access and success system and to identify how they might use data to create change for students like Manny and his friends. We detail here

¹ Manny is a fictitious character, based on: Roderick, M., Nagaoka, J., Coca, V., (2008) *Barriers to College Attainment*. Center for American Progress. College aspirations, access, and enrollment data based on Roderick, M., Nagaoka, J., Coca, V., Moeller E., Roddie, K., Gilliam, J., & Patton, D. (2008). *From High School to the Future: Potholes on the Road to College*. Chicago: Consortium on Chicago School Research.

how data can strengthen current programs and support broader changes that ease the path to college for students such as Manny.

With scarce time and limited financial resources, can we afford to divert attention from direct programming for students toward data collection and use? We believe the answer is an emphatic yes. This guide will illuminate how a long-term data-collection strategy can help organizations both maximize the impact of their own programming and strengthen the connections of their work to other programs, thus improving student experiences and outcomes.

In the last decade, education reformers have discussed and debated the topic of data at length. Because the No Child Left Behind act placed a national spotlight on educational accountability and related issues of data collection, many stakeholders have come to view data collection as a system of punishment or reward externally imposed by government and other agencies. We see it differently — as an opportunity for learning and action fueled by organizations' own concerns and goals.

Recently, however, key stakeholders have begun to expand activities and resources for more supportive uses of data. Federal, state and local governments are investing more time and money in systems to track student educational trajectories. These systems help shape policies and programs and can support improvements as programs develop. Stakeholders increasingly ask how to maximize these data-collection systems to benefit students.² Philanthropists — most notably, the Bill & Melinda Gates Foundation and Lumina Foundation for Education — have invested substantially in quality college access and success data tracking. The National Student Clearinghouse — to date, one of the most reliable sources of national college enrollment and graduation data — has

A vital field resource

The National Student Clearinghouse (NSC) was founded in 1993 as a nonprofit organization to house information about college matriculation for use by secondary and postsecondary institutions. NSC partner colleges represent approximately 92 percent of United States college students, and NSC provides ongoing enrollment and degree completion information about the students they serve. Organizations and school districts that partner with the NSC have ongoing access to this information so that they can understand what happens to their students after they graduate high school.

seen a sizable increase in the use of its services as organizations try to better assess their programs aimed at increasing college access and success.

These shifts are promising. If the field seeks to develop policies and programs that bolster students' success in college, it will need both quantitative and qualitative data to understand which students are going to college, how they got there and how they are performing. Stakeholders will need to better understand why and how a student such as Manny could navigate the system and succeed while others could not.

Drawing from evaluation experience

Over the past several years, the OMG Center for Collaborative Learning has developed a robust portfolio of work in higher education access and success initiatives. For this guide, OMG draws primarily from two evaluations it conducted on behalf of Lumina Foundation: 1) an evaluation of the McCabe Fund and 2) an evaluation of the Partnerships

² The U.S. Department of Education has invested \$264 million in recent years to support the development of state longitudinal data systems. Another \$250 million is included in the American Recovery and Reinvestment Act. (Kline, D. "Data, data everywhere but not a drop to use," *Education Week*, May 29, 2009; <http://www.edweek.org/ew/articles/2009/05/28/33kline.h28.html>)

Key sources for this guide

Lumina's McCabe Fund awarded grants to individual programs that provide college access services to underrepresented students. The OMG evaluation of the McCabe Fund examined 32 organizations that were awarded grants from June 2005 through December 2006. Grantees included community-based organizations, secondary schools and postsecondary institutions. The OMG evaluation examined both the college enrollment as well as the persistence outcomes of more than 1,500 students from these programs and the access experience associated with these outcomes. A Web-enabled database system, specially designed for the evaluation, enhanced grantee capacity to collect and analyze data. The variety of grantees using the database illustrated how program providers address the challenges and opportunities that derive from more systematic and intentional collection of data.

The Partnerships for College Access and Success (PCAS) initiative supported eight organizations

across the United States to build partnerships as vehicles to improve institutional policies and alignment of programs and student supports in their communities. Participants included the following organizations:

- Linking Learning to Life; Burlington, Vt.
- Public Education Fund and the College Access Center; Chattanooga, Tenn.
- Little Village Development Corporation; Chicago, Ill.
- COMPASS Guide; Milwaukee, Wis.
- Youth Development Institute; New York, N.Y.
- Linking Education and Economic Development; Sacramento, Calif.
- San Antonio Education Partnership; San Antonio, Texas
- Port Jobs; Seattle, Wash.

Data collection not only brought together PCAS grantee partnerships but also drove agendas for community-wide program enhancements and policy change.

for College Access and Success (PCAS) initiatives. We draw as well from our other projects in higher education and in training nonprofit organizations to use data in their programs.

The layout of this guide

Sections

Section I presents an overview of the college access and success system, includes a brief description of the various stakeholders and their roles and concludes with an examination of data's role in building the system. Section II focuses on how stakeholders can use data to develop partnerships in increasing college access. Finally, Section III examines how data can improve

individual programs. The guide concludes with a brief summary and a checklist on data collection and use.

Examples from the field

Throughout the guide, we have included specific examples from our evaluation work to illustrate the many ways organizations use data to inform their programming or to change the way college access and success stakeholders align services and supports in their communities.

Questions to guide data exploration

At various junctures, we highlight key questions that can guide practitioners in their use of data. These

include questions tailored to individual organizations and those useful in developing quality partnerships with other organizations.

Tips for using data

This guide also includes numerous “where the rubber meets the road” text boxes. These contain concrete tips and guidelines related to data collection and use,

including tips on how to select appropriate measures to track progress, how to develop data-sharing agreements and how to build data-collection systems.

Appendices

At the end of the report, we include several helpful Web sites and resources as well as some detailed information about OMG and its evaluative work.

SECTION I:

OVERVIEW OF THE COLLEGE ACCESS AND SUCCESS SYSTEM

What is a *college access and success system*? We use this term throughout this guide to describe the multiple stakeholders in increasing the number of students who enroll in and graduate from college. College access and success is a broad-based issue that includes many different players: K-12 schools, institutions of higher education, community- and school-based nonprofit organizations, policymakers and funders, among others.

Defining the college access and success pathway

OMG's McCabe and PCAS evaluations have illuminated a series of critical steps toward college access and success. Existing research affirms that these activities constitute what we call "college access and success milestones." We also refer to a "continuum," "pathway" or "pipeline of services."

These milestones are most crucial in high school, where critical preparation occurs, and in college, where additional milestones lead to graduation. The high school success indicators are academic achievement in high school, preparation and success on college exams (such as the SAT, PSAT and ACT), college application, and financial aid and

scholarships. College indicators are academic success, persistence and college completion. Figure 1 on Page 6 summarizes a sample of these key factors, along with corresponding data collection points for each.³

However, the path is much more complex and fragmented than Figure 1 suggests. Fortunately, projects such as Lumina's KnowHow2GO initiative⁴ are helping to better align all of the critical steps of college access and success.

Defining the college access and success players

While some stakeholders may provide a single service along the college access and success pathway, others may provide multiple services. However, to complete all of the necessary milestones, the interaction and support of many individuals and organizations are required. Figure 2 on Page 7 highlights the various players and stakeholders in the college access and success system and includes roles that each may play.

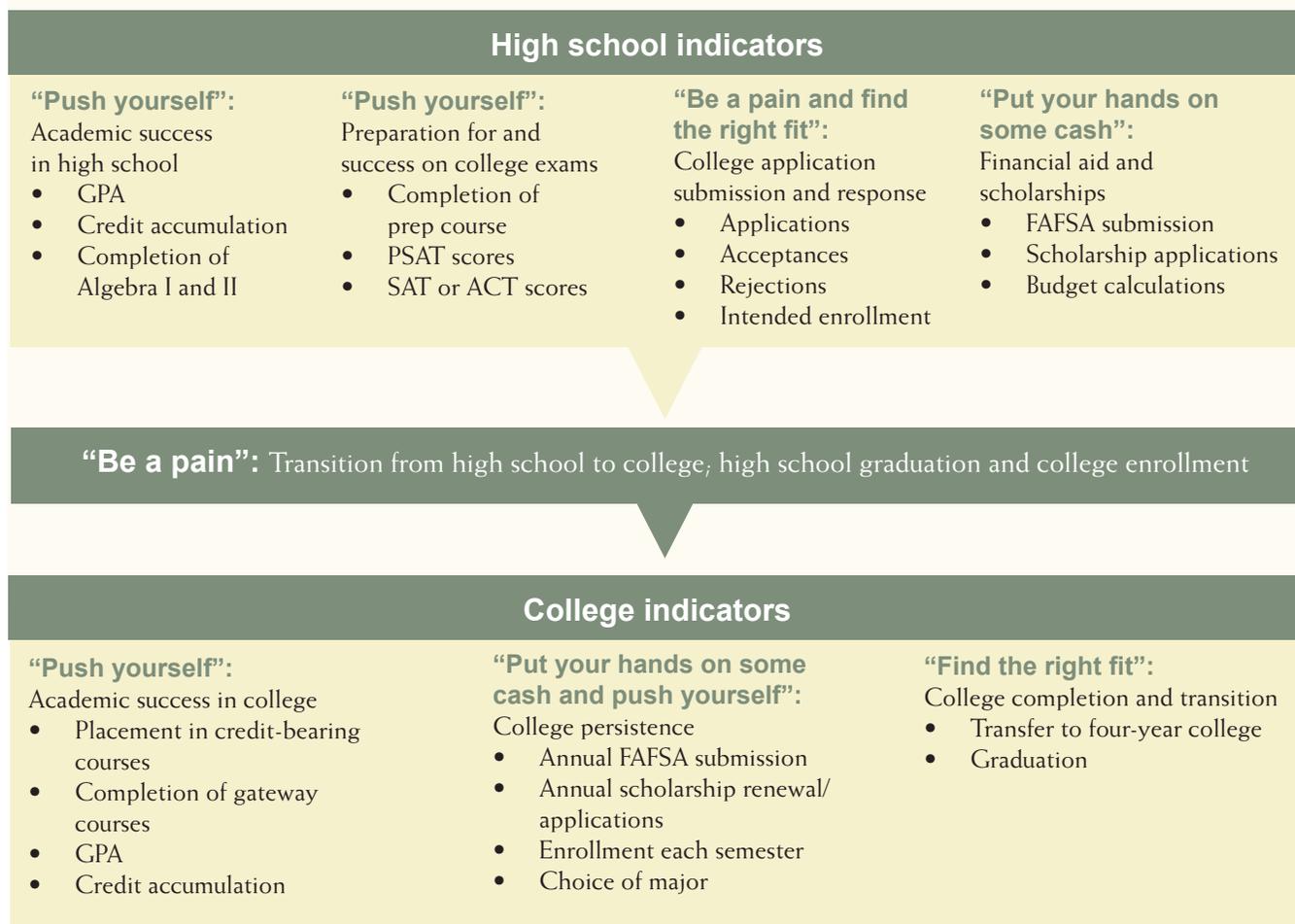
As the graphic⁵ illustrates, the students are at the center of the system and are its reason for being. Surrounding the students are the individuals, organizations and institutions that have the most direct contact with them: parents and family members, nonprofit service providers, the K-12 education system and institutions of higher education. These groups

