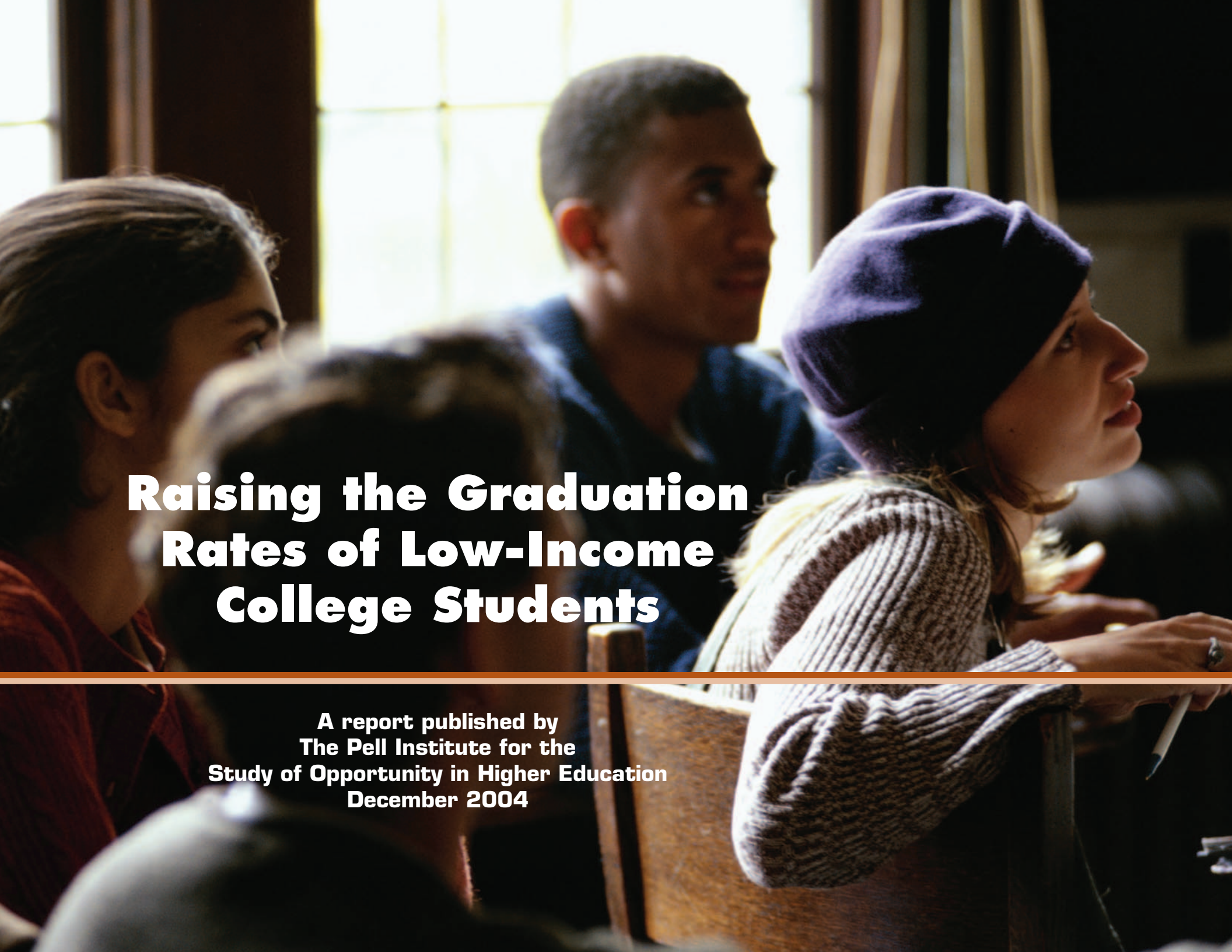

Raising the Graduation Rates of Low-Income College Students

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As a group, colleges that serve large percentages of low-income students have lower graduation rates than other colleges. However, among the colleges that serve low-income students there is also considerable variation in graduation rates, differences that suggest a strategy for studying and improving college outcomes. This report presents the findings of a study designed by the Pell Institute for the Study of Opportunity in Higher Education to identify the institutional characteristics, practices, and policies that might account for differences in retention and graduation rates among colleges and universities that serve high concentrations of low-income students. Lumina Foundation for Education supported the study in an effort to learn and share effective practices for fostering student success.

This research is a preliminary inquiry intended to provide the groundwork for further efforts to identify the institutional policies and programs that contribute to student retention. Most studies observe retention efforts at individual institutions. By including 10 high graduation rate (HGR) colleges in the research, we have generated a more complete look at the factors in retention than has been previously available.

Among the colleges that serve low-income students there is also considerable variation in graduation rates, differences that suggest a strategy for studying and improving college outcomes.

STUDY DESIGN

To conduct the study, we sought to identify 20 four-year institutions with large shares of low-income students, 10 with higher than average graduation rates (HGRs) and 10 with lower than average graduation rates (LGRs). Two key issues in site selection were determining which institutions serve large percentages of low-income students, and identifying graduation rates for these and other institutions. To estimate the portion of *low-income students enrolled* in each institution, we determined the percentage of students receiving a Pell Grant, the federal program that awards grant aid to low-income, undergraduate students pursuing a degree and attending at least half-time. We used data supplied from various offices of the U.S. Department of Education, including data on Pell Grant recipients per school from the Office of Postsecondary Education, and enrollment data from the National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS).

The information on *graduation rates* came from the 1999 National Collegiate Athletic Association (NCAA) Graduation Rates Report, which determines institutional graduation rates by calculating the percentage of undergraduates who

enroll full-time at the outset and subsequently graduate with a baccalaureate degree from the same institution within six years.

SITE SELECTION

Once the universe was established, colleges and universities with a high proportion of Pell Grant recipients were assigned to a high or low group based on their graduation rates. Public and private institutions were compared separately, which resulted in four institutional categories:

- Private/highest graduation rates
- Private/lowest graduation rates
- Public/highest graduation rates
- Public/lowest graduation rates[1]

Five considerations determined whether an institution was included: 1) at or near the top of the ranking in its group; 2) agreed to participate in the study; 3) geographic distribution — we did not want to select all the institutions from the South, where many colleges and universities with the highest percentages of low-income students are located; 4) enrollment size — included institutions of different size and different missions; and 5) mix of students by race/ethnicity — we sought a mix of Historically Black Colleges and Universities (HBCUs) and non-HBCUs, as many of the institutions with the highest percentages of Pell Grant recipients are HBCUs.

Once we identified the colleges and universities and received permission to visit them, we collected quantitative and qualitative data about each institution. We made site visits of 2 to 2.5 days to 19 of the 20 institutions. During the visits, we collected additional descriptive information on a range of policies and practices. We also interviewed faculty, staff and students, asking them about the factors contributing to institutional performance in retaining and graduating students.

HGR institutions have more full-time faculty, lower student/faculty ratios, some graduate offerings, and, most importantly, far greater resources for their education than LGR institutions.

DIFFERENCES BETWEEN HGRS AND LGRS

There are important systematic differences in student body and resources between the HGR and LGR institutions in the study, differences that likely play a major role in explaining their differing graduation rates. They are more likely to draw students of "traditional" college age (i.e., recent high school graduates). Limited data on prior performance suggests that students at HGR institutions may also have better academic preparation for college. HGR institutions have more full-time faculty, lower student/faculty ratios, some graduate offerings, and, most importantly, far greater resources for their education than LGR institutions. Ironically, the students at high-cost HGR institutions probably pay no more out of pocket for education than do the LGR institutions because the HGR institutions with high tuition also offer larger institutional subsidies to more students.

These findings also suggest that the LGR institutions in this study face extraordinary challenges in providing education, let alone retaining and graduating students. These institutions are spending much less than average to serve a population with much greater than average academic need. Given their resources and student bodies it is quite possible that the LGR institutions are performing relatively well in retaining and graduating students, even at the low absolute levels that led to their inclusion in the study. Unfortunately, we were unable to address this issue — performance relative to student body and resources — with the data at hand.

COMMON PRACTICES AT HGR INSTITUTIONS

The HGR institutions in the study are a diverse group of four-year colleges and universities, ranging from a large land-grant state university with 12,500 undergraduates and modest selectivity, to a rural private university with 1,400 undergraduates that is relatively selective, to a private, religiously-oriented Historically Black college with 800 students.

We have identified common elements among the HGR institutions that may help to explain their performance. Not every institution demonstrated each element, nor is there evidence that these elements are directly responsible for the graduation rates we observed. Without a controlled experiment, it is not possible to say that these elements explain the higher graduation rates we observed. Nevertheless, commonalities among the institutions include:

- **Intentional academic planning:** through intrusive advising, freshman orientation courses, and academic reviews for students in trouble, the institutions make sure that students pursue a well-structured academic program;
- **Small classes:** most classes, even those for freshmen, are small, giving students opportunity for recognition and class discussion;
- **Special programs:** many students, especially those at academic risk, participate in programs that provide advising and academic support, and give them a greater sense of belonging on campus;
- **A dedicated faculty:** most faculty members teach full-time and are easily accessible to students;
- **Educational innovation:** these institutions have courses to ease freshman entrance and help students adjust to college life, and offer a wealth of academic support through tutoring, group study, supplemental instruction, and mastery classes;
- **Developmental education:** although formal developmental offerings are fading, they were active at most of these institutions at the time they were selected;

Much of the difference in student outcomes may be due to factors so basic that they are hardly amenable to "tweaking" institutional policies or practices.

- **Geographic isolation:** most of the institutions are in rural areas or small cities, making campus life and work on campus the center of the students' lives;
- **Residential life:** half the institutions require freshmen to live on campus.
- **Shared values:** at many of the colleges, students share rural and small-town backgrounds, some share a religious orientation, and in some schools the faculty reflects similar backgrounds;
- **Modest selectivity:** institutions do not intentionally attract students from low-income families but they do seek students likely to graduate, setting modest but important admissions requirements — at least a C average in high school and decent SAT/ACT scores.
- **Financial aid for high achievers:** the institutions use state and institutional merit-based aid to attract high-performing students; and
- **Retention policy:** the colleges are explicitly concerned with retention and graduation rates, and several have set ambitious goals well beyond current performance.

CONCLUSION

Among the institutions serving large shares of low-income students there are widely differing graduation rates. We have seen, however, that among those institutions, much of the difference in student outcomes may be due to factors so basic that they are hardly amenable to "tweaking" institutional policies or practices. They may require, at least in public institutions, systematic consideration at the state level. These factors include prior

student performance, available institutional resources, and items that are directly affected by resources such as levels of full-time faculty. In this study, we also see that the LGR institutions serve a population that is, on average, older and more likely to be enrolled in college part time, factors that are independently associated with lower rates of graduation in other studies. Often, the institutions facing the greatest challenges — lower prior student performance, older and part-time students, etc. — also have the least resources to address those challenges.

The opportunity to look across 10 institutions with large shares of low-income students but higher than average graduation rates and the identification of common policies and practices among some or most of these institutions provided some interesting results. We found, for example, that many of the HGR institutions have or had developmental or remedial programs that enrolled large shares of freshmen. While increasing numbers of states are eliminating developmental education from four-year institutions, it remains to be seen how this will affect enrollments and graduation rates of low-income students.

Often, the institutions facing the greatest challenges — lower prior student performance, older and part-time students, etc. — also have the least resources to address those challenges.

Another intriguing finding is that many of the HGR institutions are located in small towns or rural areas (or small towns in the middle of rural areas) and that their student bodies are relatively homogeneous from a cultural standpoint. This finding suggests that they may have a comparative advantage in building the kinds of group cohesion and social attachment to the institution that many have argued are critical to student persistence.

Because we made only brief visits to each of the institutions, there were fairly severe constraints on what we were able to see and record. There may be other important commonalities — or combinations of factors — that were simply overlooked or go well beyond what we could observe in a short period of time. For example, we have reported on discrete factors that we observed, but success may be due to a combination of those factors or conditions. It may be that it is not enough to have a caring faculty if an institution does not also have leadership, faculty, and staff that share a vision of the institution's purposes or goals. It may not be enough to have sufficient resources if an institution does not have an active advising system that directs new students to courses that sufficiently structure their initial educational experience.

As a group, colleges that serve large percentages of low-income students tend to have lower graduation rates than other colleges. However, among the colleges that serve low-income students there is also considerable variation in graduation rates, differences that suggest a strategy for studying and improving college outcomes. One potential means to identify successful retention and graduation strategies is to study the differences in institutional characteristics, policies, and practices among low-income serving institutions with higher and lower graduation rates, practices that may help explain their differential performance. The Pell Institute for the Study of Opportunity in Higher Education designed this study to explore this approach to retention research and begin to identify the institutional practices and policies at four-year colleges and universities that might account for differences in retention and graduation rates among colleges and universities that serve high concentrations of low-income students. Lumina Foundation for Education supported the study in an effort to learn and share effective practices for fostering student success.

Despite the current mix of public and private subsidies, students from low-income families do not enter college at the same rate as more affluent students.

This report presents the findings of the study. It begins with a brief description of inequities in college retention. It then describes the design of the study, explaining how the institutions were selected for participation and the information that was collected. This section of the report provides a brief profile of institutions that serve large shares of low-income students. Following the design discussion is a summary of the literature on institutional practices that affect retention. The findings of the study are presented in two parts — first, a comparison of institutions with relatively high and relatively low graduation rates and, second, a description of the common elements among the institutions with relatively high graduation rates. The conclusion summarizes what we have learned that may be applied more widely. We hope the results of this study will be of use to institutions as they try to improve the educational success of all students, especially those at risk of not completing their education.

Inequities in College Retention

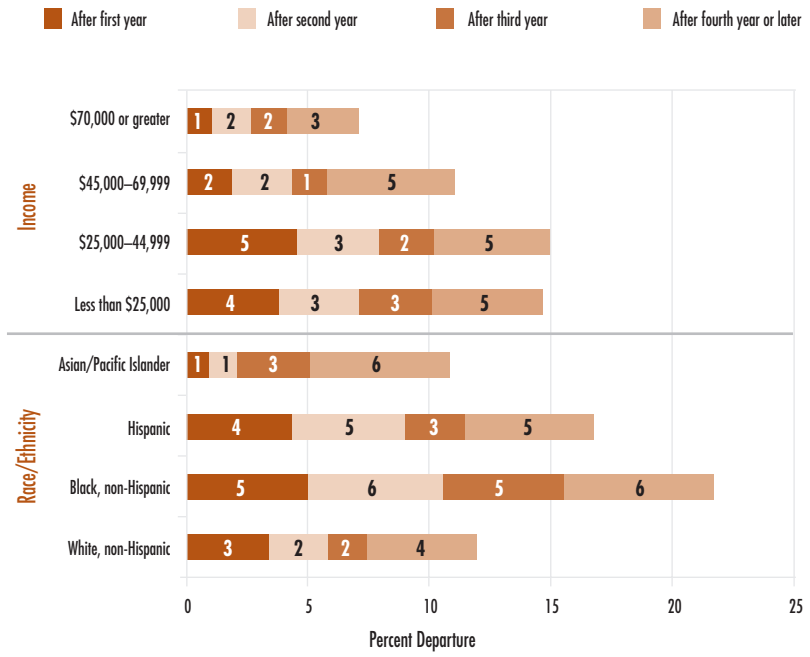
Despite the current mix of public and private subsidies, students from low-income families do not enter college at the same rate as more affluent students. Academic, cultural, or financial factors limit low-income students' educational

opportunities. Students from low-income families are less likely to receive high quality K-12 education because they are more likely to attend schools with limited resources. An inferior K-12 education may, in turn, limit their college choices and financial aid opportunities. In addition, these students may not receive the same information and encouragement to attend college from families, teachers and counselors as do their more advantaged peers. Even with encouragement and financial help, however, many students from low-income families cannot afford to lose the income they must forego to attend college.

Even when they attend college, low-income students remain at a disadvantage. Low-income students leave without degrees at higher rates than their wealthier peers (Figure 1). If affluent students leave college, they do so at a later stage in their education than do students from lower income families. Students from low-income families appear to face more problems and are more sensitive to the costs of college than are students from wealthier families.

In some ways, leaving college before graduating is a greater liability than never having attended. The majority of research on the economic returns from college suggests that the earning power of a student who does not complete college is roughly equivalent to that of a high school graduate (Barton, 2002). In addition, the non-completing student has likely foregone income to attend college, and may be burdened with a loan payment that will reduce his or her income even further.

Figure 1. Rate of Permanent Postsecondary Education Departure for Students Who Begin at a Four-Year Institution



Source: Berkner, Lutz, He, Shirley, and Cataldi, Emily Forest (2002). *Descriptive Summary of the 1995-96 Beginning Postsecondary Students: Six Years Later*. U.S. Department of Education, NCES 2003-151.