³ This list of data-collection points is not exhaustive. As we will see later in this guide, many organizations choose to collect additional data points such as college aspirations, career exploration and participation in key college activities such as college visits.

⁴ KnowHow2GO is a public-awareness campaign and grassroots initiative that builds sustainable state and regional networks to support college success for low-income students. Networks provide direct services that increase the motivation and knowledge needed to succeed in college and advocate for increased educational attainment for low-income students. Initially launched as an Advertising Council campaign, the program has expanded to at least 15 states and involves many national youth-serving organizations, including Y-USA, that are working to attain Lumina Foundation's "big goal," that, by the year 2025, 60 percent of Americans hold high-quality college degrees or credentials.

⁵ These graphics provide a succinct schematic representation of key stakeholders in the college access and success system and their roles. Thus these graphics may exclude or oversimplify some stakeholders' contributions. In the case of K-12 education, for example, fostering a college-going culture requires many elements, including high expectations, an academically challenging environment and opportunities for college exploration, among others. Although these figures cannot represent the full complexity of the system, we hope that they can help organizations and individuals better identify where they fall within the college access and success system, what role they play and what data to collect.

**Figure 1:
The KnowHow2GO “four steps to college” and
key college access and success milestones**



form the core of the college access and success system and are the primary focus of this guide. They are the “helping hands” that ushered Manny toward his goal of attending college.

The core operates within a much broader and complex network of stakeholders that includes policymakers, researchers, the business community, advocates, communication experts and funders, among others. Although this outer core of the college access and success system may not necessarily interact directly with students, these stakeholders significantly

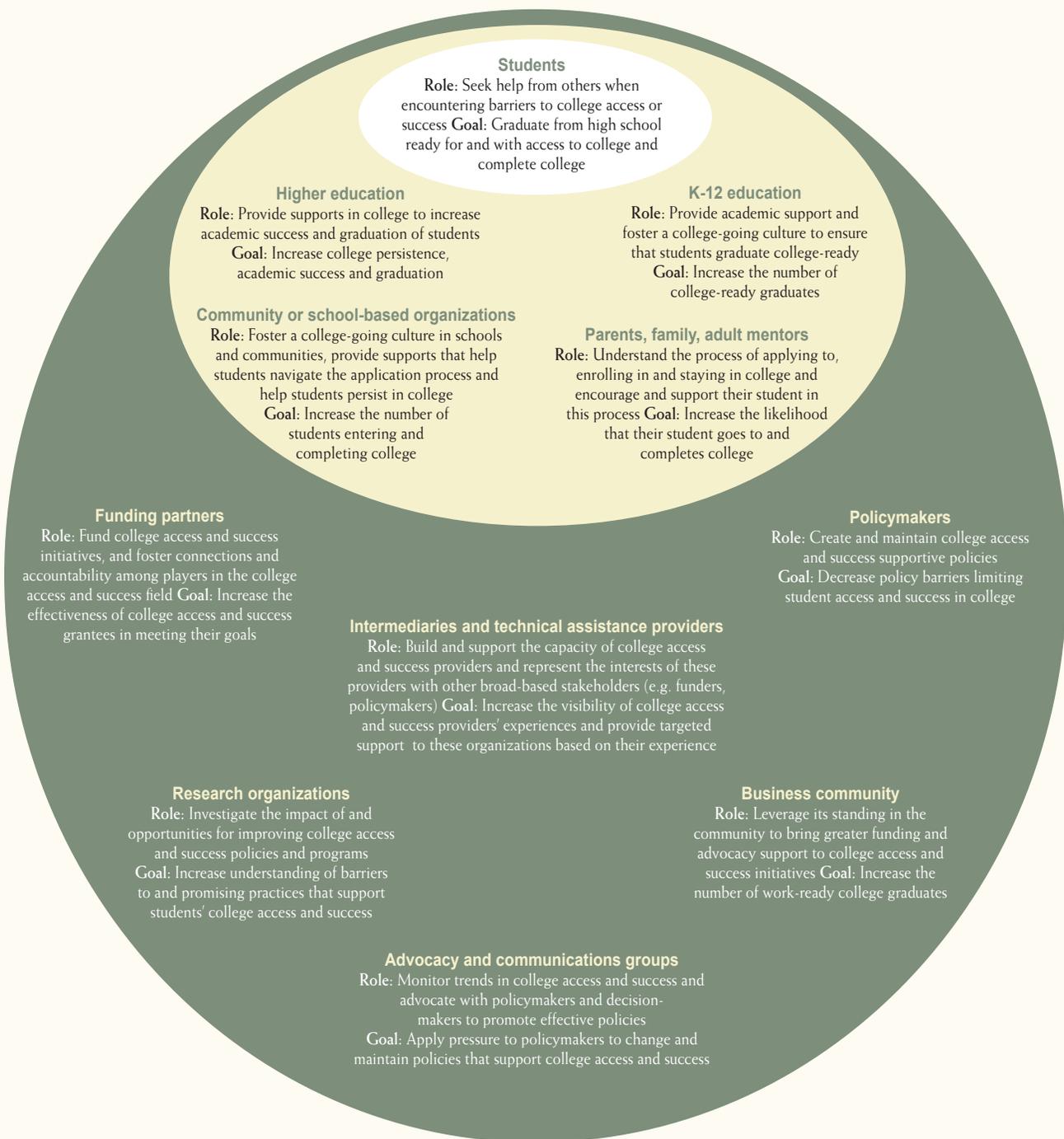
influence the college access and success system and thus influence individual students.

Using data to connect players and roles

Data are crucial to developing and strengthening the system; data not only help build internal capacity in individual organizations but also build relationships between multiple players.

The McCabe and PCAS evaluations revealed that organizations use data in three key ways: 1) to address student needs on an individual level; 2) to improve

**Figure 2:
College access and success system — overarching roles**



**Figure 3:
Three levels of data use**

Individual students

The collection of individual student data allows frontline staff to identify patterns, gaps and opportunities in the progress of individual students. Staff can use these data to improve advisement and support of each student.

Individual programs

Aggregating individual student data connected to a particular program allows program directors and staff to identify patterns across students that highlight gaps and opportunities in specific programs. These data can be used to improve overall program delivery. These data are also critical for programs to advocate for funding to sustain their work.

Multiple programs and broader policy (system)

Connecting data across individual programs and different organizations allows organizational leaders, program staff, policymakers and others to identify patterns across programs that highlight gaps and opportunities that no single organization can address alone. Organizations can use these data to realign services, develop new strategies across organizations and advocate for policy change.

programming; and 3) to learn about college access and success programs throughout the community while identifying larger, systemic barriers and opportunities. Figure 3 (above) highlights these uses.

Each key milestone on the pathway to college access and success corresponds to these three levels of data usage. Take, for example, academic preparedness. Figure 4 on Page 9 lists questions that data can illuminate at each level of analysis (student, program or system), as well as relevant data-collection points.

Linking sources of data

In practice, different organizations often collect different segments of the types of data highlighted in Figure 4. Data-collection efforts are spread out among players in the system. For example, when OMG conducted its McCabe evaluation, individual grantees were responsible for uploading student-level

data to a Web-enabled database, while information about college enrollment and completion came from matching student records with data in the national NSC database. The OMG evaluation team collected information about programs and services, which we in turn linked to other data sources for a more comprehensive analysis. This linking of data is crucial to building a fluid system. In the McCabe example, all of the data sources — the student-level data collected by grantees, the NSC data and the OMG evaluation data — combine to provide a comprehensive assessment of the McCabe investment and to help individual grantees better understand their programs and impacts. Figure 5 on Page 10 provides a basic overview of where different responsibilities for various points of data collection often reside in the college access and success system.

**Figure 4:
Academic preparedness through multiple data levels**

Unit of analysis	Types of data	Questions data can address
Student	High school GPA High school course completion State test scores	<ul style="list-style-type: none"> Is this student on track to graduate high school with the necessary preparation for college?
Program	High school GPA High school course completion State test scores + Program services data	<ul style="list-style-type: none"> Where are students succeeding or falling short of graduating high school with the necessary college preparation? How does program implementation connect to whether students are on or off track in terms of academic readiness? Which implementation practices should be sustained, changed and/or added?
System	High school GPA High school course completion State test scores + Program services data from high school and college programs + College GPA College course completion College retention	<ul style="list-style-type: none"> Are barriers to high school students' preparation or graduation beyond the responsibility of any single program? Are the students who graduate high school prepared for college succeeding in college? Why or why not?

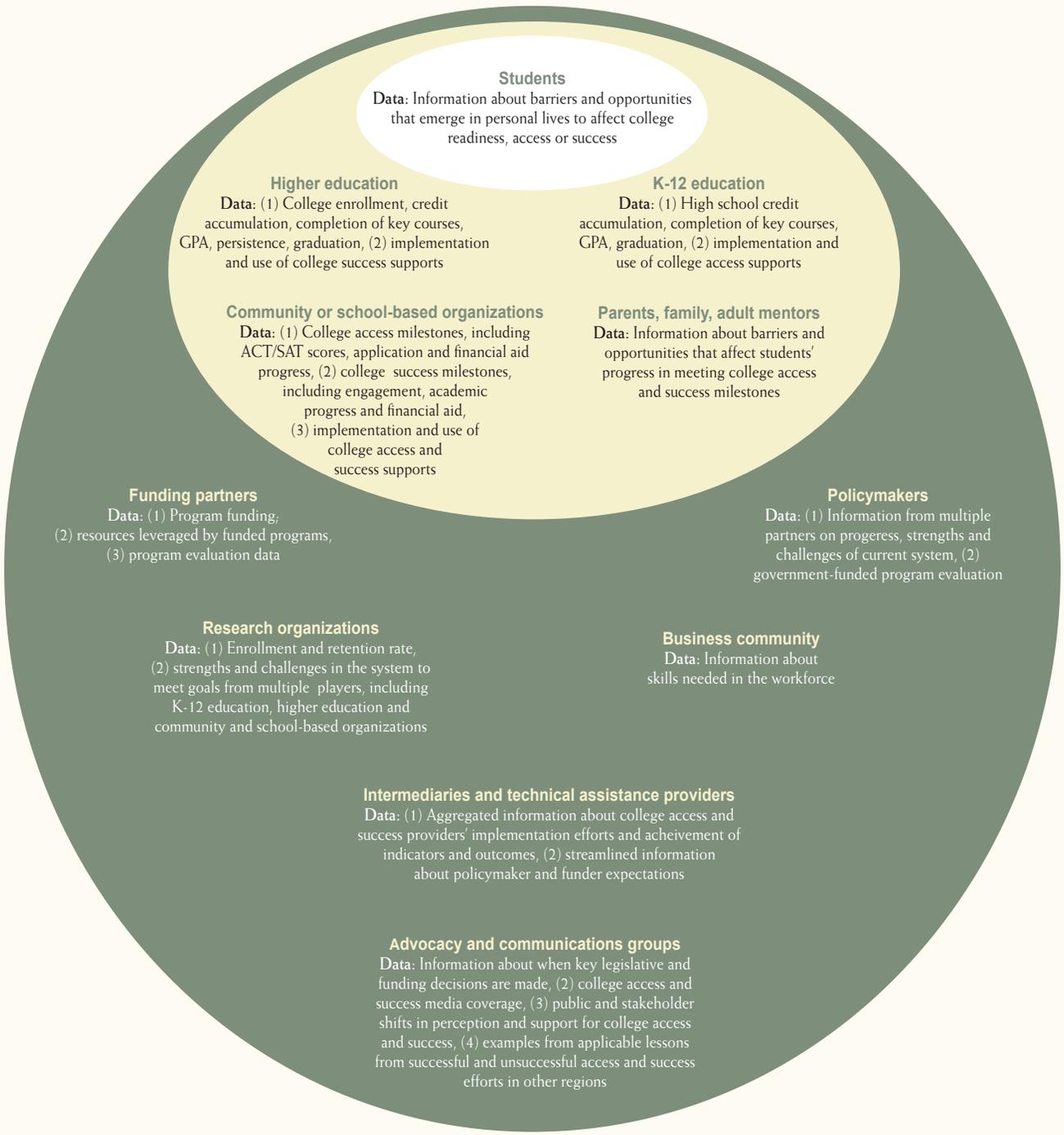
Improving data collection and use

Linking data points provides greater opportunities for understanding student experiences holistically and over time, as students move from high school to college. However, for data to be linked successfully, each organization must practice high-quality data collection, and the organizations must collaborate well — often at a level that exceeds prior experiences at many organizations. Both of these critical factors

demand technical abilities and compatibility of data-collection systems between partners.

Sections II and III explore these critical components of data usage — identifying where opportunities for data collection exist and exploring how organizations can use data effectively and very practically with other partners in the system while strengthening their own data-collection efforts.

**Figure 5:
College access and success system — data roles**



SECTION II: THE ROLE OF DATA IN POLICY AND SYSTEMS CHANGE

Our research and evaluation work over the past several years has revealed, somewhat unexpectedly, that data collection and analysis are the strongest mobilizing factors in building college access and success partnerships. In community after community, the act of collecting information and then investigating shared findings has provided common, concrete goals for diverse stakeholders to take joint action.

This process of systems change usually begins when a few courageous stakeholders publicly and passionately acknowledge that the community's current college access and success strategies have failed to yield desired results. These leaders often call on others to join in open and honest discussion and collectively brainstorm ways service providers can better meet students' needs. Stakeholders collaborate to take stock of current services and identify needs within the community; the success of this initial data-gathering effort often provides the momentum to tackle more ambitious questions and challenges in tandem. As we illustrate in this section, long-term, data-driven community partnerships have begun tackling college affordability policies, K-20 institutional alignment and college-readiness standards.

In this section, we highlight some ways communities have used data to realign programming, shift internal organizational practice or tackle larger policy issues to improve the college access and success system. Case studies in this section come largely from the PCAS initiative. This initiative provided multiyear funding to eight organizations across the country to spearhead and coordinate the development of college access and success partnerships. Using data to build partnerships and shift practice and policies as illustrated in this section is *very difficult*. The communities highlighted in this section committed

significant resources — in Chattanooga and San Antonio, hundreds of thousands of dollars over a decade — to develop data-collection systems, support and train staff and create incentives for data collection. This readiness for data collection preceded the PCAS investment and played a critical role in the success of these sites.

How can data create greater community understanding of students' needs?

Most communities offer a wealth of college access and success-related supports through schools, higher education institutions and community-based programs. Yet program providers and students often lack a comprehensive knowledge of the variety and depth of college-related programs available in their areas. As a result, one of the first steps most providers can take as they consider their role in the broader system is to analyze existing college access and success supports in the community. Basic questions include:

- What types of college access and success programs exist?
- What services do these programs offer?
- Where are these programs located?
- Whom do they serve?

In some cases, these data can be gathered through an online survey distributed through the school district, higher education and community-based partner networks. Alternatively, organizations can conduct a needs assessment through document and Web site reviews and informational interviews. Some PCAS grantees created maps of college-related services. Others presented these data as lists of programs by geographic reach, types of services and so on.

In most cases, the first community needs assessment was not comprehensive, but it prompted further conversation. Our experience suggests that

communities use this type of needs assessment in the following three key ways:

- *To spread knowledge about existing services:* Organizations distributed information from the needs assessments to students, families and other stakeholders to help them better identify available resources.
- *To understand existing college access and success programs as a system of services:* Individual organizations took stock of their services and compared them to what other partners provided. Some communities realized, for example, that they had too many financial aid centers. In such communities, a partner would sometimes shift its organizational focus to reduce duplication of services.
- *To identify gaps in college access and success services and develop strategies for strengthening the system:* The needs assessment sometimes led community partners to identify new and more complex questions with important implications for service provision. For example: What types of services does the community lack? Which locales and students are being neglected? Would a reorganization begin to address these gaps? What best practices or proven programs from other locales could be adapted to meet the needs in the community?

From such inventories, new programs sometimes emerged. These new programs included:

- *Referral mechanisms* to help guide individual students from provider to provider.
- *Data-sharing agreements between partners* to improve information exchange about individual student needs.
- *Joint fundraising between partners* to develop new programs to increase the reach of services to areas

or students where programs and supports were lacking.

- *Changes in organizational policies* to better serve students; for example, creating regional credit transfer agreements that model potential statewide changes in credit transfer agreements.

DATA TIP

Don't reinvent the wheel; take stock of existing data collection

Multiple relevant data sources collected by school districts, community partners, local colleges and national nonprofits such as the National Student Clearinghouse may already exist in one's community and beyond. Reform advocates must know who is collecting the data as well as how it is being collected. The following checklist may help evaluate the data's relevance:

- Are the data reported by individual student? If so, what identifiers are used? For example, for its subscribing members, the National Student Clearinghouse can match data based on first and last name and birth date.
- How frequently are the data updated?
- Are the data of acceptable quality (e.g., does the system minimize data-entry mistakes such as misspellings)?
- Is there a contact person or group of people who can provide regular data sets, including clean, updated files? What protocols for continued permission and access are in place?
- Are the data formats compatible between organizations? Files often are shared in a comma-delimited format and can be put into various programs, including Access, Excel and statistical packages such as SPSS and SAS.

In Milwaukee, for example, an inventory of citywide services led to better coordination of public events related to college access programs and helped resource-strapped organizations reduce administrative costs.