As already noted, previous research has shown that there are considerable differences in graduation rates among institutions. Mortenson (1997) used the average ACT/SAT scores of entering classes to predict an institution's graduation rate and compare it with the institution's actual graduation rate. He found considerable variations from the predicted graduation rate for many schools — some institutions with high-performing students have much poorer than expected graduation rates, while others with academically at-risk students showed graduation rates well above expectations. Clearly, factors other than student academic ability influence retention and graduation.

As states and federal agencies have demanded more accountability from colleges and universities, persistence and graduation rates have received more attention. A variety of programs have been created to try and increase both college access and completion. College access programs now start as early as middle school, offering knowledge and encouragement about college, academic support, and help in making the transition to college (e.g. applying, securing financial aid, and settling in). Many colleges have also adopted pre-college "bridge" or orientation programs during the summer before freshman year that allow new students to learn about the campus, get a head start on registering for classes, and, in some cases, improve their basic skills or get a few credits under their belts.

State and federal governments and institutions have invested in these pre-college programs, especially for low-

income and minority students. The Federal TRIO Talent Search and Upward Bound programs provide academic and social support to low-income and first-generation middle and high school students.[2] The Federal GEAR UP program provides encouragement and the potential for financial aid to middle and high school students in schools with large shares of low-income students. In addition, state and institutional opportunity programs aimed at attracting and retaining minority students often provide similar academic and social services. State higher education opportunity programs and federal programs sponsored by the National Science Foundation, the U.S. Department of Energy and others provide funding for pre-enrollment programs.

Once students reach college age, financial aid is an important component of educational opportunity. Not having enough money to attend college, or to stay in once enrolled, is an important consideration for low-income students. A number of programs provide student aid to low-income students. The Federal Pell Grant program is the best known, but numerous state, institutional and private programs provide aid to low-income students. Subsidized loan programs are also a critical component.

For students enrolled in college, programs aimed at improving retention are increasingly available. Some pre-college programs continue to provide assistance to students once enrolled. In addition, there are many federal, state and institutional programs that supplement instruction with academic support, including additional instruction, study groups, writing centers, learning centers, labs, workshops on study and test taking skills, and similar support. Services often include more extensive advising and counseling than may be otherwise available. Institutions provide a wide array of special programs to help bring students together, especially students who share interests or backgrounds. These include ethnic/racial affinity programs, special housing programs, freshman interest groups, or other special programs. Two of the Federal TRIO programs also support low-income undergraduates: 1) Student Support Services (SSS) program, which offers a wide range of academic and social support to participants from low-income and first-generation families, as well as students with disabilities; and 2) the Ronald E. McNair Post-Baccalauerate Achievement Program, which offers eligible students opportunities for research experience and encourages them to attend graduate school.

It is the efforts of the institution as a whole that affect the degree to which low-income — and all — students persist and graduate.

Finally, and perhaps most importantly, it is the efforts of the institution as a whole that affect the degree to which low-income — and all — students persist and graduate. Many institutions have re-designed instructional programs to ensure that their offerings integrate students into the campus, both academically and socially. Structured freshman year experiences that organize course-taking and social interactions, learning communities that offer intellectually linked courses, and team approaches to instruction — are all efforts to make the college experience more engaging and satisfying to students.

This study focuses on the full range of institutional activities that may affect student outcomes, especially retention and completion. By identifying and studying institutions that appear particularly successful at retaining and graduating students, we hope to better understand how both the programs that are specifically designed to address retention, as well as overall institutional practice and policy work to affect student outcomes.

To conduct the study, we sought to identify 20 four-year institutions with large shares of low-income students, 10 with higher than average graduation rates and 10 with lower than average graduation rates. We then compared them using widely available institutional data and visited each of the institutions.

Selecting the Institutions

The first step in selecting the institutions to study was to identify the universe from which they would be drawn. Two key issues in site selection were determining which four-year institutions serve large percentages of low-income students, and identifying graduation rates for these and other institutions.

Percentage of low-income students

To estimate the portion of low-income students enrolled in each institution, we determined the percentage of students receiving a Pell Grant. The Federal Pell Grant Program awards grant aid to low-income students. Eligible students — defined as undergraduate students pursuing a degree and attending at least half-time — receive grant awards up to an annual maximum award of $4,050, based on their family income, cost of attendance, and other factors. In 1999-2000, the median income of Pell Grant recipients was $15,098; over 80 percent of aid applicants with income of less than $10,000 received a Pell Grant (King, 2003).

Pell Grant recipients are more likely than other students to leave college prior to graduation, but the reasons may be unrelated to finances.

Previous research (Lee, 1998) indicated that Pell Grant recipients are more likely than other students to leave college prior to graduation, but the reasons may be unrelated to finances. Pell Grant recipients are probably more likely than higher income undergraduates to have financial problems that can cause them to leave school, but they are also more likely to have non-financial risk factors. These factors include being financially independent, being a single parent, delaying enrollment after high school, having inadequate academic preparation, having extensive family obligations, and lacking experience with the college environment.

To identify four-year institutions with large percentages of low-income students, we used data supplied from various offices of the U.S. Department of Education. Data on Pell Grant recipients per school for 1998-99 (the most recent year for which data were available) were obtained from the U.S. Department of Education Office of Postsecondary Education. Comparable enrollment data came from the Department's

National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) for the academic year 1998-99. The full-time equivalent (FTE) enrollment estimate — which calculates three part-time students as equaling one full-time student — was used because some students attending less than full-time may receive a Pell Grant.[3] The combination of data from these sources provides a measure of the relationship between the share of undergraduates receiving a Pell Grant and institutional graduation rates.

To determine whether the share of students receiving a Pell Grant was a stable indicator from which to select institutions for further study, we calculated the percentage of undergraduates at an institution receiving a Pell Grant using data from two consecutive years. Institutional percentages did not change appreciably between the two years and we were satisfied that inter-year results did not vary significantly. The stability in measures may not extend to graduation rates, however. Some of the colleges with large shares of Pell Grant recipients have small enrollments that may result in volatile graduation rate changes between years.[4] A more rigorous study with more precise data would probably lead to the same general conclusions, but the results for specific institutions might change.

Table 1: Number and Percentage of Four-Year Institutions Reporting Graduation Rates to NCAA, 1999[5]

College Control	IPEDS Four-Year Universe	NCAA Reporting Institutions	NCAA as a Percent of IPEDS Universe
Public	686	442	64%
Private	2,009	549	27%
Total	2,695	991	37%

Table 2: Median FTE per Institution, 1999

College Control	IPEDS Four-Year Universe	NCAA Reporting Institutions
Public	4,693	7,250
Private	873	1,825

Sources: 1999 NCAA Division I, II, and III Graduation Reports, U.S. Department of Education's Office of Postsecondary Education, and National Center for Education Statistics, IPEDS.

Graduation rates

This study uses data from the graduation rates survey of the National Collegiate Athletic Association (NCAA), which determines institutional graduation rates by calculating the percentage of undergraduates who enroll full time at the outset (most frequently called first-time, full-time freshmen) and subsequently graduate with a baccalaureate degree from the same institution within six years. The information on graduation rates used in this report came from the 1999 NCAA Graduation Rates Report, which analyzed the portion of the freshman cohort entering college in 1992 that graduated by 1998. (For example, if 100 students entered an institution in 1992 and 60 graduated by 1998, the graduation rate would be 60 percent.)

The NCAA graduation rates data set is one of the few that includes systematic institutional data on six-year graduation rates for first-time, full-time freshmen. There are limitations to this data though. First, the NCAA report does not include all four-year colleges and universities, only those participating in NCAA sanctioned sports programs. As a result, only 27 percent of all private colleges and 64 percent of all public colleges report graduation rates to the NCAA (see Tables 1 and 2 for further details on the share of schools reporting). Second, this is a freshman-based rate; transfer students are not included.

Determining graduation rates for low-income students

Table 3 shows the distribution of private and public colleges divided into quintiles defined by the share of their undergraduates that receives a Pell Grant. In both public and private institutions, graduation rates decline as the share of FTE undergraduates with a Pell Grant increases:

- In the quintile of private institutions with the lowest share of Pell Grant recipients (an average of 10 percent), the average six-year institutional graduation rate is 77 percent.
- In the quintile of private institutions with the

highest share of Pell Grant recipients (an average of 49 percent), the average six-year graduation rate is only 41 percent.

- Among the public institutions (which enroll far greater percentages of Pell Grant recipients), disparities in graduation rates are slightly smaller, but still substantial. The quintile of institutions with the lowest share of Pell Grant recipients (an average of 16 percent) has an average graduation rate of 57 percent.
- The quintile of public institutions with the highest share of Pell Grant recipients (an average of 58 percent) has an average graduation rate of only 30 percent — quite low in relation to national averages for public institutions, 43 percent.

Table 3: Baccalaureate Graduation Rates for Private and Public Institutions by Percent of FTE Students Receiving a Pell Grant in Quintiles

Percent of FTE Students Receiving a Pell Grant (in Descending Order)	Private (N=547)		Public (N=432)	
	Mean Percent FTE Receiving Pell Grant	*Mean Percent Graduating in 1998*	Mean Percent FTE Receiving Pell Grant	*Mean Percent Graduating in 1998*
First quintile	49	***41***	58	***30***
Second quintile	29	***51***	38	***39***
Third quintile	23	***56***	30	***42***
Fourth quintile	17	***63***	25	***49***
Fifth quintile	10	***77***	16	***57***

Table 4: Baccalaureate Graduation Rates and Percent Pell Grant Recipients for Private and Public Institutions by Carnegie Classification

Institutional Carnegie Classification	Private (N=546)		Public (N=430)	
	Mean Percent FTE Receiving Pell Grant	*Mean Percent Graduating in 1998*	Mean Percent FTE Receiving Pell Grant	*Mean Percent Graduating in 1998*
Research	11	***80***	24	***59***
Doctoral	20	***64***	28	***43***
Master	24	***53***	36	***39***
BA/Specialized	29	***57***	42	***36***

Sources: 1999 NCAA Division I, II, and III Graduation Reports, U.S. Department of Education's Office of Postsecondary Education, and National Center for Education Statistics, IPEDS.

As shown in Table 4, both the share of the student body receiving a Pell Grant and the graduation rates themselves differ by Carnegie classification[6] (research, doctoral, master, bachelors/specialized) and control (public, private).

- In all cases, public institutions have higher percentages of Pell Grant recipients and lower graduation rates compared with private institutions.
- Research institutions have the lowest percentages of Pell Grant recipients and the highest graduation rates.
- Bachelors/specialized colleges have the highest percentages of Pell Grant recipients and the lowest graduation rates.
- Combining the two indicators (control and Carnegie classification), private research universities have the smallest shares of Pell Grant recipients and the highest graduation rates. Public baccalaureate and specialized institutions have the highest shares of Pell Grant recipients and the lowest graduation rates.

These results suggest that a relationship exists between the enrollment of low-income undergraduates, as measured by the share receiving a Pell Grant, and an institution's graduation rate. The statistical relationship is not inevitable, however. The instances of institutions with high proportions of Pell Grant recipients and higher than average graduation rates provide evidence that it is possible to beat the averages. The tables on the next page show the range of the high and low

Table 5: Percent of Undergraduates with Pell Grants by Institutional Quintile Defined by Percent of FTE Receiving a Pell Grant

Percent of FTE Students Receiving a Pell Grant (in Descending Order)	Private			Public		
	Median % Pell	Highest % Pell	Lowest % Pell	Median % Pell	Highest % Pell	Lowest % Pell
First Quintile	49	97	34	58	98	45
Second Quintile	29	34	26	38	44	34
Third Quintile	23	26	20	30	34	27
Fourth Quintile	17	20	14	25	27	21
Fifth Quintile	10	14	2	16	21	2

Table 6: Percent of Undergraduates Receiving Pell Grants by Institutional Carnegie Classification and Control

Institutional Carnegie Classification	Private			Public		
	Median % Pell	Highest % Pell	Lowest % Pell	Median % Pell	Highest % Pell	Lowest % Pell
Research	8	32	2	23	98	7
Doctoral	17	68	5	27	79	8
Master	23	93	5	33	89	10
BA/Specialized	26	97	3	41	97	10

Table 7: Graduation Rates by Institutional Quintile

Percent of FTE Students Receiving a Pell Grant (in Descending Order)	Private			Public		
	Median % Graduation	Highest % Graduation	Lowest % Graduation	Median % Graduation	Highest % Graduation	Lowest % Graduation
First Quintile	41	99	6	28	57	6
Second Quintile	53	83	19	37	80	19
Third Quintile	58	86	23	40	82	17
Fourth Quintile	65	88	17	48	83	21
Fifth Quintile	78	97	37	60	92	20

Table 8: Graduation Rates by Institutional Carnegie Classification and Control

Institutional Carnegie Classification	Private			Public		
	Median % Graduation	Highest % Graduation	Lowest % Graduation	Median % Graduation	Highest % Graduation	Lowest % Graduation
Research	83	97	45	61	92	30
Doctoral	66	94	46	40	89	9
Master	55	99	17	39	80	9
BA/Specialized	60	97	6	33	74	6

Sources: 1999 NCAA Division I, II, and III Graduation Reports, U.S. Department of Education's Office of Postsecondary Education, and National Center for Education Statistics, IPEDS.

percentages of undergraduates with a Pell Grant and the median for each quintile (Table 5) and institutional control (Table 6).[7]

The next two tables show the range of graduation rates by quintile (Table 7) and institutional Carnegie classification and control (Table 8). Again, the median graduation rate is shown.

Site Selection

Once the universe was established, four-year colleges and universities with a high proportion of Pell Grant recipients were assigned to a high or low group based on their graduation rates. Public and private institutions were compared separately, which resulted in four institutional categories:

- Private/highest graduation rates
- Private/lowest graduation rates
- Public/highest graduation rates
- Public/lowest graduation rates

The four institutional groups are shown in Table 9. Those marked with an asterisk were included in the site visits. The participating institutions are not named to assure confidentiality. Not all of the highest ranked institutions were selected for site visits. Five considerations determined whether an institution was included:

- At or near the top of the ranking in its group.
- Agreed to participate in the study.
- Geographic distribution — we did not want to select all the institutions from the South, where many colleges and universities with the highest percentages of low-income students are located.
- Enrollment size — we included institutions of different size and different missions.
- Mix of students by race/ethnicity — we sought a mix of Historically Black Colleges and Universities (HBCUs) and non-HBCUs, as many of the institutions with the highest percentages of Pell Grant recipients are HBCUs.

Table 9: Selected Institutions, By Control and Graduation Rate

High Graduation Rate, Private			Graduation rate %
1.	A1*		65
2.	B1*		52
3.	C1*	(HBCU)	56
4.	D1	(HBCU)	50
5.	E1		55
6.	F1*		56
7.	G1*	(HBCU)	49
8.	H1		61
9.	I1		43

Low Graduation Rate, Private			Graduation rate %
1.	A2*		6
2.	B2		19
3.	C2*	(HBCU)	15
4.	D2*	(HBCU)	20
5.	E2*		21
6.	F2		14
7.	G2		23
8.	H2*		15

High Graduation Rate, Public			Graduation rate %
1.	A3*	(HBCU)	49
2.	B3	(HBCU)	47
3.	C3*		43
4.	D3*		41
5.	E3*		41
6.	F3*	(HBCU)	45
7.	G3		41
8.	H3		43

Low Graduation Rate, Public			Graduation rate %
1.	A4*		6
2.	B4	(HBCU)	9
3.	C4*		9
4.	D4		12
5.	E4*		14
6.	F4*		9
7.	G4*		11
8.	H4		18

* Institutions selected for further analysis and site visits.

One factor that might influence the institutional graduation rate is the share of the student body that attends school part-time. Part-time students take longer to graduate than do those who attend full-time; thus, a college that enrolled a high proportion of part-time students might report a lower average graduation rate. Although only full-time students are used for the cohort, these students may at some point leave school and return in a part-time capacity. We found only a small average variation in the share of undergraduates enrolled part-time among the five institutional quintiles for both public and private institutions.

Site Visits

Once we identified the colleges and universities and received permission to visit them, we collected quantitative and qualitative data about each institution. Data were

obtained from IPEDS, the *Peterson's Guide to Four-Year Colleges*, the *US News and World Report* guide to colleges, and other sources. We made site visits of 2 to 2.5 days to 19 of the 20 institutions.[8] Each site visit was conducted by a two-person team. During the visits, we collected additional descriptive information on a range of policies and practices. We also interviewed faculty, staff and students, asking them about the factors contributing to institutional performance in retaining and graduating students. Site visitors completed a report using a uniform outline as a site visit protocol (included in Appendix A). Once the site visits were complete, a matrix of findings allowing the comparison of qualitative data collected was created. The matrix is included in Appendix B of this report and is the basis for the analysis in sections 4 and 5.