As more and more stakeholders become invested in increasingly multilayered data, new and useful data sources have emerged. For instance, in light of increased federal attention and resources dedicated to data collection, many school districts have enhanced their data-collection systems to track individual students through high school and even through college. Other sources of relevant data may include community partners, local colleges and the National Student Clearinghouse. Data come in many shapes, sizes and formats. Organizations must ensure that any data collected by another organization is in a shareable format (*see Data tip: “Don’t reinvent the wheel” on Page 12*).

How can data help build partnerships to change the system?

In our experience, most organizations that sought significant college access and success change in their communities functioned primarily as service providers. Tackling the college access and success system, they often first brought together other college access service organizations. They also included representatives from schools and universities with whom they had worked previously.

However, many quickly realized that their work would require a broader coalition, including parents, the business community and especially partners with decision-making power and influence. Leaders needed to engage individuals and organizations with a vested stake in the college access and success agenda that also had the funds and the authority to make changes in practice and policy. These people included executive directors, superintendents, and policymakers such as state legislators, deans and presidents. Existing partners’ knowledge was critical to identifying the

FROM THE FIELD **How Milwaukee’s college access resource list prompted collaboration**

COMPASS Guide, one of the PCAS grantees, started local partnership-building work by calling together a large group of stakeholders from the Milwaukee community. The diverse group included the YMCA, the public libraries, schools, several community-based organizations, three key universities, parent groups, funders and others. During the first meeting, the group quickly realized that individual stakeholders were unaware of the multiple college-related services that their peers at the table or others in the community were providing.

The PCAS grantee, working with several partners, developed a college access provider survey and distributed it widely throughout individual partner networks. The survey went to community-based organizations, colleges, universities, the school district and local and state government agencies. The partnership used funding from its Lumina Foundation grant to support the data collection and analysis, and it identified a financial aid organization to sponsor publication and dissemination of the research.

During the course of the grant, the small pilot of eight core partners succeeded in providing more streamlined and comprehensive services to students, and it reduced the duplication of administrative efforts by offering shared programming. For example, rather than offer them independently, partners coordinated major college access events such as advising days, financial aid workshops and parent nights. By aligning their event calendar, partners shared the responsibility for organizing the events, reduced the burden on school or district staff (instead of eight requests for space and time, only one was needed) and increased the success for individual organizations (bigger events drew bigger crowds). The time invested in putting together these events paid off as more students obtained services from individual partners and received more support through the shared events.

unique and influential local leaders that had a record of accomplishments in their communities.

Organizations used student data to identify students’ greatest obstacles along the path to college success and collaborated with those best capable of

DATA TIP

Putting it all on the table:

Data-sharing “how-to” advice

One partner generally takes the lead in presenting data findings to the group. The capacity of data to drive change will increase when partners do the following:

- Leave time to discuss and solve data-sharing challenges, and set aside time to celebrate successes. Partners will be less frustrated with the process and more likely to appreciate the value of the data if they celebrate small victories.
- Respect partners’ fear of data. Not everyone will embrace the data-collection and analysis process; people often fear what might be uncovered. Share this fear openly, and use it as an opportunity to build trust.
- Emphasize the positive aspects of data collection. Sharing data helps strengthen partnerships, solidify relationships and narrate the college access and success story. Regardless of what the actual data show, partners will collaborate better on common challenges if they have debated the data vigorously.
- Find ways to present sensitive data anonymously. Remove names of schools, higher education institutions or community partners from presentations of data. Give individual partners handouts with just their organizations noted, leaving others unnamed.
- Provide opportunities for partners to digest data on their own and then lead a small group discussion. Let partners identify key observations and implications of these findings for the partnership and for the individual members.

providing services or adjusting policies to minimize those obstacles. The PCAS grantees found that having a broader vision of students’ needs and partners’ capabilities helped in forming the best partnerships.

Questions partnerships posed included:

- Who in our community needs to be included in partnership conversations, whether for political, programming or public relations reasons?
- Are particular organizations missing from our current partnership? Among organizations already represented, are any specific individuals from these organizations missing?
- Given the local context, what obstacles in practice and policy can we anticipate, and who can help eliminate these challenges?
- How do we bring these organizations and individuals to the table and keep them there as long-term, vested partners?

To answer these questions, partnerships relied on a variety of data sources: asset scans, partner interviews, student-level data and personal knowledge of the community. These data sources helped to identify influential service providers who were not already included in the partnership. Just as data can be used to assess students’ needs, services offered and service gaps, they can be used to identify potential partners and their roles in meeting these needs.

Most of the partnerships OMG observed ended up with the appropriate mix of decision-makers and on-the-ground practitioners capable of taking on a systemic change agenda.

After grantees identified lists of prospective partners, partnerships relied on conversations, individual interviews with stakeholders and reviews of publicly available information to answer the following questions:

- How does the systems-change agenda fit within the individual or institutional goals of the potential partner?

- Does the potential partner have the capacity (time, skills, influence, money) to support the work of the partnership?
- What is the appropriate role for the potential partner (advocate, service provider, researcher, etc)?

Understanding prospective partners' interests and assets facilitated a variety of partnership models. Some partnership models were broad-based, with simultaneous working committees and an oversight structure. Others were small, focused partnerships with loose connections to necessary partners who could be called upon as necessary. Regardless of the model, the partnerships that were most successful in shifting college access and success programs — and in some cases, policies — were formed very deliberately, responded to the critical needs of the community and used data to drive their formation and their decisions.

Especially as a partnership grows and builds its data-collection capabilities, it requires mechanisms to share findings both internally and externally. Sensitivity is critical in this process for several reasons. For example, data may reflect positively or negatively on the efforts of service providers and others. Additionally, partners may not be equally committed to using data to drive program and systems change. Partnerships must create a safe space and allow ample time for partners to digest findings, air concerns, raise questions and strategize about data implications and applications (*see "Data tip: Putting it all on the table" on Page 14*).

How can data help identify policy obstacles?

Rich program- and student-level data shared among partners and used over extended periods of time (months, semesters or years) enable programs and stakeholders to observe trends and patterns in their community. This level of data collection also allows partners and other supporters to investigate the causes

FROM THE FIELD How Seattle used knowledge of individual needs to build an effective coalition

The Seattle partnership, facilitated by Port Jobs, enrolled low-wage airport employees in college as a way to advance their careers and improve their earning ability. Port Jobs knew from its prior program experience several things about the targeted students. For instance, these students had limited academic preparation, strained resources, transportation and housing challenges and erratic work schedules with limited release time.

To build the partnership, Port Jobs invited a small core of partners, primarily service providers and local community college leaders, to provide on-site programming and instruction to the airport employees. Port Jobs selected partners with a long-standing history, interest and success in working with this population. The community college was particularly receptive; it provided block schedules, on-site classes, opportunities for low-cost credit-bearing classes, counseling and tutoring to bridge academic gaps. The benefits of this partnership were mutual. Port Jobs offered college opportunities to their clients, and the community college developed a new pipeline of prospective students.

The second tier of the partnership included executives from airport businesses, workforce development policymakers, funders and elected officials who relied on the financial viability of the airport. These partners supported the work of the core partners through advocacy, funding and policy changes. To engage the business community, for example, Port Jobs distributed a brief survey to airport employers and learned that a key area of interest was worker retention and development. Armed with this knowledge, they showed airport business leaders how the program would yield more engaged and better-prepared workers. In turn, employers began to shift their reimbursement and time-off policies to allow employees to take college classes through the partnership.

The core partners' flexibility in response to the data, combined with the support of the second-tier members, helped Port Jobs start Airport University, an on-site, credit-bearing college program. The program specifically targets the developmental needs of airport employees and employers.

DATA TIP

He said; she said: Partner roles and responsibilities for data sharing

Data-sharing agreements are not to be taken lightly. Legal considerations represent only one area of concern; roles and responsibilities also must be clear. Even with long-term, trusted colleagues, organizations should avoid informal relationships. Partners who plan to share data should get it in writing! Joint data-collection efforts too often unravel because partners fail to specify expectations. Questions to address in writing include the following:

- What data are required?
- What timeline will guide the collection of data?
- In what format will data be presented?
- Are the data student-level, programmatic or aggregate?
- If the data will be merged into an existing database, what variable(s) will be used to match the data?
- When will partners be expected to submit the data? To whom and in what format?
- How frequently will partners be required to update the data?
- Will the data be raw, or will the data sets be cleaned?
- What type of formatting standards will be necessary? Consider not only file type but also consistent labeling of data points across all partners and from year to year.
- Who is the point person if questions arise about the data? What is his or her contact information?

and consequences of these trends and patterns. Some of the key questions guiding this level of exploration include:

- What trends are common across multiple programs?
- What factors could help explain these trends, given our knowledge of the community, institutions and partners?
- Can a single organization or a small group of partners address these concerns, or do they require more systemic and coordinated action?

Seattle-based PCAS partners provide one useful illustration. In reviewing enrollment data, they noted an on-and-off student enrollment pattern. Individuals would enroll in one or two classes before dropping out of the system and then returning several semesters later. Interviews with students revealed that their part-time status had prevented them from receiving financial aid; therefore they enrolled only when they could afford the class. Although the grantee initially asked to use some of the grant money to offset the cost of tuition, the issue of financial aid turned out to be well beyond the scope of the college partner or community-based partners to tackle alone.

Digging deeper into aggregate data, as in the above example, is one way that partners can begin to identify potential policy obstacles. We have seen partners tackle policy issues ranging from financial aid regulations to program eligibility requirements to curriculum requirements.