It is important to keep in mind that these visits were brief and sought information on a wide range of possible influences on institutional performance. This research is a preliminary inquiry intended to provide the groundwork for further efforts to identify the institutional policies and programs that contribute to student retention. Most studies observe retention efforts at individual institutions. By including 10 high graduation rate colleges in the research, we have generated a more complete look at the factors in retention than has been previously available.

In all cases, public institutions have higher percentages of Pell Grant recipients and lower graduation rates compared with private institutions.

We recognize, however, that there are substantial limitations to this study. First, in selecting institutions, no effort was made to control for institutional admissions policies or prior student academic performance. Second, other factors that could well account for differences in institutional performance were not controlled — including institutional resources, location, religious affiliation, size, percentage of students residing on campus, or percentage of students attending full time. Third, we do not know whether the overall graduation rates reported by the institutions also apply to low-income students at those schools. The authors of this study are now conducting an expanded study, including a multivariate analysis of institutional and student characteristics that might explain institutional performance. In selecting institutions for in-depth examination, the new study will control for prior academic performance (ACT/SAT) and may also control for other student factors that are associated with graduation rates and are systematically available.

Much of the research on persistence in postsecondary education concentrates on the student characteristics that predict success. High school GPA and SAT and ACT scores have been identified as the strongest retention predictors (Astin, Korn, and Green, 1987). Socioeconomic status, first- (or later) generation college attendance, non-traditional characteristics, out-of-state residency, and race/ethnicity are also predictive factors (Hoyt, 1999; Murtaugh, Burns, and Schuster, 1999; Somers, 1995b). Adelman's (1999) recent study based on longitudinal data finds that a rigorous high school curriculum is the strongest predictor of postsecondary persistence and success. Once in college, the level of a student's social and academic integration, along with his or her intent to complete college, can affect decisions to stay in school (Tinto, 1993; Beil et al, 1999; Okun et al, 1996; Cabrera et al, 1992; and Pascarella and Terenzini, 1991).

This review focuses on what is known about how institutions can improve student retention and graduation. Tinto suggests that researchers should "direct our studies to forms of practice so that we can better understand the impact of practice on persistence and let the knowledge gained from those studies inform our theories of persistence ... Too much of our research has been blind to practice and its recent innovations" (1998). Following Tinto's suggestion, we reviewed evaluations and other studies of instruction, programs, and other campus factors that address five important elements needed to complete college: academic skills, financial support, academic direction, instruction and academic support, and campus participation.

This review focuses on what is known about how institutions can improve student retention and graduation.

Academic Skills

Poor academic preparation is a significant factor in leaving college. Students must have the basic reading, writing, and math skills necessary to persist through more challenging coursework and to graduate. There is considerable evidence that students who enter college with poorer high school records (as measured by GPA), and lower SAT or ACT scores are more likely to leave before completing college. A wide range of programs that address academic deficiencies have been studied, including summer bridge and developmental education programs.

Summer bridge programs

Typically, summer bridge programs take place during the

summer between high school graduation and the fall semester of a student's first year. They have a strong curricular component, developing basic skills and improving academic performance. Bridge programs often include remedial or developmental coursework for under-prepared students. They also aim to make students comfortable in the college environment through advising, social events, and other activities.

Studies of summer bridge programs are almost unanimous in showing positive effects on college retention. Evaluations of programs at Georgia State University (Gold, 1992), University of California-San Diego (Buck, 1985), the University of Maryland-College Park (Boyd, 1996), and California State University (Garcia, 1991) all showed enhanced retention through at least the first year of college. Bridge students also become more involved in campus life (Buck, 1985). A six-week summer bridge program for under-represented and low-income freshmen and transfers at UCLA helped students to become part of a community, adjust to college, and persist through their first two quarters (Ackermann, 1990).

Developmental coursework

Developmental or remedial courses are designed to provide students with the academic skills to succeed in postsecondary education. Typical developmental offerings are courses in math, English, and writing. In some institutions, students must complete these courses before taking college-level classes, while in other institutions students may enroll in developmental and regular courses simultaneously.

Unlike summer bridge programs, the results of developmental programs on retention are more mixed. Not surprisingly, students who need extensive remediation have lower retention and graduation rates (Hoyt, 1999; Haycock, 2000; McDaniel, 2001; Windham, 1995). The negative effect is not found, however, when students take remedial reading only (Adelman, 1999). Furthermore, students who perceive remedial courses as valuable are more likely to stay in school (Garcia, 2000). Of course, most studies do not compare students with comparable academic skills, some of whom take developmental courses and some of whom do not. Such a design might reveal more positive effects of remediation. There is also some evidence to suggest that when developmental education is linked with regular course-taking the effects are more positive (see discussion of learning communities below).

Studies of summer bridge programs are almost unanimous in showing positive effects on college retention.

Financial Support

Like academic skills, having the money to pay for education is a necessity for college completion. Low-income students are at a disadvantage in attending college and, not surprisingly, graduate at lower rates (Mortensen, 2001, Choy, 2002). Federal, state, institutional, and private financial assistance programs are aimed at making college affordable for low-income students so that they can complete their education.

Overall aid effects

Studies conducted across four-year institutions are inconclusive with respect to the effect of financial aid on graduation (Braunstein, McGrath, and Pescatrice 2000). Because of state and federal government changes in the amount and types of aid packages, one recent study concluded that the evidence concerning the effects of student financial aid "is mixed at best, and contradictory, at worst" (Astin, 2001). The effects of aid may vary by institution type. Hoyt (1999) found that aid has a positive impact on community college students. A study using data from the 1996 NCES National Postsecondary Student Aid Study (NPSAS) showed that, at two-year colleges with higher tuition rates, students with grants, loans, or work-study participation were more likely to persist than those without such assistance (Cofer and Somers, 2000). One study found that minority aid recipients persist at higher rates than non-recipient counterparts, especially when grants and loans are combined (Hu and St. John, 2001). However, as the amount of need-based aid decreases and tuition increases, overall persistence declines (Hu and St. John, 2001).

Type of aid

The effects of aid often vary by type and amount. Grants, scholarships, and work-study are more consistently related to higher persistence; conversely, loans are more consistently related to lower persistence (Blanchfield, 1971, 1972; Li and Killian, 1999; Somers, 1995a). Work-study or other on-campus work seems to produce positive effects more consistently than other types of aid, most likely because students become more involved and attached to the campus and its staff (Adelman, 1999; DesJardins, Ahlburg, and McCall, 1999). Not every study shows this effect, however (McGrath and Braunstein, 1997). For an institution seeking to increase its overall retention rate, partial scholarships for a larger number of applicants may be more effective than a small number of large scholarships to attract as well as retain academically strong students (Somers, 1995a, 1996).

Amount and timing of aid

A longitudinal study of college-leaving behavior found that although students who receive financial aid generally have higher completion rates than comparable students without financial aid, results vary by the amount of aid and by when the students receive it (Ishitani and DesJardins, 2002-2003). Overall, it appears that in each of the first three years of college, the higher the amount of aid, the greater the persistence. The beneficial effect of financial aid was actually strongest in the third year, when the risk of dropping out was 93 to 99 percent lower for students who received assistance.

Institutional aid

Some studies suggest that institutional aid is less effective in increasing retention and graduation than outside aid, largely because the amounts provided are small (Somers, 1995a; Shields, 1994). Nonetheless, some studies find an independent effect for campus-based aid (Nora, 1990). Institutional aid can also have positive effects when the student perceives the aid as a reward for personal achievement, unlike need-based federal aid, which low-income students expect to receive (Astin, 2001).

Students with clear academic and career goals are more likely to persist than those who have not articulated their goals.

Perceptions of the role of financial aid

Like developmental education, attitudes and perceptions of aid might be more important than the receipt of aid itself. Persisters are more likely than non-persisters to report that the financial aid office was helpful (Heverly, 1999). At an urban, open-admission, commuter university, persistence of students in developmental classes was predicted by perceptions of difficulties in financing their education (Garcia, 2000). A study at an urban commuter university found that attitudes associated with financial aid had significant total effects on persistence. Satisfaction with financial support had a direct effect on academic integration, which had an effect on educational goal commitments. Students also felt a sense of commitment to the institution that provided them with financial aid (Cabrera et al, 1992).

Academic Direction

Students with clear academic and career goals are more likely to persist than those who have not articulated their goals. Early identification of a major is also related to retention (Hagedorn, Maxwell, and Hampton, 2001-2002; Kim, 1996; Leppel, 2001). In this section, we explore what is known about the effectiveness of college programs that help students develop academic and career goals, select courses and majors, and other similar efforts.

Freshman year structure

There are a variety of college programs that help students adjust to college and select their courses and majors. These programs range from highly structured freshman year programs (directive advising, seminars, linked classes, study groups, etc), or may be as brief as a one- or two-day orientation program that helps students clarify their academic and career plans. Evaluations of freshman year programs are largely positive. Students who enroll in these programs show greater persistence, higher GPAs, etc (Sidle and McReynolds, 1999; Williford, Chapman, and Kahrig, 2000-2001; Pascarella, Terenzini, and Wolfle, 1986; Colton, Connor, Shultz, and Easter, 1999; Simmons, Wallins, and George, 1995;

Murtaugh, Burns, and Schuster, 1999; Martin and Hodum, 1994; Fidler and Moore, 1996; Muraskin, 1997). However, students who enroll in voluntary programs may already be more motivated or committed to college. Nevertheless, given the consistency of evaluation findings, freshman year experience programs do appear to positively affect institutional persistence.

Advising and counseling

Advising and counseling by professionals and peers can also help students develop their academic and career goals. Counseling and encouragement help to foster clear, realistic goals and commitment, and have been found to be significantly related to retention (Seidman, 1991). While orientation programs allow for interaction with other students, advising allows for more personalized interaction with faculty and staff.

Evidence on the effects of advising and counseling services is weak, however. Most studies have focused on student perceptions of advising or counseling, rather than on the impact of the services themselves. Astin and his colleagues (1987) found that students who left public institutions had poor perceptions of advising and other services. Carroll (1988) found that persisting students at a two-year urban community college had positive perceptions of counselor effectiveness. Non-returning students at a large eastern public university were less satisfied with guidance counseling than were returning students (Mohr, Eiche, and Sedlacek, 1998). Heverly (1999) also reported that persisting students are more likely to find college advisors helpful. On the other hand, the National Study of Student Support Services (Chaney et al, 1997) found that greater hours of counseling/advising were negatively associated with retention, probably because the students having the greatest academic and personal difficulty got the most counseling.

Mentoring programs

Mentoring programs link students with older peers, faculty, administrators, or other professionals in one-on-one relationships. They also help students develop career plans and get to know faculty or peers. These programs usually target students who are under-represented, either at the institution or in a specific department, and who may need extra encouragement and role models. Often under-represented students "unlike middle- and upper-class students, ... lack the advantage of coming from a background where the importance of attending college is emphasized from an early age" (Tierney, 1999). Only a limited amount of information on the impact of mentoring programs on college retention exists. Much of the evidence is positive. (Campbell and Campbell, 1996; Schwitzer and Thomas, 1998; Newton and Wells-Glover, 1999). Because mentoring is almost always voluntary, however, there is no way of knowing whether it attracts students who are already motivated to stay in school and graduate.

Freshman year experience programs do appear to positively affect institutional persistence.

Overall support service use

According to Pascarella and Terinzini (1991), "degree completion may be a function of the extent to which an institution provides supportive personnel services ... Students who get the help and information they need may be more likely to persist." At a highly selective research institution, non-persisting students reported less satisfaction with campus support services and the standards of service than persisting students (West and Michael, 1998). At a regional state university, at-risk freshmen who received regular telephone calls from faculty or student affairs staff had significantly higher retention rates. Overall, outreach by phone contact provided students with a caring, nurturing environment that improved retention and grades (Volp, Hill, and Frazier, 1998). A study on the role of organizational attributes in integration and persistence found that institutional communication, fairness in enforcing policies and rules, and participation in decision-making have a positive effect on faculty-peer relations, which in turn aid students' social integration, commitment, and intent to stay (Berger and Braxton, 1998).

Instruction and Academic Support

No matter how good the support services or financial aid, the quality of instruction is a critical element in the college experience, especially in building academic competence and integration. A host of curricular reforms have been developed, designed to foster a more intellectually cohesive educational experience, enhance learning, and, ultimately, increase retention and graduation. Among these reforms are: Freshman Interest Groups (FIG), Learning Communities (LC), and Blocks or Clusters, all of which use group learning approaches to enhance learning. In addition, academic support programs that offer a "home base" on campus and a range of support services (supplemental instruction, group study, mastery classes, workshops, etc.) target additional academic support to at-risk or other groups of students. Once again, though, because most of these programs are voluntary there is no way of knowing whether more motivated students are also more likely to participate.

Freshman Interest Groups (FIG)

FIGs bring together freshmen who share interests and allow students to pursue those interests in a supportive educational environment. FIGs can focus on academics, arts, sports, or a wide range of other shared interests. Some FIGs involve college classes, while others do not, and many are located in residence halls. Evidence from several institutional studies suggests that FIGs help to build a sense of community among students or increase retention (Dale and Zych, 1996; Tokuno and Campbell, 1992; Goodsell and Tinto, 1993).

Blocks or clusters

Blocks or clusters (also called "block rostering") are course-scheduling methods in which students are grouped together for two or more classes. Sometimes, they are grouped for a freshman experience course and one or more other courses. For example, the First Year Experience Program at Northern Michigan University pairs a freshman seminar with other classes in "blocks." Blocks may include other components such as study groups that emphasize collaborative learning among peers and foster communities of students. Blocks may also involve collaborative relationships between faculty who team-teach or otherwise coordinate several classes. Sometimes, participating in a block also offers registration and scheduling priority, and increased interaction with faculty and advisors.

Studies of blocks and clusters show improved retention rates for participants (Soldner, Lee, and Duby, 1999; Mangold et al, 2002-2003). The benefits of clusters are perhaps greater at larger, commuter institutions where students may not be on campus for extended periods and developing relationships is more difficult. At least one study of a small, private institution with a high graduation rate showed no additional benefit from clustering students (Crissman, 2001-2002).

Participation in the Learning Community was a significant independent predictor of retention, even after controlling for student characteristics.

Learning Communities

Learning communities are programs of linked courses. In a learning community, students are not only block rostered, but the linked courses are intellectually integrated as well. Studies of these programs show higher retention rates of students. For example, at the University of Southern Maine — a commuter institution with a large number of part-time and older students — learning communities for at-risk students retained significantly more students than less structured retention programs, and surpassed the institution's two-year persistence rate (White and Mosely, 1995). Students at a metropolitan commuter university who were in a learning community of three linked classes had higher fall-to-spring retention than non-participating students, although the difference was not significant (Baker and Pomerantz, 2000). Tinto found that members of a learning community at Seattle Central Community College reported significantly higher levels of campus involvement, satisfaction, and personal, social and academic development than other students. Participation in the Learning Community was a significant independent predictor of retention, even after controlling for student characteristics (Tinto, 1997).

Academic support programs

Colleges also offer a wide range of academic support programs. Many are geared specifically to at-risk or underrepresented populations. For example, Student Support Services is a national TRIO program that provides counseling, mentoring, and academic support services (tutoring, group study, supplemental instruction, developmental instruction, etc.) to low-income, first-generation students and students with disabilities. A national evaluation found that students in the program had higher GPAs, took more credits, and had higher retention (through the third year of college) than comparison groups (Chaney et al, 1997). An evaluation of the Undergraduate Research Opportunity Program (UROP) — a home base program for minority freshmen and sophomores at the University of Michigan — found a positive effect on retention. The program helps students form relationships with faculty through workshops, presentations, peer advising, mentoring, and interest groups. The program creates a collaborative, academic and intellectual environment between students and faculty, and constantly monitors the effects on retention. This program had a significant positive effect on retention for each racial/ethnic group, with the strongest effect for low-achieving African-American sophomores. Low GPA students participating in UROP had higher persistence than a control group of low GPA students (Nagda et al, 1998).

Classroom approaches

Curricular approaches and faculty performance appear to be related to persistence (Braxton, Vesper, and Hossler, 1995; Somers, 1995b; Tinto, 1997; Johnson, 1997). Several studies comparing students who leave and those who graduate find that students who stay report more positive interactions with faculty (South Texas Community College, 1998; Heverly, 1999; Lundquist, Spalding, and Landrum, 2002-2003; Li and Killian, 1999). Braxton et al, (2000) found that an active learning approach through class discussion and higher-level thinking activities had a significant effect on academic integration, which in turn influenced students' "intent to stay" at the institution. Examples of effective classroom activities identified in the study include "the pause procedure, short writes, think pair-share, formative quizzes, lecture summaries and classroom assessment techniques." Not every study finds a strong association between faculty interaction and persistence, however (Ruddock, Hanson, and Moss, 1999).