To investigate the possible explanations for trends, partners must be willing to critically assess their own programs, schools or universities. They must also have a sense of shared responsibility. In our experience, partners often initially hesitate to share data and investigate trends. This hesitation partly reflects territoriality over who collects and owns the data. Moreover, partners often fear what the data might show about their programs or their communities. Dialogue and trust are crucial to overcoming this

reluctance (see *Data tip: "Putting it all on the table" on Page 14*). When partners have overcome some of these initial fears — a process that in many cases can take a few years of coaxing resistant partners — partners can investigate data trends and underlying causes and determine together whether the data suggest a need for a change in programming, in policy or, as is often the case, in both.

Developing a strong partnership model that can tackle complex policy issues is a process that unfolds over time. The initial forging of data agreements in which roles and responsibilities are specifically articulated (see *Data tip: "He said/she said" on Page 16*) helps ease some of the territorialism and can pave the way for frank conversations about the state of college access and success in the community.

How can data help make a case for a policy change agenda?

Data often underscore the need for significant policy changes and can help partners develop a shared policy change agenda to increase student access and success in college.

Policymakers at the national, state and local levels often have limited time to digest extensive information; they need to be presented with data snapshots that make a succinct case for necessary change. These case statements need to be paired with policy recommendations or action steps. To set a policy change agenda, consider the following:

- What is the policy issue, and what

FROM THE FIELD **How partners in Chattanooga used data to develop programs and shift policy and practice**

The Partnership for College Access and Success (PCAS) in Chattanooga is a large, multilevel partnership facilitated by the College Access Center and the local education fund, an education reform partner and adviser to the school district. The partnership includes community college access providers, the Hamilton County School District, four- and two-year state colleges and universities and others. The long-standing partnership has been successful in engaging university, college and district partners, in part because of anonymous sharing of sensitive data findings between partners, which eliminates the potential for assigning blame and emphasizes shared responsibility and analysis.

In 2005 and 2006, although the partnership noted positive college-going trends for Hamilton County students, partners also noted alarmingly high math remediation rates once students enrolled in college.

After almost five years of building relationships and trust across the district and local higher education institutions, the partnership selected a neutral convener, a local foundation with a vested interest in the region's educational attainment. This foundation brought together instructional heads, including the local university chancellor, college president and the superintendent of the district. The group also included math teachers from the district and math professors from area colleges. They focused on understanding the link between math remediation needs and college retention and on how to reduce the need for remediation.

Two key issues emerged as a result of the work of the group: 1) students often did not take math during their fourth year of high school or would lose core math skills during the summer before enrolling in college; and 2) students who graduated high school with the requisite math courses nevertheless placed in remedial classes because of misaligned curricula.

As a result of the work group, partners piloted an intensive summer bridge program that helped students strengthen math skills during the summer before college. The work group, led in large part by the superintendent and university leaders, contributed major institutional policy changes, most notably the revision of both high school and college course curricula and shifts in teacher professional development, to align math curricula and improve instruction and student preparedness for college math courses.

Additionally, high school juniors take the university math entry exam, thus allowing a full year for students to catch up during high school if test scores indicate such a need. The school district also introduced ACT's EXPLORE program in eighth grade and PLAN in tenth grade; both curricula provide guidance on college readiness in math. The Carnegie Corporation has helped continue this work.

FROM THE FIELD

How San Antonio tackled articulation agreements

The San Antonio Education Partnership (SAEP) came to data collection somewhat reluctantly. In the early years of the partnership, data collection focused largely on counting the numbers of students accessing the partnership's scholarships. As the partnership grew, more information was needed to answer short-term impact questions, such as whether students graduated from college.

As the partnership tracked students over time to answer the graduation question, a trend began to emerge: Although many students enrolled in two-year colleges, relatively few transferred to obtain four-year degrees. Several partnership members, including presidents of the two- and four-year colleges, the business community and school district, became particularly interested in this data trend. Questions began to arise. Was something in the program encouraging students to enroll in two-year colleges and discouraging transfer? Were program or policy obstacles prohibiting students from moving on to bachelor's degrees?

In trying to answer these questions, SAEP made discoveries that have begun to reshape its work. Two key data points were uncovered: 1) students had limited financial incentives for transferring because the cost of a four-year college exceeded the amount of the SAEP scholarship; and 2) students did better in two-year programs when they were closer to home. Building on these findings, the partnership established two new college success incentive scholarships awarded to students who attend local two-year institutions and transfer to four-year campuses.

Using data from follow-up student interviews and focus groups, the partnership learned that students had very limited information about the transfer process and generally lacked supports while in college. The San Antonio partnership developed additional programs to help students navigate the college environment and developed an additional counseling position specifically designed to help students understand the transfer process. The partner colleges and universities supported this additional position.

Finally, after collecting these data and testing different program changes, the partnership realized that some of the challenges lay well beyond partners' immediate influence. For instance, state-level articulation agreements represented a major obstacle. Although they did not identify themselves as such, members of the partnership became policy advocates. They initiated conversations with state leaders to streamline articulation agreements that would facilitate student transfer between institutions. Since these initial conversations, SAEP has piloted several revisions in transfer policies to ease student movement between partner campuses. Partners also documented some necessary language and legal changes, including broadening course descriptions to ease transfer policies. These pilots have provided important information to state legislators as they examine best practices for transfer agreements between state institutions.

Although the policy changes have not yet been adopted at the state level, the group hopes that some of the pilot agreements being tested in San Antonio institutions of higher education will take hold across the Texas college system, easing the way for a significant number of students to transfer from two-year to four-year institutions.

data clearly show that this policy impedes student access to or success in college?

- What is the policy change that we hope to see implemented?
- What are some best practices or precedents in other regions or in related fields that can help shape the policy agenda?

In the past several years, in *every* community that OMG visited as part of the PCAS initiative, policy-change agendas also included important shifts in programming. Data are critical to demonstrating indisputable, numerical need to change a given policy. As the "From the Field" box demonstrates, data about low transfer rates of students between two-year and four-year colleges put college articulation and transfer agreements high on the partnership's policy-change agenda. Although data can be a powerful advocacy tool, successful shifts in practice can further buttress advocacy efforts. For example, this is what happened when the San Antonio Education Partnership began to question why so few students were transferring from two-year to four-year institutions (see "From the field" box). Partnerships seeking to work

systemically in their communities should consider both program and policy interventions. Section III offers more information about using data to inform programming changes.

In all of these data-sharing efforts — especially as the partnership's work increasingly shifts it into the public realm as it informs policy change — data-release forms are essential to protecting privacy. Partners will need to collaborate to develop such data-sharing agreements and also obtain relevant legal counsel (see *Data tip: "Get on the same page"*).

DATA TIP

Get on the same page: Develop shared data-release forms

A key challenge in data sharing relates to privacy regulations such as the Family Educational Rights and Privacy Act (FERPA) and institutional codes of ethics and legal protections clauses. Although these regulations present some challenges to data sharing, they are not insurmountable and serve the very important purpose of protecting the rights of individuals.

Organizations developing data-release forms should take the following important steps:

- Be familiar with local, state and national privacy protection laws, and understand compliance by checking district, state and national Department of Education Web sites. In some cases, having an option for students or families to opt out of the program or data-sharing agreement is enough to satisfy the privacy requirements.
- According to FERPA, institutions can share certain pieces of public information, including a student's name and date of birth, without written consent. Institutions planning to match their student information with the National Student Clearinghouse (NSC) records by using the student name and date of birth will not need to obtain written consent to share this information to comply with FERPA. However, more detailed matching information or sharing of educational data with outside parties may require written consent. Moreover, parents or students over 18 years of age can block their NSC directory information, including names, addresses and dates of birth. These students' college-going activity could not be tracked through the NSC.
- Collect privacy-protection forms from all core partners that would like to share data, and have a legal specialist review these forms. In some cases, the protection requirements of each partner may turn out to be quite similar.
- Draft a data-sharing agreement that meets the requirements of all of the prospective partners; have someone with legal expertise review the form; then have each partner's legal department sign off on the shared agreement.
- Designate someone, likely the individual or organization that will have lead responsibility for data collection and analysis, to be the watchdog for data-sharing compliance.

SECTION III: USING DATA TO IMPROVE PROGRAMMING

Programs use data to improve outcomes. More specifically, programs typically use data at the individual program level in the following four ways: 1) to plan a program; 2) to make mid-course corrections and refinements; 3) to address individual student needs; and 4) to tell the program's story in order to raise additional money, leverage success, share lessons and address accountability requirements. In this section, we discuss these four ways that program staff use data.

How can data inform program planning?

In OMG's experience, organizations with strong track records in achieving program goals initiate data-collection efforts *before* launching the program and then draw on data to plan their strategic intervention. They use data to 1) assess needs; 2) identify target populations; and 3) determine the services or strategies that are most likely to yield the desired outcomes. Data can also help inform the nuances of program design, such as when and where to offer the services, how often and with what level of depth and follow-up.

Organizations usually enter the program-design stage sensing an unmet need. They propose interventions that they believe will address this need, but these interventions usually rely on untested assumptions, intuition and hunches.

In a more systematic and data-driven design process, organizations investigate their assumptions about needs and how proposed interventions can address them. Focus groups and interviews with students (or with staff or faculty working with students) provide a strong forum for testing assumptions about need and the potential efficacy of proposed strategies. Reviews of the existing literature on access and success can also help round out an understanding of need, identify trends in program or school data and illuminate possible strategies for

further testing. Resources are compiled that provide information about evidence-based interventions and best practices. These resources are invaluable in highlighting exemplary programs that can be replicated and adapted at the early stages of program design. Other resources may include existing data collected by the organization as well as data collected by others, including the school district and local colleges and universities (*see Data tip: "Get beyond hunches" on Page 23*).