Positive effects may be enhanced by faculty characteristics. At a Midwestern university, first-time, full-time freshmen who did not return the next semester took a larger proportion of their coursework from part-time faculty members than did the freshman cohort as a whole (Harrington and Schibik, 2001). At SUNY Binghamton, the presence of women faculty in science, mathematics, and computer sciences courses increased the likelihood of women students returning (Robst, Keil, and Russo, 1998). For women who took at least one-third of their classes in the math or sciences, the percent of credit hours taught by women was a positive predictor of one-year retention rates.

A national evaluation [of SSS] found that students in the program had higher GPAs, took more credits, and had higher retention (through the third year of college) than comparison groups.

Campus Participation

Residence halls

Living on campus also helps to foster retention. The positive effects likely occur through the opportunities for social integration that residence halls afford (Mallinckrodt and Sedlacek, 1987; Skahill, 2002-2003; St. John, Musoba, and Simmons, 2001). Residence hall living also has positive effects on graduation (Astin, 2001; Fidler and Moore, 1996). The influence of campus residency can vary by student type. At North Carolina State University, on-campus residency predicted persistence for African-American students only (Kim, 1996). At the University of Maryland, campus residence had significant effects on both persistence and graduation for white and African-American students (Gallicki and McEwen, 1989). At institutions with high overall retention rates, the effects of residence halls appear to be lower or not significant (McGrath and Braunstein, 1997; Crissman, 2001-2002; Kanoy and Bruhn, 1996).

Retaining commuter students

Because they do not live on campus, commuter students face a greater challenge in becoming integrated or attached to the institutions they attend. In addition to the factors already cited (academic interventions, counseling/advising, mentoring, etc.), there is some evidence that a welcoming environment can affect retention and graduation for both residential and commuting students.

Use of campus facilities may have an independent effect on retention. At the University of Maryland, hours spent on campus studying, conducting research, and in the campus library were connected to retention of second semester freshmen. Specific uses of the student union (but not overall hours) were also related to retention. Non-academic activities such as attending a dance or concert in the student union, eating at the campus dining hall, and working as a campus employee also influenced retention. For African-American students, studying in the library, working out at the campus gym, and participating in student union sponsored trips were related to retention (Mallinckrodt and Sedlacek, 1987).

Campus flexibility for non-traditional students

The retention issues for older and returning students may differ from those of younger students. Older, non-traditional students at two-year institutions often work full time while they are enrolled in college and have less time for social activities; therefore, flexibility in college offerings may be more important than fostering campus integration (Baker, 1996). Baker found that low-income, full-time workers leave college at higher rates. Part-time work did not seem to have as much of an impact. Baker (1996) also found that finances were more of an issue for older students than their academic performance. For students over the age of 23 at two-year colleges, persistence was negatively influenced by tuition charges to a greater degree than for younger students (Hippensteel, St. John, and Starkey, 1996).

Finances were more of an issue for older students than their academic performance.

Non-traditional students enrolled in the College of Business Administration at a metropolitan commuter university cited work conflicts and loss of income, not academic problems, as reasons for leaving (Tom, 1999). Work conflicts led to a lack of participation in extracurricular activities, as well as problems in scheduling classes. The study cited the lack of social integration and a lack of funds as factors contributing to their decisions to leave. The students needed to work to afford college, which left them little time to participate outside the classroom. The majority said they had stopped out rather than leaving permanently — 43 percent planned on returning, and 47 percent had already interrupted their education.

Summary

In addition to the student characteristics that predict college graduation, there are a variety of institutional programs and approaches that appear to have positive effects. These include summer bridge programs prior to freshman year, freshman year experience programs, freshman interest groups, block rostering of students, learning communities, and other academic support programs. There is evidence that grant aid and work-study are also associated with higher retention and graduation. Because students who participate in some programs at high levels are likely to be the ones most at risk, there is less evidence about the positive effects of counseling and developmental education. Studies with an experimental component would be needed to understand the impacts of these offerings. Living on campus is positively associated with retention but use of campus facilities may increase retention for commuter students. Older or returning students can benefit from flexible academic scheduling.

As described in the study design, we first identified institutions for inclusion based upon their relatively high percentages of Pell Grant recipients. We then selected from among those institutions two groups for study: those with the highest and lowest six-year graduation rates.[9] We have compared the two groups using indicators available from national data sets to identify any systematic differences between the groups that might help to explain their differing student performance. This section reports on the results of that comparison, using indicators of student enrollment, faculty characteristics, institutional resources and expenditures, and prior student performance. It should be noted that, while some of these data have been obtained from highly reliable national education data sets, such as IPEDS, others are institutionally self-reported to guidebooks for college applicants and may be less reliable. In the discussion and tables that follow, we indicate the source of each data element as we consider its implications.

Enrollment Differences

The high graduation rate (HGR) institutions have full-/part-time enrollment patterns that differ substantially from the low graduation rate (LGR) institutions. The HGR institutions are more likely than the LGR institutions to enroll undergraduate students on a full-time basis (Table 10). Of the 10 HGR schools, eight have full-time enrollments above 72 percent — the national average for four-year institutions. None of the 10 institutions has a full-time enrollment rate below 67 percent. In comparison, among the LGR institutions, only four of 9 institutions have full-time enrollment rates above the national average and five have full-time enrollment rates below 67 percent.

The HGR institutions have full-/part-time enrollment patterns that differ substantially from the LGRs.

Although this study did not conduct such an analysis, these substantial differences in enrollment patterns may help to explain the differences in student retention and graduation. Part-time enrollment may reflect less of a commitment to higher education, with students reluctant to invest their full effort or time. At the least, part-time students will take longer to graduate and, if they are low-income, are likely to exhaust financial aid before completing college. In national studies using longitudinal student data, full-time enrollment is strongly associated with college completion. Among the HGR schools in this study, high rates of full-time enrollment, compared to national full-time enrollment rates, may also

help to offset the institutional graduation disadvantage associated with a large share of low-income students.

It is impossible to know how the higher full-time enrollment rates in HGR institutions came about. Did these institutions establish policies that largely demanded full-time enrollment or did they somehow attract students committed to college full time because of other factors — such as recruitment efforts, location, or offerings? We do know that the HGR institutions in the study appear more likely to attract entrants of "traditional" college age, and traditional-age students are more likely than others to enroll full time:

- In six of the 10 HGR institutions, 80 percent or more of the undergraduate students are 24 years of age or younger (see Table 10).
- Only one of the eight LGR institutions for which age data are available has more than 80 percent of its under graduates in the "traditional" age range.

These data suggest that the LGR and HGR institutions may be qualitatively different in other ways as well, with LGR institutions attracting students who may have enrolled for many years without completing, are returning to higher education after enrollment sometime in the past, or are starting higher education at a later age. It is possible that at least some of the LGR institutions are "second chance" institutions, with enrollments not unlike those of community colleges.[10]

The HGR institutions are also larger institutions, on average, than the LGR colleges (see Table 10):

- Combined, the HGR institutions have an average head count undergraduate enrollment of 4,222, compared with an average head count enrollment of 2,973 at the LGR institutions.
- The HGR institutions are also more likely to offer graduate education and enroll graduate students (see Table 10). Nine of the 10 HGR institutions enroll some graduate students, and seven of the nine enroll more than 100 graduate students. Four enroll more than 1,000 graduate students.
- In contrast, only four of the nine LGR institutions enroll graduate students, with three of the four enrolling more than 100

Table 10: Undergraduate and Graduate Enrollment, HGR and LGR Institutions, Fall 2000

Institution	Undergraduate Head Count Enrollment	Undergraduate Percent Full Time	Undergraduate Percent 24 Years of Age or More	Graduate Head Count Enrollment
HGR Institutions	**(avg: 4,222)**			
A	1,361	95	91	148
B	5,353	69	62	1,042
C	2,022	88	82	235
D	853	94	93	65
E	702	100	94	0
F	12,453	78	73	1,682
G	5,755	76	70	1,216
H	3,639	89	81	549
I	7,613	67	45	2,956
J	2,467	96	87	103
LGR Institutions	**(avg: 2,973)**			
K	1,398	77	88	0
L	4,988	56	64	245
M	4,455	43	60	0
N	4,614	51	41	0
O	6,897	62	43	1,246
P	2,785	95	–	0
Q	1,183	79	78	0
R	1,241	95	78	13
S	2,165	58	51	215
National Average	4,573	72	64	245

Source: IPEDS, Fall 2000 institutional data.

but only one enrolling more than 1,000 graduate students.

In short, the full-/part-time enrollment differences may also reflect differences in broader institutional scope and interests — between smaller institutions with few graduate offerings and larger institutions with more graduate offerings.

Limited data from the *Peterson's Guide to Four-Year Colleges* suggest that students at the HGR institutions may be somewhat more academically advantaged at entrance (Table 11). Institutions report to *Peterson's Guide* on the percentage of their entering freshmen class that were ranked in the "top half" of their high school graduating class.

- Among the nine HGR institutions reporting, the percentages of freshmen in the top half of their high school class ranged from 63 to 82 percent.
- Only four of nine LGR institutions reported comparable high school rank data, and they indicated from 31 to 54 percent of entering students were in the top half of their high school class.

The limited data from the LGR institutions may also reflect the older average age of students — older or returning students may not report high school class rank.

There are few systematic differences between the HGR and LGR institutions on other undergraduate student characteristics available from our data sets:

- Both sets of institutions have relatively high percentages of minority students (see Table 11). Each of the sets includes several HBCUs. Minority enrollment among the remaining institutions in each group ranges from 12 to 51 percent.[11]
- Both HGR and LGR institutions appear to draw most of their students from the states where they are located. Although data are limited, only three of eight HGR institutions for which data are available show out-of-state enrollment rates above 20 percent. Similarly, only two of six LGR institutions show rates above 20 percent. Of the five institutions with relatively high rates of out-of-state enrollment, three are HBCUs.
- Most of the institutions in the study have higher female enrollments than the national average, although LGR institutions have somewhat higher female enrollments than HGR institutions.

Table 11: Student Characteristics at HGR and LGR Institutions, Fall 2000

Institution	Percent in Top Half of High School Class	Percent Minority	Percent Female	Percent from Out-of-State
HGR Institutions				
A	80	12	53	31
B	73	38*	66	1
C	70	78	63	12
D	73	94	70	72
E	63	100	49	42
F	81	51*	53	20
G	72	33*	42	14
H	N/A	97	58	N/A
I	72	30	56	10
J	82	98	58	N/A
LGR Institutions				
K	N/A	13*	64	13
L	N/A	28	70	5
M	N/A	47	65	2
N	N/A	93	78	1
O	45	70	71	N/A
P	N/A	95	N/A	38
Q	31	18	53	50
R	54	99	58	N/A
S	40	51	59	N/A
National Average	N/A	29	56	26

*More than 10 percent of students are of unknown race/ethnicity.
Sources: Class rank from Peterson's Guide. Percent minority, female, and out-of-state from IPEDS, Fall 2000 institutional data.

Faculty Characteristics

HGR and LGR institutions have substantially different faculty:

- The HGR institutions have much larger percentages of full-time faculty (Table 12). In the HGR institutions, nine employ 60 percent or more of their

instructional personnel on a full-time basis, and five of the nine with such data show a full-time faculty rate of 90 percent or greater.

- In contrast, only four of the nine LGR institutions have more than 60 percent full-time faculty. In the other five LGR institutions, full-time personnel account for fewer than half the faculty.
- The rates of full-time employment for faculty in HGR institutions are high, not only in relation to the LGR institutions, but in relation to national averages. Nationally, four-year public institutions have an average of 72 percent full-time faculty and private four-year institutions have an average of 60 percent full-time faculty.

Furthermore, the greater use of full-time faculty does not appear to affect adversely the ratio of students to faculty (see Table 12). In fact, the HGR institutions have somewhat lower ratios of students to faculty, on average, than the LGR institutions. Lower student to faculty ratios occur despite the fact that a largely full-time faculty is likely to cost more per FTE faculty member than a faculty rich in part-timers. When part-time faculty are defined as one-third of an FTE, we find that among the nine HGR institutions for which data are available, eight have student-to-faculty ratios at or below the national average of 17 to 1. In contrast, five of nine LGR institutions show student-to-faculty ratios below 17 to 1.

Table 12: Faculty Characteristics, HGR and LGR Institutions, Fall 2000

Institution	Percent Full Time	Student/Faculty Ratio	Percent Minority
HGR Institutions	**(average 80%)**	**(average 15:1)**	
A	78%	13:1	1%
B	61	15:1	22
C	96	17:1	74
D	N/A	N/A	N/A
E	100	16:1	67
F	96	17:1	15
G	38	23:1	18
H	96	16:1	72
I	64	28:1	11
J	90	10:1	81
LGR Institutions	**(average 62%)**	**(average 17:1)**	
K	46	26:1	3
L	49	17:1	5
M	41	25:1	19
N	31	24:1	85
O	78	29:1	14
P	49	28:1	89
Q	91	20:1	10
R	83	13:1	78
S	88	18:1	16
National Average	59.7	17:1	27

Student faculty ratios assume that part-time faculty are employed on a 1/3 time basis.
Source: IPEDS, Fall 2000 institutional data.

The combination of high percentages of full-time faculty and lower student-to-faculty ratios suggest that the HGR institutions may offer students smaller classes and more opportunity to interact with faculty. There are more FTE faculty available overall at the HGR institutions and students are more likely to attend classes taught by faculty who are committed to the institution for their livelihood. (As we shall see in the later discussion of commonalities among the HGR institutions, students and faculty report that the opportunity for interaction is a major factor in institutional success.) Finally, there do not appear to be systematic differences between HGR and LGR institutions with respect to the percentages of minority faculty when HBCU status is taken into account (see Table 12).

The Cost of Education: Institutional and Student Spending

Given the greater use of full-time faculty and the lower number of students per faculty member, it is not surprising to find that the HGR institutions spend more money per FTE student.[12] What is surprising is how much more they spend per FTE undergraduate enrollment than the LGR institutions (Table 13):

- Across the 10 HGR institutions, total expenditures per FTE student ranged from $12,400 to $35,800. Only three institutions showed per-FTE expenditures below $15,000 and four had expenditures above $20,000.

- Among the LGR institutions, expenditures per FTE ranged from $10,500 to $17,900, and only two institutions had expenditures above $15,000.
- The median expenditure among the HGR institutions ($18,600) is 59 percent higher than the median for the LGR institutions ($12,019). The median per-student expenditure among the HGR institutions in fact exceeds the amount spent by any of the LGR institutions.

Nationally, public four-year institutions spend, on average, about $20,000 per FTE undergraduate enrollment, meaning that half of the HGR institutions in the study spend slightly less than the national average and all of the LGRs spend only about half the national average. These large differences in per-student resources may well play a major role in explaining the differences in student outcomes.

Table 13: Institutional Expenditures and Students Costs, HGR and LGR Institutions, Fall 2000

Institution	Expenditures per FTE Undergraduate Student	In-State Tuition (and Percent per Student Expenditures Tuition Reflects)	Full Costs (Inc. Room, Board, Other)	Average Institutional Grant (to First-Time Students)	Percent of Full-Time First-Time Students Receiving Institutional Grants
HGR					
Medians	$18,600	$ 5,200	$12,006	$ 3,407	50
A private	$35,799	$19,196 (54%)	$28,962	$12,200	94
B public	$14,959	$ 1,875 (13%)	$11,775	$ 1,710	45
C public	$19,162	$ 1,840 (10%)	$ 8,154	$ 2,740	15
D private	$18,621	$ 9,790 (53%)	$19,472	$ 5,731	71
E private	$12,398	$ 6,370 (51%)	$11,980	$ 2,395	77
F public	$20,767	$ 3,006 (14%)	$12,032	$ 1,226	33
G private	$28,016	$17,030 (61%)	$26,850	$ 6,311	75
H public	$18,174	$ 4,096 (23%)	$10,796	$ 980	17
I public	$13,767	$ 3,296 (24%)	$ 8,096	$ 4,074	49
J private	$27,313	$10,496 (38%)	$19,358	$ 4,153	55
LGR					
Medians	$12,019	$ 3,282	$14,269	$ 1,274	35
K private	$10,938	$11,395(104%)	$21,285	$ 4,374	97
L public	$12,019	$ 2,314 (19%)	$11,768	$ 1,532	23
M public	$16,279	$ 2,322 (14%)	$11,582	$ 1,040	8
N public	$13,599	$ 3,282 (24%)	$14,269	N/A	0
O private	$ 9,525	$ 8,950 (94%)	$18,635	$ 1,796	35
P private	$17,852	$ 12,592 (71%)	$20,362	$ 5,000	48
Q public	$10,510	$ 2,022 (19%)	$ 6,172	$ 604	41
R private	$10,764	$ 9,640 (90%)	$16,508	$ 1,274	27
S public	$12,816	$ 2,124 (17%)	$ 9,218	$ 519	37
National average	$16,329	$15,064	$21,423	$ 4,165	15

Source: IPEDS, Fall 2000 institutional data.