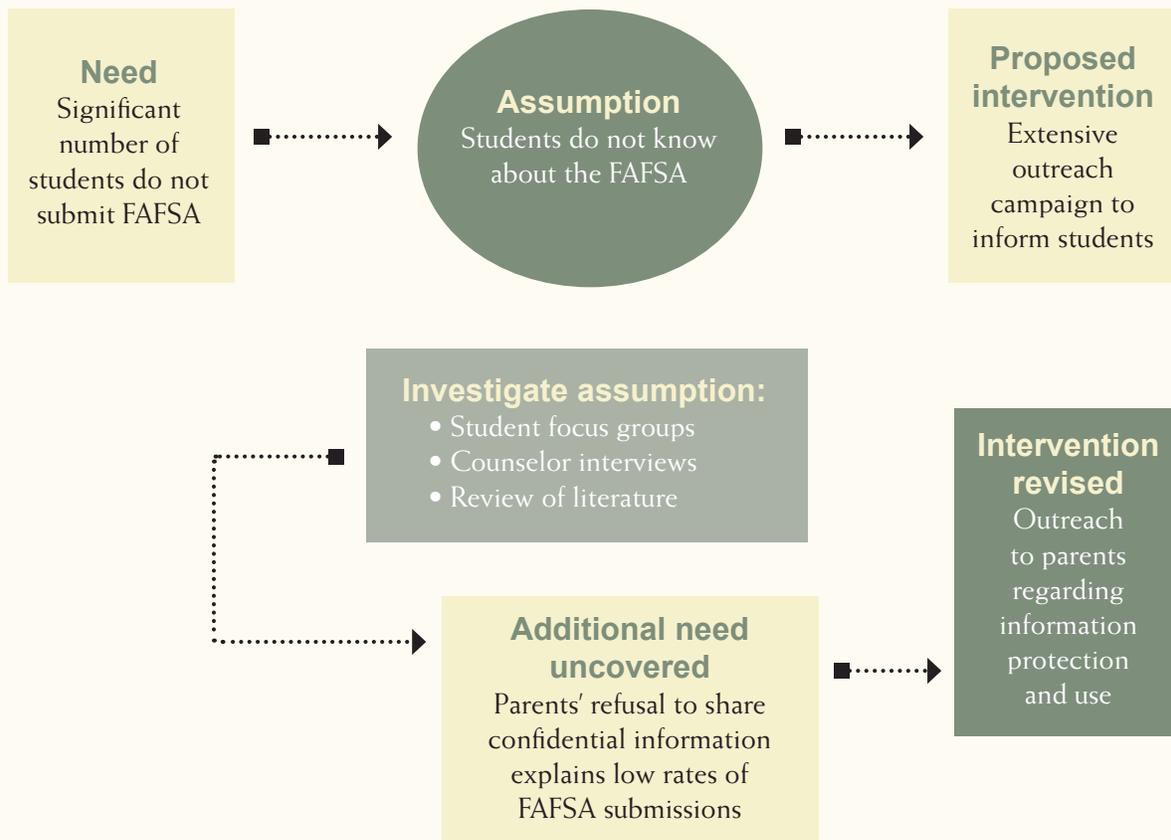
To illustrate: an organization may find that students are falling short of meeting a critical milestone in the college access process — for example, submitting the Free Application for Federal Student Aid (FAFSA). Figure 6 (Page 21) depicts a situation in which an organization used data to test and revise assumptions about barriers to achieving this milestone.

Using data in the planning phase often helps organizations develop programs that can more effectively target specific racial, ethnic, gender or socioeconomic groups. As detailed in the "From the Field" box on Page 22, a nationwide program to address college success outcomes for African-American men grew directly out of a deliberate process of data collection, analysis and application.

How can data be used to make mid-course corrections and refinements?

Strong organizations also use data to inform program operation and management for initiatives in progress. In the case of college access and success providers, the overarching goal is to maximize the number of students who enroll, stay and succeed in college. Consistently asking questions about progress toward these goals — and seeking out qualitative and quantitative answers — is precisely what helps providers achieve them. Some key basic questions include:

Figure 6:
Field example: The FAFSA application — data and design



- What are the expected short-term and long-term student and program outcomes?
- What strategies can be deployed to achieve those outcomes?
- What evidence indicates whether program activities are working?
- If program activities are working, how can they be further improved and expanded?
- If program activities are not working, how can they be changed?

Although measuring students' enrollment and success in college is critical to evaluating programs, these measures alone do not provide the data needed

to improve programs. Data on implementation and on which program components are helpful to students are needed to refine programs and, in turn, improve student outcomes.

As a result of the current intense focus on accountability and data collection, some organizations tend to adopt a "more is better" approach to data collection. However, casting the net widely and indiscriminately may be cumbersome and unsustainable. Evidence from OMG's work indicates that a focused and carefully developed "less is more" approach provides a pragmatic and effective framework for data collection. For example, in OMG's evaluations of the PCAS initiative and the McCabe

DATA TIP

Get beyond hunches: Use data for program planning

Multiple sources of data can inform college access and success program planning. Organizations may already be collecting relevant data but may turn to other resources, such as the following, for additional relevant information:

- **Program data:** Providers serving the target population may collect information about students' aspirations, challenges, academic progress and behavior issues, as well as information about satisfaction with services and points of program dropout.
- **K-12 data:** School districts, individual schools or students themselves provide information about students' academic strengths and challenges, patterns in behavioral incidents and dropout and graduation data. These data may be reported by demographics or other characteristics to further target student needs.
- **Postsecondary institution data:** Individual colleges and universities and students themselves provide information about the academic and social experiences of students in college, such as remediation needs, credit loads and engagement in extracurricular activities.
- **National and state data:** A number of research organizations, data banks and public organizations track individual student college access and success benchmarks. The National Student Clearinghouse is a national source for college enrollment and persistence data. State student assistance corporations track student FAFSA completion. State departments of education can provide valuable academic achievement data.
- **Best practice data:** Numerous organizations compile information about college access and success best practices and evidence-based, tested college access and success interventions. These groups include the Campbell Collaboration, the National College Access Network and the Pathways to College Network.

Fund, it pared down the data collection to a handful of student-level indicators related to student demographics, college access and success program data, application milestones and college enrollment (*See Data tip: "Keep it simple" on Page 25*).

Figure 7 on Page 24 provides some examples of the questions by which a program assesses its performance as well as some of the data points it may use to answer these questions.

Successful programs integrate data collection and analysis into their routine practices and regularly discuss findings with all staff. This approach strengthens data collection by providing additional perspectives, and it informs staff of early data themes that may warrant consideration in their work.

Demographic data points often prove especially valuable in making mid-course corrections to programs; they may reveal variations in program effectiveness among specific groups — for example, first-generation college-goers, English language learners or male students. A more detailed understanding of what strategies work best for whom allows service delivery to be adjusted accordingly.

How can data be used to address individual student needs?

We have discussed how data are used to design and refine programs, but what about using data to help an individual student? Data can facilitate and improve a program's ability to assess a student's progress and to share information about a student between direct-service stakeholders. In college access and success programs, students typically intersect with a multitude of services and staff — the

school guidance counselor, Advanced Placement or other classroom teachers, nonprofit support staff in their schools and/or community-based providers outside school.

Programs that can connect these disaggregated service points are often better positioned to address the student's needs. The literature on college access and success has pointed to the importance of holistic services — that is, meeting a student's academic, social, emotional and financial needs to improve postsecondary attainment. As programs serve students, they should view the student through this holistic lens, tracking their progress and needs in multiple areas, regardless of the individual service provided by the program or the role of the staff person interacting with the student.

Programs use a variety of methods to track students, including Excel spreadsheets and off-the-shelf or customized databases such as the data-collection system that the McCabe Fund grantees used (see *"The McCabe experience"* box on Page 26). An intake process typically captures basic student demographic and referral information. However, the extent to which organizations track other key data points — such as a student's experiences in the program, progress in meeting college milestones to achievement and other services received — varies greatly. Programs with more extensive systems record service participation and attendance as well as items such as behavior infractions and merits, academic progress via assessments, test scores, grades and/or progress in other social-emotional areas.

Most organizations choose to focus on a subset of data points that are important in their individual work. For example, one McCabe Fund grantee hoped to improve social skills of students and developed a social competency survey to track student progress in areas such as empathy. Another grantee developed a data-collection system that would be particularly useful in its ongoing communication with parents.

FROM THE FIELD SAAB's design driven by data

The Student African-American Brotherhood (SAAB) aims to increase the number of African-American and Latino men who graduate from college by creating a positive peer community on college campuses and in high schools. Since 1990 SAAB has grown to nearly 100 chapters on campuses throughout the United States, with a national office at the University of Toledo.

The impetus and design for SAAB came from data. SAAB's founder, Dr. Tyrone Bledsoe, then an administrator at Georgia Southwestern State University, documented comparatively low GPAs and high dropout rates among African-American men on his campus. To further investigate this disturbing trend identified in the institution's data, Bledsoe drew on a combination of research in the field, interviews with other administrators and students and intuition about what strategies and supports could address this need.

Bledsoe identified a number of risk factors that seemed to contribute to the low GPA and high dropout rates of African-American males, including minimal peer support, poor academic preparation relative to that of other college students, a lack of commitment to the college community and limited financial-management skills.