Yet at the same time that the HGR institutions spend much more per student than the LGR institutions, the nominal costs of education to the students who attend these institutions do not appear to differ commensurately. Bearing in mind that the official costs of attendance (tuition, room and board, books, etc.) often do not reflect actual student costs — because large numbers of students receive subsidies or discounts — we see that the institution-reported costs of tuition are slightly higher at the HGR institutions (see Table 13):

- Among HGR colleges (in-state) tuition and fees range from $1,840 to $19,200, with the median cost at approximately $5,200.
- Among LGR institutions (in-state) tuition and fees range from $2,000 to $12,600, with the median cost at $3,282.

But if other costs, including room and board, are added, the differences in cost between HGR and LGR institutions change, with the HGR institutions showing a range of $8,100 to $28,950 and a median of $12,006, while the LGR institutions range from $6,200 to $21,300 and a higher median cost — $14,300. Overall, tuition and living costs at most of the institutions in the study, HGR and LGR alike, fall below — and often well below — the national average for four-year institutions.

Even though their tuition costs may be somewhat higher, students at the HGR institutions are more likely than those in LGR institutions to receive grants that offset the costs of attendance (see Table 13). For first-time, full-time students, both sets of institutions offer federal grants of roughly similar size to low-income students, and public institutions in both sets of schools also offer state grants at similar rates (see Appendix B). Institutional grants differ dramatically, however, and substantially offset the costs of attendance, in the highest-cost HGR institutions.

- At the highest-cost HGR institution (tuition $19,200), 94 percent of first-time, full-time students receive an institutional grant and the average grant is $12,200.
- At the next most expensive school (tuition: $17,000), 75 percent of the first-time, full-time students receive an average of $6,300 in institutional grants.
- Overall, institutional grants at HGR institutions range from $980 to $12,200, with a median grant of $3,407 and a median 50 percent of students receiving an institutional grant.
- Among the LGR institutions, grants range from zero to $5,000 with a median grant of $1,274 and a median of 35 percent of students receiving institutional support.

Thus, the somewhat higher cost of attending an HGR institution is more than offset by institutional assistance (i.e., discounting).

Even though their tuition costs may be somewhat higher, students at the HGR institutions are more likely than those in LGR institutions to receive grants that offset the costs of attendance.

If we compare the per-student institutional expenditures described earlier with the tuition students pay, we find that, even without taking tuition offsets (i.e, institutional grants) into account, tuition accounts for a smaller share of institutional expenditures in the HGR than the LGR institutions. We would expect tuition to be a small share of costs at public institutions and that is largely the case:

- Among HGR public institutions, tuition accounts for 10 percent to 24 percent of per-student expenditures.
- In the five LGR public institutions, tuition accounts for 14 percent to 24 percent of per-student expenditures (similar to the HGR institutions).

What is particularly noteworthy are the differences in tuition as a share of costs in the private institutions.

- Among HGR private institutions, tuition accounts for between 38 percent to 61 percent.
- But in the four private LGR institutions, nominal tuition ranges from 70 percent to 104 percent of per-student institutional expenditures. In three of these institutions, nominal tuition is 90 percent or more of per-student expenditures.[13]

While there are some small institutional grants that offset tuition costs for small percentages of students, these private LGR institutions would appear to have few sources of income beyond tuition. Thus, they are at the mercy of year-to-year enrollment fluctuations and federal or other payments to students.

Even without considering their higher graduation rates, what these financial data suggest is that the HGR institutions may be a better buy. The HGR institutions appear to spend more on education without greater student outlays.[14] These higher expenditures are true for both public and private institutions. Further, the private HGRs have more resources to spend beyond tuition than their private LGR counterparts. Greater resources appear to translate into considerably higher rates of full-time faculty and the opportunities such faculty offer for faculty-student contact. Finally, the greater resources

of the HGRs are available to students without much additional student cost, once institutional grants to students (essentially tuition offsets) are taken into account.

Summary and Discussion

There are important systematic differences in student body and resources between the HGR and LGR institutions in the study, differences that are likely to play a major role in explaining their differing graduation rates. As we have shown, HGR institutions are more likely to enroll students on a full-time basis. They are also more likely to draw students of "traditional" college age (i.e., recent high school graduates). Limited data on prior performance suggests that students at HGR institutions may also have better academic preparation for college. HGR institutions have more full-time faculty, lower student/faculty ratios, some graduate offerings, and most importantly, far greater resources for their education than LGR institutions. Ironically, the students at high-cost HGR institutions probably pay no more out of pocket for education than do the LGR institutions because the HGR institutions with high tuition also offer larger institutional subsidies to more students.

These findings also suggest that the LGR institutions in this study face extraordinary challenges in providing education, let alone retaining and graduating students. What is most striking is their level of per-student resources. Only four of the nine LGR institutions and none of the LGR private institutions are even in the same range of per-student expenditures as any of the HGR institutions. Their per-student expenditures are substantially lower than national averages as well. Not surprisingly, they must employ relatively large shares of faculty on a part-time basis in order to keep costs low. When coupled with student bodies that are older, are likely to have had poorer academic preparation, and are attending school part-time, this financial profile takes on even greater significance. These institutions are spending much less than average to serve a population with much greater than average academic need. Given their resources and student bodies it is quite possible that the LGR institutions are performing relatively well in retaining and graduating students, even at the low absolute levels that led to their inclusion in the study. Unfortunately, we cannot address this issue — performance relative to student body and resources — with the data at hand.

HGR institutions have more full-time faculty, lower student/faculty ratios, some graduate offerings, and more importantly, far greater resources.

What we can learn are the factors that HGR institutions share. We know that, compared with other institutions (in the NCAA data set) that have substantial shares of low-income students, these institutions are some of the most successful at retaining and graduating students. We also now see that most of them have student bodies that are largely young and enrolled full time. Nonetheless, most of the HGR institutions still spend less than the national average per undergraduate student to provide education and, as we shall describe later, they are not highly selective. Clearly, they must be doing something right. The next section of this report looks at the commonalities in policy and practice that we observed at the HGR institutions that may help to explain their performance.

COMMONALITIES AMONG THE "HIGH GRADUATION RATE" INSTITUTIONS

The HGR institutions in the study are a diverse group of four-year colleges and universities. They include:

- A public, Historically Black land-grant college of about 3,600 undergraduates with a six-year graduation rate of 45 percent. Located in a rural area, the school is nominally open enrollment, but students who have not completed a college prep curriculum or do not have a 2.0 high school GPA are admitted as provisional only. Popular majors include engineering technology and sciences, and applied professional sciences.

- A large land-grant state university with 12,500 undergraduates, "slightly" selective (2.5 GPA, college prep curriculum completed), and a six-year graduation rate of 41 percent. The institution is located in a small but growing urban area and popular majors include business, education, engineering, and the social sciences.

- A private, Historically Black college of 2,400 undergraduates with a strong religious base and six-year graduation rate of 43 percent. The institution is modestly selective, seeking students with at least a 2.5 GPA, 720 SAT or 15 ACT, but conditionally admitting some students without those qualifications. The institution is located in a rural area and popular areas of study include engineering, health and natural sciences, and business.

- A rural private university with 1,400 undergraduates that is relatively selective (at least 1000 SAT for regular admissions, some special admits accepted) and has a six-year graduation rate of 65 percent. Largest majors include business and the social sciences.

- A state university campus with 7,600 students that is modestly selective (2.0 GPA, 18 ACT/870 SAT) but conditionally accepts some without those grades or scores. Its six-year graduation rate is 43 percent. Located in a small town, popular majors include education, criminal justice, accounting, and nursing.

For institutions with large percentages of low-income students, these HGRs have some of the highest graduation rates among NCAA institutions.

- A private, religiously-oriented Historically Black college with 700 students, located in a mid-sized city. The institution has an open admissions policy, and a six-year graduation rate of 56 percent. Popular majors include business and the natural sciences.

- A modestly selective state university campus (seeks top third of high school class, or for out of state applicants, a 2.5 GPA and 900 SAT) with 5,400 students and a six-year graduation rate of 42 percent. Located in a rural area, the most common majors are liberal studies and business. Many students are preparing for teaching careers.

- A public, Historically Black college with approximately 1,800 students that is modestly selective (at least a 2.0 GPA, 700-800 SAT for most students), and reports a six-year graduation rate of 49 percent. Located in a small town, social science, business, and protective services are the largest programs.

- An urban, private university with 5,800 students that may be described as moderately selective (two-thirds of entrants score at least 500 on the math SAT). The six-year graduation rate is 52 percent. Popular majors include business, marketing, computer sciences, and health.

- An urban, private, Historically Black university with 850 students that is modestly selective (2.5 GPA, "competitive" SAT/ACT, and good recommendations). Its six-year graduation rate is 56 percent.

As can be seen from these brief descriptions, half of the institutions are HBCUs. The high percentage of HBCUs among the institutions is due to the high percentages of low-income students at HBCUs in general.[14]

Some of the six-year graduation rates among the 10 institutions may not seem terribly impressive by national standards — about half of all students who enter four-year colleges have graduated from the same institution six years later — yet all but three of the institutions have higher rates than the national average. However, for institutions with large percentages of low-income students, these HGRs have some of the highest graduation rates among NCAA institutions.[15] Furthermore, by national standards these are relatively small colleges and universities overall. The average undergraduate enrollment for the 10 HGRs is below the national enrollment average.

Because low-income students are large percentages of all students at these institutions ... it is likely that their graduation rates do not differ substantially from graduation rates for students as a whole.

We selected these institutions based upon their overall graduation rates. We do not know whether low-income students who attend these institutions have the same graduation rates as students as a whole. Most of these institutions have not studied whether low-income students perform better, worse, or the same as other students. In preparation for our visit, one university did carry out such an inquiry and found that Pell Grant recipients had the same graduation rates as students as a whole. Because low-income students are large percentages of all students at these institutions — Pell Grant recipients represent between 38 percent and 82 percent among the 10 institutions and more than half of all undergraduates in all but three institutions — it is likely that their graduation rates do not differ substantially from graduation rates for students as a whole.

COMMON PRACTICES AT HGRS

The following section describes commonalities in policy and practice observed among these 10 institutions that may help explain their relatively good performance. The discussion reflects 2 to 2.5 day visits to each of the 10 schools during 2002. The findings are organized under four themes:

- A Personal Education
- A Commitment to Undergraduate Education
- A Community Apart, and
- A Hospitable Policy Environment.

Under each theme, common elements in policy and practice are described that reflect the theme and may help to explain the graduation rates we have observed. It is important to keep in mind that not every institution in the study fits neatly under every theme or engages in every practice. If we observed a particular policy or practice at several institutions it is described here, whether it was observed everywhere. Furthermore, the common elements described may or may not explain their high graduation rates. It can simply be stated that institutions with these characteristics also show relatively high rates of student retention and graduation.

A Personal Education

Across the HGR institutions, one important common element is the extent to which the institution creates a personalized educational experience. The faculty and staff see their roles as directive, helping students to make the right course choices, keeping close track of their educational progress, and intervening if problems arise. During the site visits, we heard repeatedly from students, faculty and staff such sentiments as "Nobody gets lost here," or "You can't be anonymous in classes here." The institutions personalize education in a variety of ways — through advising, small classes and special programs.

Intentional, intrusive academic plans. The HGR institutions put a great deal of effort into shaping students' educational experiences. Seven of the 10 institutions employ intrusive advising aimed at ensuring that students make initial course choices that will ensure academic success and steady progress toward graduation. These institutions generally require students to attend multiple meetings (three or more) with their advisors each semester, although not all students show up for all "required" visits. Faculty and staff advisors encourage students to declare majors as soon as possible so they will know exactly what courses they will need to graduate. Some of the institutions place strict limits on the number of units entering students may take, regardless of their past performance. Advisors in some of the institutions conduct mid-term reviews with students who appear to be having academic difficulties (two of the institutions send notices to parents as well). Making sure that students complete general education requirements early is also a goal. Here are some examples:

One important common element is the extent to which the institution creates a personalized educational experience.

- At a public HBCU, all new students are enrolled in a freshman program and assigned a professional or faculty advisor. At the initial meeting, the advisor provides the student with an already-developed schedule for the semester. At the conclusion, the student receives a PIN number for online registration. The online system also allows advisors to track student progress each semester, while students can get accurate information on the courses they still need to graduate. Dropping or adding classes requires an advisor's signature. If students do not declare a major by the end of the freshman year they stay in the freshman program for additional advising. Faculty advisors are required to complete training. At-risk students have both freshman program and faculty advising from the outset. Typically, students have multiple meetings with their advisor each semester.

- At a large private university, all new students are assigned to professional advisors for the first semester. The advisors tell the students to take 12-15 credits so as not to overextend themselves. By second semester, students switch to faculty advisors in the colleges that reflect their areas of interest and the faculty advisors provide more directive, guided assistance. In some popular majors — such as business — the four-year curriculum provides little room for student choice in courses. Students who perform below a 2.0 are targeted for intrusive advising that requires multiple meetings during the semester and plans for improvement.

Summing it up succinctly, students at one HBCU said the advising system was "parental."

Most of the institutions in the study use faculty advisors. Advising loads ranged from 10 or 12 to 30 per faculty member, depending on the institution. These relatively low numbers provide advisors an opportunity to get to know the students they advise. No one reported that faculty advisors provided insufficient time for student assistance, and respondents at several institutions indicated that faculty advisors spend considerable time with each student. The amounts and kinds of training for faculty advisors differ — some institutions provide intensive annual faculty training, whereas others send out information as needed. Faculty also teach freshmen orientation classes that help students plan their academic programs, learn study skills, and plan careers.

A few institutions use different advising systems. One larger public institution conducts small group advising by professionals in the summer prior to freshman year. Once students are enrolled, they are advised by faculty in some colleges but professional counselors in others. Special programs including Student Support Services (SSS) and ethnic affinity programs also serve as advising resources for the students who participate. Most faculty advisors have 30 or fewer advisees and some faculty are more directive than others in steering students to particular classes or teachers. In another institution, a "summer bridge" for low-income or at-risk students prior to freshman year offers academic advising followed by enrollment in one of several special programs (SSS, Educational Opportunity Programs, etc.) One private university conducts an orientation week for new freshmen the week before school starts with placement tests and advising.

When students are having academic difficulties, the advising systems become particularly active. Many of the HGR institutions have strict policies about academic probation and suspension but nevertheless make substantial efforts to improve the performance of students who perform below a C average. One private college holds meetings in each semester at which faculty and administrators review the performance of every student in the college. Students with low GPAs are asked to present plans for how they will address academic deficiencies. The committees review the plans and then decide whether to require additional advising, place the student on probation, or take other action. In another public institution, mid-term reviews that show academic deficiency may lead to action plans that require tutoring or other action. One HBCU sends out a list of students with GPAs below 2.0 to retention counselors. Students below 2.0 must write an essay about why they did not perform well and how they will improve before being allowed to register for the next year. Students at one institution said they were "grounded" by the "reality check" of mid-term advising and valued faculty help in devising corrective actions for academic deficiencies.

Most of the HGR institutions take pains to ensure that students get directive assistance in selecting an educational program.

In short, most of the HGR institutions take pains to ensure that students get directive assistance in selecting an educational program. Much of the direction is provided at college entrance, and it is aimed at ensuring that students complete requirements and do not overextend themselves. The colleges reinforce their direction with firm efforts to get students to declare majors early and with active intervention when students experience academic difficulty. The relatively low numbers of students per advisor and the amount of time devoted to guiding students allow entering students the opportunity to develop strong relationships with advisors. Not every student may take equal advantage of the system, but the option is there to do so.

Small classes. One of the most consistent findings among the HGR institutions is the predominance of small classes, even at the freshman level. When asked what institutional factors were responsible for the institution's success in retaining and graduating students, faculty and staff often mentioned small class size as the first or second most important factor. We have already seen that HGR institutions have a greater percentage of full-time faculty members than the LGR institutions as well as student-to-faculty ratios that are about average for all higher education institutions. Qualitative information collected during the site visits shows that

typical freshmen classes are small and, in many of these institutions, no larger than those found in high schools.

While we do not have information on typical class sizes from every institution, large lecture classes were not common in any of these 10 institutions. One relatively small private university reports that 35 students are considered a large class and that a typical freshman class in arts and sciences includes 17 students. There are a few introductory lecture classes but they typically include 30-35 students and are held to a maximum of 60. Another public state college reports that all freshman courses are taught by full-time faculty members and that the largest classroom on the campus holds 110 students, but that most classes are quite small. Officials at one public HBCU indicate that the school offers no large lecture classes. At the largest private college in the study, the average class has 22 students. Even at the largest state university in the study the average lower division class size was reported as 39 students; in the upper division, class size was lower, at an average of 22 students. Officials at several institutions stress that all freshmen classes are taught by full-time faculty — no part-timers or adjuncts.

Students indicate that small class sizes figure prominently in why they like the institutions and why they and their classmates are likely to stay. In group discussions with students conducted at each site, students noted the small classes in which they were enrolled offered a great deal of personal attention and opportunities for discussion. Students said they were able to talk to professors easily and get to know their fellow students. They contrasted the small classes they take with the large lectures that they know to be the case at other institutions. Faculty know students by name and some faculty take attendance at each class. Students may bemoan the fact that they can't be anonymous, but most appreciate the personal attention small classes afford.

Making students special. Almost all of the HGR colleges have special or professional affinity programs that enroll subgroups of students on the campus. Many of these programs serve low-income students explicitly, or serve students that are disproportionately low-income (first-generation, minority, or at-risk students). While not every targeted student participates in these programs, many do. Other special programs focus on high-achieving students; several of these institutions have honors programs or colleges. Some of the special programs offer financial aid for participants — especially the state educational opportunity programs — and summer employment linked to the students' professional goals. These programs include the TRIO program, SSS, which enrolls first-generation and low-income students; state-level educational opportunity programs focused on at-risk low-income or minority students; other public agency programs (particularly federal programs) aimed at minority students, such as National Science Foundation sponsored programs; and programs sponsored by professional associations or academic departments, such as minority engineering, business, and science programs.

Students indicate that small class sizes figure prominently in why they like the institutions and why they and their classmates are likely to stay.

These special programs provide services and academic support that further individualize and personalize education. The programs play an active role in shaping students' academic programs. Typically, they provide students with guidance on course-taking and, in some institutions, special program staff serve as the participant's advisor of record. In at least two of the institutions, enrolling in a special program is mandatory for conditionally or specially admitted students. A few of the programs offer assistance even before the first semester of freshman year, through summer bridge programs that provide instruction and tutoring — in math especially — as well as advising, social programs, etc. During the school year, the programs also provide tutoring, peer mentoring, and other academic support. They may also help students form study groups for common classes. Some offer summer jobs or internships, especially programs for minority science, math, and engineering students. In the programs that focus on a particular field or career (sciences, math, business, etc.), students are guided by faculty and other professionals in those fields.

Some have argued that special programs may offer excellent services but that students are stigmatized by

participating. We saw little at these 10 colleges to suggest that participating in these types of special programs had negative consequences for students. In fact, students involved in these programs were generally enthusiastic about the services. There is some evidence from the national evaluation of Student Support Services that participation enhances the likelihood of staying in college and graduating. It is impossible to generalize to all programs, but in the views of faculty and staff at the HGR institutions, these programs play a major role in structuring students' education and encouraging them to pursue careers.

A unique place. One of the HGR institutions has an intensive approach that is unique among the institutions we visited. The only open admissions institution in the group of 10, this small, religiously-oriented HBCU offers a highly structured educational experience. New students first arrive in July with their families for a two-and-a-half day orientation. Students take assessment tests, which are sophomore proficiency exams that provide the basis for assignment to classes. Students who lack sufficient skills are enrolled in intensive five-credit courses in math, science, and English. All students also enroll in a two-credit freshman experience course. Faculty take attendance at all classes and contact parents if students are absent more than a few times. Students must attend chapel once a week.[16] There is even a dress code. More than 20 percent of the students are also enrolled in Student Support Services. Some students find the prescriptive approach difficult, even describing it as a "boot camp," but most decide that its advantages (a strong likelihood of completing a four-year degree despite poor academic skills at entrance) outweigh its disadvantages. Everyone agreed that the "hands on" quality of schooling at this institution means that no one can remain invisible.

A Commitment to Undergraduate Education

A second commonality among the HGR institutions is the emphasis placed on undergraduate teaching. We have already seen that these institutions offer classes that are relatively small, even at the introductory level. In addition, we found that faculty in the 10 institutions are either exclusively focused on teaching or indicate that teaching undergraduates is their main business. A few of the institutions have graduate schools of some size but, nonetheless, emphasize their undergraduate programs. In all of these institutions, students indicate that faculty are accessible and supportive. Beyond teaching, we found that freshman course offerings are fairly standard, although some of the institutions are beginning to adopt curricular innovations. Classroom instruction is often accompanied by supplemental academic assistance, however. Availability of developmental education varies widely, as state rules determine the availability of developmental education in public institutions.

We found that faculty in the 10 institutions are either exclusively focused on teaching or indicate that teaching undergraduates is their main business.

A dedicated faculty. In all but one or two of the HGR institutions, students and staff report that the faculty are caring, helpful, and focused primarily on undergraduate instruction. As already noted, most of the HGR institutions have largely full-time faculty, and the proportions of full-time faculty are higher than the national average. Those numbers tell just part of the story, however. Site visitors were impressed with the attitudes of faculty, noting that the faculty members they spoke with see themselves as responsible for the success of their students. As one college administrator put it, "We take average students and make them exceptional students." Some of the institutions encourage faculty to conduct research, but even in those institutions, faculty and staff reiterate that quality of teaching is a major factor in decisions on hiring and tenure.

At most of the institutions students described their teachers as excellent, inspiring them to persevere and achieve. We had no "hard" evidence to reinforce this anecdotal information from students we met, but the message in the student group interviews was consistent. One large state university campus had surveyed students on features of the institution they liked best. The high quality of teaching, including opportunities for classroom interaction, was the number one factor cited by students across the institution.

Stories of supportive faculty were widespread. At these high-performing institutions, faculty often interact with students outside of class — sponsoring clubs, staffing special professional programs, offering students opportunities to assist in research, inviting students to their homes. Faculty attend summer orientations, often meet with parents, teach freshman experience courses and the like. At some of the institutions faculty are on campus all day, every day, not just during classes and office hours. We heard stories of faculty who assisted students who needed financial help. We also heard about faculty who intervened when minority students were poorly treated by businesses near campus. At almost all of the institutions we were told that faculty have high performance expectations for students that encourage high achievement.

Educational innovation then and now. In visiting these institutions, we were interested in finding out what kind of educational experience undergraduates in general, and freshmen in particular, were likely to encounter. We wanted to see whether these institutions had adopted particularly interesting, innovative, or unique approaches to education that might help to explain their success. We asked what kinds of classes or programs students might experience in their freshmen year. We found that, in the years from which our student performance data were drawn, these institutions offered fairly conventional freshman courses aimed at building basic skills, fulfilling general education requirements, or exploring possible fields in which to major. While several of the institutions are currently exploring or have begun to adopt curricular innovations, such as learning communities or other more integrated approaches to freshman year studies, students who recently completed their education (and are, thus, included in the data we used to select these institutions) were not affected by those reforms in most of the institutions.

One curricular innovation that appears to have been adopted widely (and to which the students in our data were exposed), is a freshman course aimed at helping students acclimate to campus, learn to study, and plan for the future. At least eight of the 10 institutions offer some form of this course. This course has a variety of names: freshman seminar, freshman orientation, freshman 101, or a similar title. These courses are offered for credit and are sometimes required of all entering students. They offer information on study skills, test taking, and time management. They also inform students about the academic support services available at the campus and how to use them. They provide career information and sometimes include career inventories or other tests of student career suitability. In some cases, the courses include additional individual advising. In general, the courses are taught by regular, full-time faculty whose disciplines range widely, giving students another opportunity to get to know faculty early on.

The other academic "innovation" ... at most of the institutions is academic support linked to the courses students take in their freshman year.

The other academic "innovation" we noted at most of the institutions is academic support linked to the courses students take in their freshman year. These freshman courses include the general education classes and the "gatekeeper" courses for majors, as well as developmental education in those institutions that offer it. All of the institutions offer opportunities for peer tutoring linked to freshman courses and most offer supplemental instruction (SI) or mastery classes — an additional hour or two of instruction a week tied to the lecture or class content — led by knowledgeable students or faculty. In many of the institutions the amount of SI/mastery is limited; it is usually available for math classes, and sometimes for other classes that students find particularly difficult. Most of the institutions also have some form of writing lab where students may bring class assignments. Other common academic support services include peer tutoring, technology and computer centers, learning centers, study groups, etc. Most tutoring is free to students, although there may be limits on how much is available. Depending on the institution and its size, services may be centralized or provided by individual colleges or departments.

One institution appears exceptional with respect to the amount and intensity of academic support. This is the only institution that has provided team teaching for freshman courses for several years. It offers a great deal of faculty and student tutoring to accompany almost every freshman course

as well as supplemental instruction and laboratories attached to general education and freshman classes, all led by regular full-time faculty. The institution also offers free tutoring to students in those classes. This institution is now exploring more formal learning communities, having already linked the freshman courses in some fields.

Improving basic skills. The institutions differ with respect to opportunities for gaining the basic skills needed to perform well in college. At least four of the institutions offer summer bridge programs prior to freshman year, but most programs are limited to math and/or the sciences, and not all students attend. One offers a summer math program of 4-6 week duration for 25 potential math or science majors. Two offer summer bridge programs only for students in economic opportunity or other special admission programs. One institution offers a bridge program between freshman and sophomore years as well.

In years past, most of the HGR institutions had developmental or remedial offerings, but at the present time less than half the institutions have official developmental programs. It is quite possible (depending on when they were phased out) that the students upon whose performance we based the selection of these institutions had considerably more opportunity for developmental education than do current students at the 10 HGR schools. Those opportunities might help to explain the graduation rates we observed. At present, six institutions offer no official developmental education. Two of the six had developmental classes until recently forbidden by state law. In these states, students who need remedial or developmental education can no longer attend four-year colleges until they have completed developmental instruction. The one open-enrollment HGR institution abandoned developmental education on its own a year ago, changing to five-credit intensive freshman classes in math, science and English. At this private HBCU, officials said that students felt stigmatized in the old program. One institution without any official developmental classes nonetheless offers a half-year math tutorial that is taken by many students and carries no credit. In this institution (and possibly in others) students performing below certain acceptable levels cannot enroll in "restricted" majors. Some of the institutions that eliminated developmental offerings now allow students to repeat courses without penalty, substituting the second grade for the first.

What is clear is that many students enter without solid basic skills and that most of these institutions make a concerted effort to improve students' basic skills ...

The remaining four institutions offer some developmental classes, but the extent of offerings and the percentages of freshmen participating differ considerably. At two institutions, developmental education is limited to the students in special programs — one of these is a conditional admit program, the other is a Student Support Services program. At the other two institutions, sizable shares of freshmen take developmental education — one institution estimates that 35 percent are enrolled in intensive four-day-a-week math, reading, writing and speech classes. In the other institution we were told that "large" numbers of freshmen take remedial English and math. Because of institutional and state policies, it is hard to know whether the institutions without official developmental classes do, nonetheless, offer comparable instruction either in credit classes or through "tutoring" or learning centers. What is clear is that many students enter without solid basic skills and that most of these institutions make a concerted effort to improve students' basic skills through tutoring, additional class hours (SI, mastery classes, etc.), study groups, laboratories or other methods. In short, there is a sizable developmental effort taking place in these institutions.

A Community Apart

Only two of the 10 HGR institutions are located in large cities. Many of the HGR institutions are located in small towns in rural areas, far from the population centers in their respective states. In visiting these institutions, we were struck by the degree to which the campus is a true focus for the students (and the faculty and staff as well); the center of their social as well as their academic lives. Further, several of the institutions have adopted policies that ensure that students live on campus, and residence halls offer a wide assortment of

social and academic activities that foster attachment to other students and the institution. In some instances, social integration is also fostered by shared values and beliefs. Of course, these institutions also attract students who want a campus-based educational experience, so it is difficult, if not impossible, to know exactly what role the campus plays in institutional success. Nonetheless, these institutions share geographic and social characteristics that are worth noting.

The advantages of isolation. Most of the HGR institutions are in small towns or small cities surrounded by rural areas and far from major population centers. Although distributed across the country, most are in rural settings with limited opportunities outside the institution for social interaction. By design, or because of isolation, these institutions' officials (and the site visitors) describe these colleges as communities, villages, etc. Only three of the institutions are commuter schools, with students driving from surrounding areas, but most are largely residential. Freshmen in particular are likely to live on campus, while students who do not live on campus generally live nearby.

Because there are few other institutions or cultural attractions nearby, the institutions make special efforts to provide a wide range of social and cultural opportunities. These institutions offer clubs, affinity groups, and social activities that are seemingly disproportionate to their size. For example, one institution with 2,000 students boasts over 100 clubs, an active student government, racial/ethnic affinity groups, and many cultural events. As officials noted, the school is an "enclave" where students can feel safe to try new things. Another institution has an active student government and organizes low-cost trips (skiing, hiking, city visits) to build cohesion and keep students from feeling isolated. Most of the institutions have extensive event schedules, with everything from homecoming to concerts to athletic events. At these institutions, faculty and staff play central roles as sponsors of clubs, groups and activities, providing students many opportunities to interact with them outside the classroom. As one staff member said about her campus, "We're a small campus but there's a 'hook' for everyone here." At most of the schools, students and faculty said that most students participate in some club or program. The faculty and staff see these programs as important, not only to build social cohesion, but as opportunities for students to develop self-confidence and leadership abilities. Not all students take part, but in most of the schools the majority of students participate in some activity.

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Geographical isolation also means that students who work are likely to work on campus. The institutions need part-time help and the students are the main source of available labor. Because these institutions draw relatively large percentages of students who are low-income, the institutions also take advantage of the Federal Work-Study program at relatively high rates. At one school, more than a quarter of the undergraduates are employed on campus. On-campus work links students with faculty and staff, increasing institutional attachment, even when the work is not professional in nature. Several of the institutions also offer school-year and/or summer employment or internships through federal, professional, or other programs aimed at drawing minority students into business, engineering, the sciences, or other fields. Some of that employment is also at the institutions, although it is also in businesses or elsewhere.

The residential component. A few of the institutions are commuter schools, with students driving in from surrounding areas, but most are primarily residential. Freshmen, especially, are likely to live on campus, while students who do not live on campus generally live nearby. Five of these institutions require freshmen (or freshmen under 20 or freshmen and sophomores) to live on campus. One institution has a special lounge for those students who do commute. A few of the institutions have active Greek programs that include housing, but at most of the institutions the students live in residence halls. The halls are a focal point for student activities, although in most of these institutions the activities are social rather than academic. Dorm-based residence advisors counsel students, plan activities, and provide support. Most

schedule activities at least weekly. There are also constraints on students' behaviors at a few institutions, including single-sex dorms without visitation rights by the opposite sex, dry campuses, etc. Given that these are institutions drawing sizable shares of low-income students, the extent to which these HGR institutions are residential is notable.

Shared values. Many of the students at these institutions come from low-income families, but they share other characteristics as well. These shared characteristics may help to build group cohesion and may also, independently, influence students' college retention and graduation. We have already noted that five of the 10 schools are HBCUs, and there is some evidence to suggest that African-American students who attend HBCUs have somewhat higher graduation rates than comparable students who select other schools. Three of the five HBCUs are also religiously-affiliated, and campus life includes religious services and activities. Faculty and staff at several institutions indicate that, because of their rural location, the schools draw students disproportionately from rural areas and small towns nearby, and attract students who are reluctant to go to college in large cities. Sometimes even the small-town campus looks large compared to the high schools the students attended. Faculty and staff say these small-town and rural students have been raised to value hard work and are highly motivated to complete college. They are often the first in their families to attend college.

At several institutions, faculty and staff pointed out that they share the students' backgrounds. They come from small towns and rural areas, attended similar colleges (even the same institution in some cases), were in the first-generation in their families, and were similarly motivated. Some of the minority-serving institutions also have large minority faculties and staffs. At one larger institution with a sizable Hispanic student population, officials speculated that students may be motivated to continue and complete their education because they see Hispanics role models among the many Hispanic faculty and staff. Conversely, faculty and staff who come from the same backgrounds as the students have high expectations for student performance and want to see their students succeed.

Faculty and staff who come from the same backgrounds as the students have high expectations for student performance and want to see their students succeed.