An iterative research and design process led SAAB to define itself as "a positive peer community of upwardly mobile African-American men based on a commitment to a spirit of caring." Chapters vary in their specific structure and orientation, but their core focus derives from the data collection and research Bledsoe initiated and includes: a) personal development; b) sense of belonging and brotherhood; c) service learning; d) academic support; e) spiritual enrichment; and f) financial management.

In determining what student data to track for case management, consider the following questions:

- What are the student outcomes my organization is aiming to achieve?
- What are the activities or services provided to the student that we expect to lead to this progress?

Continued on Page 26

**Figure 7:
Examples of qualitative and quantitative data to inform programming**

Key program refinement question	Sample data-analysis questions	Sample data points (disaggregate by student characteristics)
Are program components being implemented as planned?	<ul style="list-style-type: none"> • Are delivery and approach consistent across sites? Across staff? • Are students receiving the anticipated services? • What services do students use the most? • How do students perceive the service quality and impact? What benefits do they derive from them? 	<ul style="list-style-type: none"> • Consistency of materials, workshop and counseling plans and interactions with students • Duration and frequency of student participation in each service • Student and staff perceptions of services and components that move students toward outcomes
Are program activities achieving the desired impact?	<ul style="list-style-type: none"> • What progress are students making toward desired outcomes? • What are short-term benchmarks of success? Longer term? • Are there certain outcomes that students are achieving more easily than others? • Are there certain students who are achieving these outcomes, while others are not? 	<ul style="list-style-type: none"> • Academic improvements (GPA) • Improvements in social competencies or campus engagement, measured through assessment tools • Milestones on the path to college, such as taking SAT/ACT • College application and acceptance • College enrollment • Student persistence in college • Graduation from college
What program components or characteristics are contributing to student success?	<ul style="list-style-type: none"> • Which components seem to be making more or less of an impact? • What is the relationship between the services students use and their progress toward the desired outcomes? • Are some components or services showing better results for different subpopulations of students? 	<ul style="list-style-type: none"> • Student milestones and outcomes (cited above) cross-tabulated with services received, staff engaged and other key programming variations • Student and staff perceptions of services and components that move the students toward outcomes

FROM THE FIELD

Using dropout patterns to make meaningful changes in programs

The Center for Leadership and College Prep at Bank Street College of Education, a McCabe Fund grantee, runs the Liberty Leads program. Liberty Leads is an after-school and summer program that provides comprehensive support to students in fifth through 12th grades. The program serves both students at risk for dropping out of school and those on track for admission to selective colleges. Several years ago, through tracking student participation, program staff saw that the attrition rate for males in the program was much higher than that among females. The program was losing 60 percent of the boys between eighth and ninth grades.

At the same time, while logging intake data, social workers noticed a pattern in the referrals of students. They saw that the male and female students came to the program for different reasons. Whereas girls typically received referrals for preventive reasons, the boys were referred after a third or fourth behavior infraction. Additionally, staff and student anecdotes revealed that one of the greatest draws for keeping students in the program was its gender-based peer-counseling groups. The program staff's review of the research literature on ways to improve retention verified the efficacy of this approach. However, a review of the contact hours showed that the boys received fewer hours in counseling group time than in other services, in part because the program struggled to find male social workers of color to lead the boys' groups.

In response to all of the factors — the different referral experiences, the importance of the peer groups and the retention challenges in the male group — Liberty Leads developed an 18-month adventure-based counseling program, which involved experiential learning in groups, both through academic year retreats and a summer wilderness adventure camp. This added service helps Liberty Leads “hook boys on the margins of the organization to stay with them.” Now the program retains 85 percent of its boys, a significant improvement over the prior 40 percent rate.

DATA TIP

Keep it simple: Identify the most important data points to collect

OMG developed a “less is more” approach to data collection for its PCAS and McCabe evaluations, focusing on the following handful of key student-level indicators:

- **Student demographics:** Race/ethnicity, income, English language learners, first-generation college-goers
- **College access and success program data:** Duration of college access program enrollment, services received
- **Academic data:** Grade point average (or similar marker of academic achievement), enrollment in Algebra I and II and college credit or dual enrollment courses, high school graduation
- **Application milestones:** Financial aid application completion, financial aid receipt and sufficiency of the financial aid (self report), ACT or SAT completion and score, college application completion, college acceptance
- **College enrollment:** First-year college matriculation, return for consecutive semesters, graduation

Some grantees chose to collect additional data points that were of particular interest to their programming success — for example, transfer rates from two-year to four-year institutions or freshman math remediation needs.

By focusing strategically on a clearly delineated set of college access and success milestones, PCAS and McCabe Fund grantees developed the capacity to efficiently track students in real time, identify where they were falling short in achieving milestones and make timely program interventions. Grantees also used these data to determine which services were most strongly associated with desired program outcomes. This determination allowed for a more efficient deployment of resources. Additionally, the focus on this set of indicators allowed grantees to contextualize their work within national-level research on high school graduation, college enrollment and persistence.

The McCabe experience: Monitoring student success via a Web system

For the McCabe evaluation, grantees entered student-level data into the McCabe Program Student Tracking (MPST) database, a variation of the National College Access Network's (NCAN) WEST system. WEST is an online data management system that can be used for case management, program oversight and reporting purposes.

McCabe grantees entered data on the college access experience of individual students in their programs, including demographic data, services received, milestones to college enrollment such as FAFSA submission and enrollment in college credit courses. Through an automated upload, high school graduates in the MPST database were matched against the NSC's college enrollment records.

OMG considered the student-level data collected through this system alongside qualitative data collected via site visits and interviews. We used this information to analyze the enrollment and persistence outcomes of students in the McCabe programs and the relationship of programming to these outcomes. The Web-enabled system provided a user-friendly platform for programs to enter information that was then available for tracking individual students, for case management, for program oversight, and for evaluation across programs.

Continued from Page 23

- At what point do we expect to see students make progress toward achieving these outcomes?
- What will progress look like? How will we know that a student is on track?

- What other student characteristics or experiences will affect these outcomes?

Data-collection systems and processes should be user-friendly for frontline staff. To this end, staff should be involved in the design, testing and upgrades of systems. A well-designed and effective case-management system is as important as the data points an organization collects. The system should be designed to do the following:

- **Help individual staff tailor and target services:** A good data system helps frontline staff members to track services received by individual students and identify areas in need of attention.
- **Bridge services across multiple staff members:** The system serves as a connection point and facilitates a team approach to serving individual students across different staff within a program or across staff from different programs.
- **Communicate information about student progress to other stakeholders:** The system should foster a common understanding of a student's progress between stakeholders and caregivers in the student's life, such as school personnel and family.
- **Empower individual students:** Some programs have developed systems for students to obtain their own case-management information, and in some circumstances the student has a role in updating his or her own information, such as aspirations or academic progress, through automated assessments.

The development of a data-collection system also needs to account for issues of cost, staff capacity (time and technical knowledge) and internal and external reporting needs (*see Data tip: "All the data ducks in a row"*).

How can organizations use data to communicate their stories?

Last but not least, programs use data to tell stories about their work. Organizations often share their work through reports to funders as part of grant requirements, but too often the sharing ends there.

However, many other prospective audiences for a program's story exist; new funders and potential financial supporters of the work are just two examples.

Organizations that use data to discover and share the stories and lessons of their work build and benefit from opportunities to connect with stakeholders

DATA TIP

All the “data ducks” in a row: Some considerations for developing a data-collection system

Developing a data-collection system raises several technical and staff capacity issues. The following long-term needs as well as immediate requirements should be considered:

- **Software:** What kind of software does the organization have or want? Proprietary software can be more expensive to develop and maintain, but if it is well-designed, it could meet data-sharing and data-merging needs. Off-the-shelf software such as MS Access might require more internal expertise to manipulate the data and develop reports. A number of customizable software packages, such as the National College Access and Success (NCAN's) WEST program and Naviance, are available on the market (see Appendix B for Web sites for these and other programs).
- **Staffing:** Does the organization have staff to enter, clean and analyze data and run reports? Do current staff members have the necessary skills, time and resources to carry out and oversee the work? Is necessary IT support staff in place? If not, how can the program develop necessary technical capacity?
- **Data entry:** How frequently will data be entered? On a rolling basis or during scheduled times throughout the year?
- **Merging and uploading data:** What data are already collected, and how can the data system be set up to easily merge secondary data (data from existing sources such as the school district) with organizational data? Technical issues of merging data should be addressed proactively in designing the system. Before purchasing a software package, thoroughly investigate functions that allow users to prepopulate the database with existing data rather than having to re-enter it. Consistent data labels and formats (e.g., whether the data are represented as numbers or words) make a big difference.
- **Matching data to the NSC:** Investigate what is needed to match data with the National Student Clearinghouse (NSC), and explore options for auto-uploading data from one system to the NSC to obtain college enrollment and degree completion records. For example, NCAN's WEST system provides these matched data three times a year for its members.
- **Data reports:** What types of reports need to be generated and how frequently? Who will see and use these reports, and how might they need to differ based on the audience?
- **Cost:** How much will it cost to set up and maintain the data-collection system? How will costs be covered?

FROM THE FIELD

Advanced data management for tracking students' progress

The MATCH Charter School in Boston, a McCabe Fund grantee, uses a combination of the PowerSchool database and an internal Excel database to track an extensive array of information on students in the school, both for internal case management as well as for ongoing communication with the students' families.

PowerSchool is a data-management system that tracks the multiple data points that frame a student's experience in a school, including information about counseling sessions, real-time course progress and classroom assessment data. It can track individual students or multiple users. These technologies allow MATCH to track student academic assessments, skill-building data, course and grade information and behavior issues. All staff and tutors use this information in their work with the students.