Everyone we spoke with noted that the college life these institutions offer is not for everyone. We met students who said they felt hemmed in by small-town campus life and planned to transfer to larger institutions or institutions in urban areas. We also talked with students who were quite positive about their school but noted that friends had chosen other colleges because they didn't want to be physically isolated. It is possible that students who select these institutions are more likely to be quite serious about education and willing to persevere to graduation than comparable students who select more urban institutions with outside distractions.

A Hospitable Policy Environment

So what do the institutions do explicitly to attract, retain and graduate their students, including their low-income students? Is it all a matter of attitude, campus climate, and culture, or have these institutions adopted policies that may help to explain their performance? We wanted to look beyond instructional "practice" to see if there were other institutional factors or policies that might help us understand why these institutions are successful in retaining and graduating students.

Recruitment and admissions. The 10 HGR institutions did not intentionally set out to serve low-income students. Recruiting low-income students is not an institutional goal in any of these schools but is largely a by-product of other recruitment goals and realities. As we have noted, five of the institutions are HBCUs, designed to serve African-American students primarily. On average, African-American students have lower family incomes than other college students.

Most of the other five institutions (as well as some of the HBCUs) are located in states, or regions within states, that are relatively poor by national standards. They draw their students largely from those states and within-state regions. The one institution among the 10 that is located in a relatively wealthy area draws most of its students from racial and ethnic groups that have recently immigrated to that

region from outside the U.S. Therefore, in actively recruiting African-American students in their states, students who live near the institution, recent immigrants, etc., they are also recruiting low-income students. As an official in one private institution put it: "Our students come primarily from the working-class region where we're located so we're a poor man's college, but we'd sure like to get an occasional 'full freight' student to help balance the books."

These institutions do seek students who have a high likelihood of graduating from college. With one exception, the 10 HGR institutions do not have open admissions. Most of the institutions describe themselves in college guides as "moderately" selective. At a minimum, they seek students who had at least a C or C+ average in high school, took an academic preparation curriculum, and perform at slightly below the national average on the SAT or ACT. They may, in fact, attract some students with considerably better performance. Some of these schools admit students conditionally who lack a C average in high school, but their preference is for students with at least average academic records. The performance of conditional admits is reexamined at the end of the first year and those who do not perform satisfactorily do not continue. In the previous section we showed that most of the students in these institutions had performance levels in the top half of their high school classes (based on institutional reports in college guides). And as we also noted previously, they enroll most students right out of high school.

Through their mix of offerings, these institutions also attract and recruit students with greater potential to succeed. Several of the institutions offer honors programs or colleges with even smaller classes and more faculty attention than are available to the student body as a whole. About half the institutions have engineering departments or schools, programs likely to attract students with an interest in math and science and relatively good academic skills. Some who enroll in an honors or an engineering program may find that they do not have sufficient background to complete the programs, but by switching to a different major they are successful. The switch in majors will affect their careers but not their college completion.

HGR institutional policies for the awarding of need-based aid are fairly standard, although some of the public institutions make a concerted effort to keep students out of loan programs, especially during freshman year.

Financial aid. We have already seen that the HGR institutions award need-based financial aid — federal and state — at similar rates as the LGR institutions. From the site visit reports it appears that HGR institutional policies for the awarding of need-based aid are fairly standard, although some of the public institutions make a concerted effort to keep students out of loan programs, especially during freshman year. Nonetheless, most federal grant aid is awarded on a first-come, first-serve basis so students who apply early have a better chance of receiving more generous financial aid. The earliest awards are more heavily weighted to grant aid than are later awards and, in most cases, students who apply late are obliged to use the loan programs more heavily. Several institutions use Federal Work-Study and other campus employment to help students avoid loans. At least two institutions report that a quarter or more of the students work on campus, many through work-study.

Beyond federal and state grant programs explicitly reserved for low-income students, most grant (or "gift") aid is merit-based. We showed previously that institutional grants offset the costs of education at the HGR institutions at higher rates and for more students than do such grants in LGR institutions. From the site visits we learned that, in three of the institutions, there are merit-based programs that include consideration of financial need. These institutions make special efforts to recruit high-achieving, low-income students. For these students, the institutions are often able to put together a package composed entirely of grant aid. The grants are a way to make the institution more attractive to high-achieving students who, officials believe, would otherwise go elsewhere.

In at least four other institutions, however, the merit-based aid programs do not consider family income. Institutions located in at least two states take advantage of state grant programs for students who perform at a set level — usually a B average. Low-income students participate in these

programs, but the aid is intended primarily to provide incentives for high performance in college. There are also colleges that award institutional funds to students who demonstrate high achievement in high school or in their first semester or year of college. In the state programs, and some institutional programs, students whose achievement falls below the required level lose the grants permanently, which can be a major blow to low-income students who received these grants. In at least one private HBCU, officials noted that there is little need-based institutional support and what little exists is fading fast.

The active use of institutional aid (and state, merit-based programs in a few cases) to recruit and retain high performing students provides a common link among the colleges that may help to explain their relatively high graduation rates. At least seven of the 10 institutions operate merit-based programs. Beyond these programs, it might also be the case that, by trying to minimize loan aid and support student work on campus, the institutions maintain their financial attractiveness to students over time. Most officials, however, indicate that loan aid increases after freshman year.

Attention to retention. The HGR institutions give considerable attention to student retention and completion of college. Not only do they seek high-performing students and offer attractive academic programs, many of the institutions also have explicit retention and graduation goals. Several conduct institutional research to measure their progress in meeting those goals. Beyond the goals, senior officials focus on retention in discussions within the college community. This explicit focus on retention may also help to explain their success. Officials in several of the institutions we visited told us that they were not satisfied with their current levels of freshman-to-sophomore retention or their graduation rates. They were surprised that we were visiting their institutions to find out what they were doing right. They were looking at retention and graduation in absolute terms, not relative to other schools with large percentages of low-income students, and they were not happy with their results.

Senior officials focus on retention in discussions within the college community.

Campus leaders have taken various actions to create awareness on campus and improve retention and graduation. One public HBCU established a retention task force that developed a strategic plan based on analysis by outside consultants. The institution sought a 6 percentage point rise in freshman-to-sophomore retention and an overall increase in the graduation rate of 7 percentage points by 2003. Another institution has adopted goals for increased freshman-to-sophomore retention and is exploring various academic reforms and alternatives to developmental education in a bid to increase graduation rates. At a third institution, all faculty meet monthly with student retention as a focus of the meetings. At another institution as a retention staff resides in the president's office. It provides direct services to improve academic performance to all students and conditional admits are required to participate.

The institutions have also adopted "academic standing" policies that promote retention for students in academic difficulty. As one administrator put it, "There are lots of second chances." The institutions have policies that emphasize keeping students enrolled rather than suspending students or encouraging them to attend a community college and then return. Several of the institutions have end-of-semester or end-of-year reviews of every student performing below 2.0, with students asked to provide plans for improvement before any decisions are made on suspension. The students are usually allowed to stay and, if suspended, opportunities for reinstatement are plentiful. As a faculty member at one school put it, "If students make some effort it is our responsibility to see that they succeed. We only sever ties with students who make no effort." At least three institutions allow students to repeat classes (including developmental classes) and to retain financial aid credit for full-time enrollment.

Summary

In this section we have identified common elements among the HGR institutions that may help to explain their performance. As noted at the outset, not every institution

demonstrated each element, nor is there evidence that these elements are directly responsible for the graduation rates we observed. Without a controlled experiment, it is not possible to say that these elements explain the higher graduation rates we observed. Further, the evidence we have is preliminary and limited, based on brief site visits to the 10 colleges. Nevertheless, commonalities among the institutions include:

- **Intentional academic planning:** through intrusive advising, freshman orientation courses, and academic reviews for students in trouble, the institutions make sure that students pursue a well-structured academic program;
- **Small classes:** most classes, even those for freshmen, are small, giving students opportunity for recognition and class discussion;
- **Special programs:** many students, especially those at academic risk, participate in programs that provide advising and academic support, and give them a greater sense of belonging on campus;
- **A dedicated faculty:** stories abound about the caring, warm environment faculty create. Most faculty members teach full-time and are easily accessible to students;
- **Educational innovation:** these institutions have courses to ease freshman entrance and help students adjust to college life. They also offer a wealth of academic support through tutoring, group study, supplemental instruction, mastery classes and the like;
- **Developmental education:** although formal developmental offerings are fading, they were active at most of these institutions at the time they were selected;

Officials ... were not satisfied with their current levels of freshman-to-sophomore retention or their graduation rates.

- **Geographic isolation:** Most of the institutions are in rural areas or small cities, making campus life and work on campus the center of the students' lives;
- **Residential life:** half the institutions require freshmen to live on campus. There are only a few commuter schools among the colleges;
- **Shared values:** at many of the colleges, students share rural and small-town backgrounds, some share a religious orientation, and in some schools the faculty reflects similar backgrounds;
- **Modest selectivity:** institutions do not intentionally attract students from low-income families but they do seek students likely to graduate, setting modest but important admissions requirements — at least a C average in high school and decent SAT/ACT scores. (Only one institution could be considered "open enrollment.") The HGRs offer pre-professional programs likely to attract better prepared students and they actively recruit high performing high school students;
- **Financial aid for high achievers:** the institutions use state and institutional merit-based aid to attract high-performing students; only a minority of the institutions consider family income in awarding merit-based aid; and
- **Retention policy:** the colleges are explicitly concerned with retention and graduation rates, and several have set ambitious retention and graduation goals well beyond current performance.

CONCLUSION

Among the institutions serving large shares of low-income students there are widely differing graduation rates. These differences occur despite the finding in many studies that low-income students are retained at lower rates than other students. We have seen, however, that among those institutions, much of the difference in student outcomes may be due to factors so basic that they are hardly amenable to "tweaking" institutional policies or practices. They may require, at least in public institutions, systematic consideration at the state level. These factors include prior student performance, available institutional resources, and items that are directly affected by resources such as levels of full-time faculty. In this study, we also see that the LGR institutions serve a population that is, on average, older and more likely to be enrolled in college part time, factors that are independently associated with lower rates of graduation in other studies. Often, the institutions facing the greatest challenges — lower prior student performance, older and part-time students, etc. — also have the least resources to address those challenges.

We noted at the end of the comparative section that, given their limited resources and at-risk student bodies, at least some of the LGR institutions may perform well relative to others with greater advantages. However, our design did not allow for this type of analysis. We should also note that, while we have not focused on their difficulties, some of the LGR colleges in the study face (or have recently faced) extraordinary challenges, including major financial problems, issues in accreditation, or student bodies with needs extending well beyond obtaining a college degree. In the end, comparing in detail their policies and practices with those of other colleges may add little to our understanding of "what works."

The elimination of developmental education may have negative effects on low-income students.

We did have an opportunity, however, to look across 10 institutions with large shares of low-income students but higher than average graduation rates, not only in relation to the institutions with high percentages of low-income students, but in relation to all institutions. We have identified common policies and practices among some or most of these institutions. We do not know that these factors explain these institutions' performance (any more than we know what accounts for differences between the LGR and HGR institutions), but we know that these are factors that are held in common. Furthermore, some of these factors are associated with higher student performance in other studies, including

freshman orientations and special programs for at-risk students.

Other findings are more surprising and intriguing. We found, for example, that many of the HGR institutions have or had developmental or remedial programs that enrolled large shares of freshmen. Although some of the institutions have abandoned these programs recently, the cohorts upon whose performance we based this study were enrolled when developmental education was available. While increasing numbers of states are eliminating developmental education from four-year institutions, it remains to be seen how this will affect enrollments and graduation rates of low-income students. Even where state policy is not a factor, institutions have eliminated these programs in the belief that they are ineffective or that they stigmatize enrollees. If the findings of this study hold for more institutions, the elimination of developmental education may have negative effects on low-income students.

Another intriguing finding is that many of the HGR institutions are located in small towns or rural areas (or small towns in the middle of rural areas) and that their student bodies are relatively homogeneous from a cultural standpoint. This finding suggests that they may have a comparative advantage in building the kinds of group cohesion and social attachment to the institution that many have argued are critical to student persistence. Of course, it should also be noted that selecting institutions with large percentages of low-income students may, itself, have biased the selection in favor of these kinds of small-town colleges.

Because we made only brief visits to each of the institutions, there were fairly severe constraints on what we were able to see and record. There may be other important commonalities — or combinations of factors — that were simply overlooked or go well beyond what we could observe in a short period of time. For example, we have reported on discrete factors that we observed, but success may be due to a combination of those factors or conditions. It may be that it is not enough to have a caring faculty if an institution does not also have leadership, faculty, and staff that share a vision of the institution's purposes or goals. It may not be enough to have sufficient resources if an institution does not have an active advising system that directs new students to courses that sufficiently structure their initial educational experience.

This finding suggests that these [HGR] institutions may have a comparative advantage in building the kinds of group cohesion and social attachment to the institution that many have argued are critical to student persistence.

There may also be other institutions that do as well, if not better, than the institutions we have studied. Because we used graduation rate to select the institutions, our study favored institutions with low transfer rates. Colleges with a high rate of transfer are not among the institutions we studied. Yet there are institutions that offer a curriculum geared to general education and a limited number of majors with the expectation that a sizeable share of students will transfer. These include branch campuses of larger state college or university systems as well as colleges that grew from two-year to four-year institutions but retained some functions of a community college. These colleges may perform relatively well but show lower graduation rates (at least two of the LGR institutions are in this category).

Nonetheless, there do appear to be important findings from this preliminary research. Institutions with relatively high graduation rates intervene actively in students' course and program planning, provide small classes, have full-time faculties that are dedicated to teaching undergraduates and know the students personally, offer (or offered) developmental education, are largely residential for new students, and are explicitly concerned with increasing retention and graduation. They also select students who show some promise of completing; they may exercise only minimal selectivity but they do show some. They also use merit-based institutional aid to attract and retain high achieving students, but only a limited number consider family income in awarding that aid.

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ENDNOTES

1 The participating institutions are not named to assure confidentiality.

2 Students with disabilities were added to the program in recent years.

3 Students attending less than half-time are not eligible for a Pell Grant, but the NCES data set does not allow us to differentiate among students who attend less than full-time but more than half-time; they are all categorized as part-time.

4 These data limitations suggest the preliminary character of the results.

5 The listed "N" in Tables 1, 3, and 4 vary slightly due to different reporting sources and the possible inclusion of branch campuses in some reports.

6 The Carnegie Commission on Higher Education developed a classification system for higher education in 1973. The system, which was later refined and update in 1976, 1987, 1994, and 2000, divides colleges and universities into groups based on the degrees that they grant — doctoral, master's, baccalaureate, and associate's. In addition, the system identifies specialized institutions, which includes theological institutions, and schools of law, medicine, and teacher education. For more information about the classification system, see the Carnegie Foundation website, http://www.carnegie foundation.org/classification.

7 Median is a different measure of central tendency than the mean, which was reported in Tables 3 and 4.

8 The final institution was selected, but we were unable to conduct a site visit due to scheduling conflicts.

9 Some were excluded as HBCUs or declined to participate.

10 As we shall describe later, several of the HGR institutions have adopted policies that strongly encourage or require freshmen students to live on campus — policies that would be unattractive to older, "returning" or part-time enrollees.

11 Large percentages in the "unknown" category for some institutions make typical rates of minority participation difficult to identify.

12 Per-FTE expenditures are defined as education and general expenditures, i.e., all current expenditures except for auxiliary enterprises — dorms, dining halls, hospitals, separate research centers etc. Use of FTE undergraduate enrollment may overstate differences as HGR institutions have somewhat more graduate students.

13 The fourth institution increased its tuition by 50 percent in the year after our data were collected.

14 It is worth noting, however, institutional grants are included in per-student expenditures.

15 As noted in the study design, we decreased the percentage of low-income students an institution needed to qualify for inclusion in the study so this would not be an examination of HBCUs exclusively.

16 Some HGR HBCUs were not included in the study and one other institution declined to participate.

17 Religion plays an important role in at least one other private college, but chapel is not mandatory.

APPENDIX A: INTERVIEW GUIDE

President or other senior official(s) (Use judgement on depth of descriptive information sought from these individuals)

1. Review briefly the key data from institutional profile

2. What accounts for institution's performance in view of respondent? Possible reasons/explanations for institution's performance outcomes:
   a) Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b) institutional policies,
   c) instructional approach or programs,
   d) services/campus climate,
   e) other factors?

   At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Are any efforts currently underway to improve performance?" If yes, describe.

   At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?" If yes, describe.

   (Answers to these questions should help you focus attention on policies, instruction, and programs that may account for institutional performance — but you should still keep an open mind about other factors).

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest academic or other needs?

4. What are the **institutional policies** that are likely to affect low-income/underrepresented students and in what manner? Policy areas to ask respondent to consider include: recruitment, admissions, financial aid, required coursetaking (including developmental education), academic performance/standing, selection of colleges and majors, etc.