Additionally, because the school emphasizes parent engagement, tutors make weekly calls to each family, using the data-management system to share updates on student progress and to track their contact with the families. School personnel say that the consistent sharing of information strengthens parents' engagement.

The extensive tracking and resulting individualized assistance to the students is also a core component of MATCH's charter school culture, which emphasizes the use of information to gauge what works and what needs improvement.

throughout the college access and success system, including other programs and partners, such as advocacy groups, researchers and policymakers. To frame lessons and information for external and broader internal audiences, organizations might consider the interests of a wider set of players when reporting findings. Questions to ask include:

- Who is the audience?
- What does the audience already know?
- What are the preconceptions among the audience about your organization's work?

- How will the audience use the data and information provided?
- What would be most compelling for this audience?

Some audiences find student stories the most powerful, while other audiences might demand a stronger quantitative evidence base. The story of a program's work may be told via numbers, student anecdotes, case studies or a combination of these.

Regardless of the audience, purpose, format and content, a focus on the story of an initiative or program can help build external support and interest by providing a clear understanding of a program's mission, method and effect. In the current economic climate, perhaps more than ever before, data about program impact, cost-effectiveness and value to the community particularly sway prospective funders. In our work, we have seen McCabe Fund and PCAS grantees present information to multiple audiences. Figure 8 (Page 29) highlights some of the specific points of interest for different audiences.

Sometimes organizations need to tell their stories on short notice, such as when policy and funding windows open unexpectedly. For example, the executive director of Port Jobs, a PCAS site in Seattle, demonstrated the impact of that organization's college access model, Airport University (AU), on adult learner career progression in order to secure a \$100,000 earmark in the Labor, Health, Human Services and Education Appropriations bill. A PCAS grantee in San Antonio leveraged its key data point — 90 percent of those in its target student population applied to and were accepted in college — to obtain an annual \$1.5 million appropriation from the city of San Antonio. Having a strong data system in place helps organizations take advantage of such opportunities to advocate more effectively for their work.

**Figure 8:
Possible audiences and select points of interest**

Audiences	Select points of interest
Prospective funders	Program impact, value of the investment, cost-effectiveness of the investment, value to the community
Potential partners	Clarification of the vision, opportunities for shared programming, benefits of partnership to individual organizations, effect on students
Policy stakeholders	Human interest story, how the program leverages or supports taxpayers' money, program impact
The broader college access and success field	Descriptions of various program models and their impact, specifics of implementation and lessons learned

FROM THE FIELD
How one PCAS grantee used program-level data to make a case for state funding

The executive director of Linking Learning to Life, a PCAS grantee in Vermont, seized an opportunity to testify before Vermont Gov. Jim Douglas' Next Generation Commission. The executive director recognized the opportunity that this commission represented for the PCAS work, as it was charged to allocate an initial investment of \$5 million to educate and retain a young workforce in Vermont.

Using individual student stories and data that clearly showed improved student college enrollment for PCAS students as a result of targeted mentoring, college supports and on-campus guidance, the executive director made a strong case for investing in college access and success programs.

Partly because of this testimony and the compelling student-level results, most of the state funds went to the state college system for development of increased access and success supports similar to those provided by PCAS partners.

SUMMARY

Although we present the use of data to build partnerships for system-level change and to improve programming as two different activities in Sections II and III, many data-use strategies in fact do both. Data can bring rigor, realism, structure, objectivity, breadth and/or depth to program and policy development within individual organizations and between multiple institutions.

However, too often the use of data is deemed a luxury in the world of college access and success, where pressures to develop successful strategies and leverage program funding are immense. As the introductory story of Manny so clearly illustrates, many helping hands are necessary as students navigate the college access and success system. Too often, for multiple reasons, even students with tremendous motivation can veer off the road that leads to college success. Estimates suggest that only 60 percent of students who graduate from high school will enroll in college, and only half of these students are adequately prepared and supported to graduate with a college degree.⁶ Given the magnitude of the problem, no single service provider can be expected to tackle this challenge alone.

Through Lumina's support, the PCAS initiative and McCabe Fund grantees have begun to invest in data collection and use it as a long-term strategy for building and strengthening the college access and success system. We end this guide with a short checklist based on the findings discussed throughout this guide to help steer data collection and use — within individual organizations and between community partners.

Data collection and use checklist

This brief checklist of items should be considered when organizations are collecting and using data to improve individual student services, shift programming change a policy or system change.

- 1. Be rigorous and systematic**
 - ✓ Allocate staff time.
 - ✓ Identify staff and partner roles.
 - ✓ Develop clear processes and procedures for collecting, analyzing and using data, including data-sharing agreements.
 - ✓ Comply with legal and individual protections.
 - ✓ Align data-collection technologies across partners.
- 2. Be realistic**
 - ✓ About what your organization and/or your partners can change.
 - ✓ About what data you can collect (consider what you are already collecting).
 - ✓ About expected outcomes.
- 3. Seek to understand the holistic experience of students and their environments**
 - ✓ Collect qualitative data (interviews with staff, focus groups with students) and quantitative data (attendance, achievement data).
 - ✓ Consider data points that include the multiple program experiences of students.
 - ✓ Consider data points that track the broader policy efforts that support students' college access and success.

⁶ U.S. DOE, NCES, "The Condition of Education, 2008 report, Table 24-2" and The Forum for Education and Democracy (April 2008). *Democracy at Risk: The Need for a New Federal Policy in Education*.

4. **Make decisions objectively**

- ✓ Substantiate intuitions about needs and obstacles using research/data.
- ✓ Substantiate intuitions about program or policy design using research/data.
- ✓ Use data to raise questions (not just to find answers).

5. **Track implementation (not just results)**

- ✓ Track whether program activities are implemented as planned.
- ✓ Track how implementation of program activities differs from plans.

- ✓ Track whether program activities lead to expected changes.
- ✓ Track and assess policies that influence the programmatic work.

6. **Inform multiple stakeholders**

- ✓ Inform students about their progress.
- ✓ Inform program staff about program progress.
- ✓ Focus, organize and inform work with partners.
- ✓ Make a case for improved college access and success policies.
- ✓ Communicate to the broader field, including policymakers, funders and the general public.

APPENDIX A:

ABOUT THE OMG CENTER FOR COLLABORATIVE LEARNING

The OMG Center for Collaborative Learning is an independent nonprofit research and consulting organization based in Philadelphia, Pa. OMG applies the principles of action research, organizational learning and collaborative planning in a variety of organizational settings. Formally established in 1988, the center has maintained a focus on public and urban policy issues. It has evolved into an expanding professional practice funded largely by foundations and focused on building organizational capacity building, evaluating programs and designing programs and organizational and community change initiatives. Many of these initiatives are multiyear and involve collaborations among multiple organizations. A significant portion of OMG's work examines national demonstrations that include multiple sites and employ multidimensional strategies and programs to effect systemic change.

OMG's expertise in college access and success

Over the past several years, OMG has deepened its expertise in higher education through several evaluations in the field of college access and success. Our work in higher education began in 2004 with the evaluation of Lumina Foundation's Partnerships for College Access and Success (PCAS) initiative. OMG was the evaluation partner for the PCAS initiative and worked very closely with the Academy for Education Development, the technical assistance provider. Lumina also asked OMG to conduct a multiyear assessment of the McCabe Fund, the Foundation's flagship college access portfolio.

OMG is also evaluating the following initiatives: the Posse Foundation's capacity to expand its access and success program to additional cities; Graduate! Philadelphia, a college access and success initiative

in Philadelphia sponsored by the John S. and James Knight Foundation; and the Student African-American Brotherhood (SAAB), a national college access and success program focused on increasing the college completion of African-American and Latino men.

Most recently, OMG has begun a research study for the Knight Foundation; it examines college enrollment and completion patterns of public high school graduates from 2002 to 2009 in Philadelphia and Miami. OMG is also the evaluation partner for the Citi Foundation's Partnerships for College Success, a five-year initiative that aims to shift the college access and success systems (including policies and practice) in three cities: Philadelphia, Miami and San Francisco. Through these numerous projects, OMG continues to develop a rich understanding of the opportunities and challenges in the field of college access and success.

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APPENDIX B:

SELECTED ELECTRONIC RESOURCES ON DATA SOLUTIONS AND USAGE

Below is a list of Web sites that provide helpful information about using data to improve student achievement as well as software solutions for collecting data and tracking progress. This list is by no means exhaustive but is meant to illustrate the types of resources available to college access and success programs.

Please note that some of these organizations require memberships or have fees associated with obtaining resources. However, many of them offer free tools, publications and information.

Information on using data:

Data Quality Campaign

<http://www.dataqualitycampaign.org>

Data Use: Improving Education

Practice through Data Use

<http://edadmin.edb.utexas.edu/datause> <http://www.csos.jhu.edu/datause>

National College Access Network

<http://www.collegeaccess.org>

Pathways to College

<http://www.pathwaystocollege.net>

The Campbell Collaboration

<http://www.campbellcollaboration.org/>

Systems and tools for data collection:

ConnectEDU

<http://www.connectedu.net>

FileMaker

<http://www.filemaker.com>

Naviance

<http://www.naviance.com>

National College Access Network (WEST)

<http://www.collegeaccess.org/west.aspx>

nFocus Software

<http://www.nfocus.com>

PowerSchool

<http://www.powerschool.com>

Prep HeadQuarters

<http://www.prephq.com/index.php>

<http://www.connectedu.net/corp/index.php/solutions/prephq>

SchoolNet

<http://www.schoolnet.com>

Social Solutions

<http://www.socialsolutions.com>

Helping People Achieve Their Potential®