   What evidence can respondent offer on the a) implementation and b) likely effects of policies cited on low-income students? Studies, evaluations, other sources of information?

5. What **academic approaches** does respondent consider likely to affect low-income students. Some possible areas on which to focus: developmental education, organization of instruction, initial educational experience, prefreshman programs, advising, academic standing, academic support offerings, monitoring of student enrollment and progress, etc.

   What evidence can respondent offer on the implementation and likely effects on low-income students of approaches cited? Ask about studies, evaluations, other sources of information.

6. What social support opportunities on campus are likely to affect low-income students? Possible types of services: affinity groups that provide a means for students to develop group and/or institutional identity; study groups, means to link students and faculty (e.g., mentoring programs), other systematic efforts to develop relationships with other students, faculty, etc. (organizations, activities, clubs, sports, etc.)

   Special programs (such as EOP, SSS, MESA, other departmental programs) that provide a "home base" for low-income or underrepresented students (or students with disabilities) and/or offer social and academic services or link students with services on campus.

7. What accommodations does the institution make for students who are also parents? Working? Need a job on campus? Have a disability? Must adjust their schedules around other responsibilities or needs? What services are available to help these students?

8. What additional approaches, activities, programs, on this campus play a role in the retention and completion of college, especially for low-income students?

9. What does the respondent consider the responsibility of the institution with respect to retention and graduation? The limits of institutional responsibility? What challenges/barriers does the institution face in ensuring high rates of retention and completion?

Senior administrator(s) responsible for policies related to attracting/retaining/graduating low income and/or underrepresented students (use judgement on depth of questioning about individual policies or programs)

1. Review briefly the key data from institutional profile

2. What accounts for institution's performance in view of respondent? Possible reasons/explanations for institution's performance outcomes:
   a) Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b) institutional policies,
   c) instructional approach or programs,
   d) services/campus climate,
   e) other factors?

   At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" Are any efforts currently underway to improve performance?" If yes, describe.

   At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Are any efforts underway to improve performance?" If yes, describe.

   (Answers to these questions should help you focus attention on policies, instruction, and programs that may account for institutional performance — but you should still keep an open mind about other factors).

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest academic or other needs?

4. Ask respondent to describe institutional policies explicitly focused on, or likely to affect, low-income/underrepresented students. Policies to examine include: recruitment, admissions, financial aid, required coursetaking (including developmental education), academic performance/standing, selection of colleges and majors, etc. (Use judgement on depth of questioning on each set of policies depending on location/knowledge of respondent.)

   Describe history of policy development, key elements of policy, how respondents describe its implementation and likely effects on low-income students. Cite evidence of policy implementation and effects from college studies, evaluations, other sources of information.

   With respect to **recruitment**: what goals have been set by the institution (and by whom)? Describe. What efforts have been made (this year, past year) to attract low-income and/or underrepresented students — of traditional college age as well as older students. Describe key features, who does it, how extensive, etc. What was the outcome? How do these efforts fit within overall recruitment efforts (e.g., share of budget, attention to these populations)? How successful do institutional officials see their efforts? What plans, if any, are there for changes in the policy or process?

   With respect to **admissions**: What goals have been set by the institution? Describe goals and any changes/modification in goals over past few years. Note specific goals with respect to low income or underrepresented students, returning students, other special groups. Who establishes goals? What are current "yield" levels? Describe outcomes of policies over time, views of respondents about adequacy of (satisfaction with) current goals. Describe any past or ongoing efforts to track admissions or other accountability mechanisms — who does it? any evidence of effects? What are policies/views on part time enrollment? Describe any special admissions policies — for whom?

   With respect to **financial aid**: Describe policies for need-based aid (and other aid, if applicable). Who sets policies? What is the typical mix of grant/loan aid for a low income freshman student and how much of "need" is likely to be covered? What other sources of assistance may be available? What efforts have been made to integrate financial aid policies with recruitment/admissions policies? What evidence is available on effects of aid policies? What are views of respondents with respect to adequacy of aid, success of aid policies?

5. Examine **academic approaches** likely to affect low-income students. Some possible policy areas in which to focus: developmental education, organization of instruction, initial (freshman) educational experience, advising, academic support services, etc.

   Outcomes of advising: what does a **typical freshman academic program** look like? What courses are required or taken by large percentages of students? What is a typical course load? How likely are students to move to sophomore status at the end of the first year of full time enrollment? What special programs exist for freshmen — such as honors programs or colleges, integrated courses — and how do students participate in them?

6. Ask about range and types of **social support opportunities on campus**.

   Possible types of services: affinity groups that provide a means for students to develop group and institutional identity; study groups, means to link students and faculty (e.g., mentoring programs), other systematic efforts to develop relationships with other students, faculty, etc. (organizations, activities, clubs, sports, etc.)

   Programs (such as EOP, SSS, MESA, other departmental programs) that provide a "home base" for low income or underrepresented students (or students with disabilities) and that offer social and academic services or link students with services on campus.

7. What accommodations does the institution make for students who are also parents? Working? Need a job on campus? Have a disability? Must adjust their schedules around other responsibilities or needs? What services are available to help these students?

8. What additional approaches, activities, programs, on this campus play a role in the retention and completion of college, especially for low-income students?

9. Who is likely to be able to provide greater detail on each of the three broad areas of policy and practice we have discussed: institutional policies, academic approaches, social and academic supports?

Director of Financial Aid

1. Confirm enrollment data from institutional profiles

2. What accounts for institution's performance in view of respondent. Possible reasons/explanations for institution's performance outcomes:
   a) Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b) institutional policies,
   c) instructional approach or programs,
   d) services/campus climate.

   At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Any efforts currently underway to improve performance?"

   At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?"

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest needs?

4. Describe **financial aid policies** likely to affect low income/underrepresented students.

   Ask about key elements of policy, how respondents describe implementation of the policies and likely effects on low income students. Ask for evidence of policy implementation and effects from college studies, evaluations, other sources of information.

   Focus on policies for need-based aid (and other aid, if applicable). Who sets policies? What is the typical mix of grant/loan aid for a low-income freshman student and how much of "need" is likely to be covered? What other sources of assistance may be available? What efforts have been made to integrate financial aid policies with recruitment/admissions policies? What evidence is available on effects of aid policies? What are views of respondents with respect to adequacy of aid, success of aid policies?

   When does the financial aid office enter the process of decision-making on new students? To what extent does the office participate in recruitment and admissions decisions? To what extent does the financial aid office seek the input of offices or programs that serve low income or underrepresented students in either general decisionmaking on decisions on specific students?

   What types of financial crises are likely to arise once students are enrolled? What happens when students have financial crises? (seek examples) What sources of emergency aid are available? How are they allocated?

5. What additional approaches, activities, programs, on this campus play a role in the retention and completion of college, especially for low-income students?

6. What does the respondent consider the responsibility of the institution with respect to retention and graduation? The limits of institutional responsibility? What challenges does the institution face in ensuring high rates of retention and completion?

Senior Official for Student Affairs

1. Confirm data from institutional profile, then ask: What accounts for institution's performance in view of respondent. Possible reasons/explanations for institution's performance outcomes:
   a) Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b) institutional policies,
   c) instructional approach or programs,
   d) services/campus climate.

   At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Any efforts currently underway to improve performance?"

   At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?"

   (Answers to these questions should help you focus attention on policies, instruction, and programs that may account for institutional performance — but you should still keep an open mind about other factors).

2. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest needs?

3. **Describe institutional policies** likely to affect low-income/underrepresented students. Policies to examine include: recruitment, admissions, financial aid, required coursetaking (including developmental education), academic performance/standing, selection of colleges and majors, etc.

   Ask respondent about importance of each type of policy and its likely effects on low-income students. Ask for evidence of policy implementation and effects from college studies, evaluations, other sources of information. Ask about role of student affairs office in recruitment, admissions, financial aid decisionmaking (if any).

4. **Examine academic approaches** likely to affect low-income students. Some possible areas on which to focus include orientation programs, developmental education, organization of instruction, freshman year experience (including bridge programs), the advising process, academic standing process, academic support offerings.

5. **Social support opportunities on campus.** Ask respondent to outline range of offerings under jurisdiction of student affairs, then other offices. Possible types of services: affinity groups that provide a means for students to develop group and institutional identity; study groups, means to link students and faculty (e.g., mentoring programs), other systematic efforts to develop relationships with other students, faculty, etc. (organizations, activities, clubs, sports, etc.)

   Programs (such as EOP, SSS, MESA, other departmental programs) that provide a "home base" for low-income or underrepresented students (or students with disabilities) and that offer social and academic services or link students with services on campus.

6. What accommodations does the institution make for students who are also parents? Working? Need a job on campus? Have a disability? Must adjust their schedules around other responsibilities or needs? What services are available to help these students?

7. What additional approaches, activities, programs, on this campus play a role in the retention and completion of college, especially for low-income students?

8. What does the respondent consider the responsibility of the institution with respect to retention and graduation? The limits of institutional responsibility? What challenges does the institution face in ensuring high rates of retention and completion?

Director of Office of (Freshman) Advising

1. Review briefly the key data from institutional profile

2. What accounts for institution's performance in view of respondent? Possible reasons/explanations for institution's performance outcomes:
   a) Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b) institutional policies,
   c) instructional approach or programs,
   d) services/campus climate,
   e) other factors?

At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Any efforts currently underway to improve performance?"

At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?"

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest needs?

4. Ask respondent whether there are institutional policies explicitly focused on, or likely to affect, low-income/underrepresented students. Policies to examine include: recruitment, admissions, financial aid, required coursetaking (including developmental education), academic performance/standing, selection of colleges and majors, etc.

   Examine academic approaches likely to affect low-income students. After discussion of general areas (developmental education, organization of instruction, freshman year programs, etc. focus discussion on advising program.

   The advising process: Who advises new and continuing (and lower and upper division) students about which courses to take? (Are there other offices that provide advising for particular groups of students?) When does advising take place When do students declare majors? Is admission to some majors restricted, and if so, how? Are there any special advising efforts for special admission students? Other students (e.g., underrepresented students)? With respect to **academic standing**, what are the policies with respect to dropping courses? How commonly do students drop courses? What is "good standing" at the end of freshman year? sophomore year? later? At what GPA level is any action taken — what actions are taken? How common are such actions? What are policies with respect to suspension, expulsion? How common are such actions? What opportunities exist for appeal? For reinstatement? Evidence of impact?

   Academic support offerings: What is the range of **academic support** available at the institution? Describe learning centers, writing centers, departmental tutoring, opportunities for research, etc. What happens when a student experiences academic difficulties to ensure that they are addressed successfully? What happens when a student skips classes? Who monitors class attendance?

   Outcomes of advising: What does a **typical freshman academic program** look like? What courses are required or taken by large percentages of students? What is a typical course load? How likely are students to move to sophomore status at the end of the first year of full time enrollment? What special programs exist for freshmen — such as honors programs or colleges, integrated courses — and how do students participate in them?

5. What additional approaches, activities, programs, on this campus play a role in the retention and completion of college, especially for low-income students?

6. What does the respondent consider the responsibility of the institution with respect to retention and graduation? The limits of institutional responsibility? What challenges does the insti-tution face in ensuring high rates of retention and completion?

Office of Institutional Research

1. Review and confirm the institutional data from institutional profile, seek updated information if available. Seek any studies of recruitment, enrollment, retention and graduation that may be available from the institution.

2. What accounts for institution's performance in view of respondent? Possible reasons/explanations for institution's performance outcomes:
   a. Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b. institutional policies,
   c. instructional approach or programs,
   d. services/campus climate,
   e. other factors?

   At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Any efforts currently underway to improve performance?"

   At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?"

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest needs?

4. What policies, approaches to education, activities, or programs, on this campus play a role in the retention and completion of college, especially for low-income students?

5. What does the respondent consider the responsibility of the institution with respect to retention and graduation? The limits of institutional responsibility? What challenges does the institution face in ensuring high rates of retention and completion?

Key Departmental or College Faculty (deans or other faculty in colleges or departments that attract large numbers of students to freshman or other widely taken courses — especially faculty who teach large freshman courses, if possible)

1. Review briefly the key data from institutional profile

2. What accounts for institution's performance in view of respondent? Possible reasons/explanations for institution's performance outcomes:
   a. Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b. institutional policies,
   c. instructional approach or programs,
   d. services/campus climate,
   e. other factors?

   At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Any efforts currently underway to improve performance?"

   At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?"

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest needs?

4. Ask respondent to describe **institutional policies** explicitly focused on, or likely to affect, low-income/underrepresented students. Policies to examine include: recruitment, admissions, financial aid, required coursetaking (including developmental education), academic performance/standing, selection of colleges and majors, etc.

5. **Examine academic approaches** likely to affect low-income students. Some possible policy areas in which to focus: developmental education, organization of instruction, initial freshman coursetaking (and efforts to organize coursetaking through linked courses, other approaches), advising, academic support, special programs, etc.

   After general discussion, focus more attention on ways in which instruction is linked across courses, efforts at team teaching, freshman seminars, means of linking classroom instruction with academic reinforcement, group etc.

6. What efforts have faculty (in this department or college) undertaken to ensure that students are successful in their initial courses, in the department? What challenges do the faculty face in freshman instruction? Are there special programs for low income or underrepresented students (or other groups) under the his/her jurisdiction? If yes, describe program, students, etc.

7. What policies, approaches to education, activities, or programs, on this campus play a role in the retention and completion of college, especially for low-income students?

8. What does the respondent consider the responsibility of the institution with respect to retention and graduation? The limits of institutional responsibility? What challenges does the institution face in ensuring high rates of retention and completion?

Academic support service providers (learning center, writing center, tutoring center, supplemental instruction director, etc.)

1. Review briefly the key data from institutional profile

2. What accounts for institution's performance in view of respondent? Possible reasons/explanations for institution's performance outcomes:
   a. Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b. institutional policies,

c. instructional approach or programs,
d. services/campus climate,
e. other factors?

At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Any efforts currently underway to improve performance?"

At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?"

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest needs?

4. Ask respondent to describe **institutional policies** explicitly focused on, or likely to affect, low-income/underrepresented students. Policies to examine include: recruitment, admissions, financial aid, required coursetaking (including developmental education), academic performance/standing, selection of colleges and majors, etc

5. **Examine briefly the range of academic approaches** respondent considers likely to affect low-income students (developmental education, freshman year experience, organization of instuction, advising, etc.), then focus on the role of the service the respondent provides and describe more fully. What is offered, who is likely to participate, how are they recruited or otherwise attracted to the service, when does service start, what is the success of the program (evidence?) in helping students achieve academic success? What is needed that is not currently offered (or what changes might be advisable)?

6. What additional approaches, activities, programs, on this campus play a role in the retention and completion of college, especially for low-income students?

Director of Developmental Education (or comparable position)

1. Review briefly the key data from institutional profile

2. What accounts for institution's performance in view of respondent? Possible reasons/explanations for institution's performance outcomes:
   a. Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b. institutional policies,
   c. instructional approach or programs,
   d. services/campus climate,
   e. other factors?

   At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Any efforts currently underway to improve performance?"

   At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?"

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest needs?

4. Describe the extent of **developmental education** at the institution (for entering freshmen) and the sequence of developmental courses. How does the institution determine who enrolls and for what period of time? What percentage of new students enroll in developmental classes and how have the numbers changed over the past few years — and/or are likely to change in near future? What is the "progression" out of developmental education — i.e., how long do students typically take these classes and how flexible is movement out of developmental education? What evidence is there about the impact of institution's approach? What are respondents' views of the adequacy of the current approach?

5. What are the links between developmental and non-developmental courses? Between developmental education and other academic support offerings?

6. What additional approaches, activities, programs, on this campus play a role in the retention and completion of college, especially for low-income students?

Providers of Other Support Services (including SSS, EOP, other "home base" programs, etc.)

1. Review briefly the key data from institutional profile

2. What accounts for institution's performance in view of respondent? Possible reasons/explanations for institution's performance outcomes:
   a. Unique elements: student body, special programs that attract particular kinds of students, special policies on retention, or other factors;
   b. institutional policies,
   c. instructional approach or programs,
   d. services/campus climate,
   e. other factors?

   At high retention/graduation institutions can ask: "What do you think accounts for the success of this institution in retaining and graduating low-income (or underrepresented) students?" "Any efforts currently underway to improve performance?"

   At the low retention/graduation institutions can ask: "How satisfied are you and/or institution with current performance?" Any efforts underway to improve performance?"

3. How would you characterize the freshman student body at this institution? What experiences do they bring to education? What are they seeking in a college education? What are their greatest needs?

4. Ask respondent to describe **institutional policies** explicitly focused on, or likely to affect, low-income/underrepresented students. Policies to examine include: recruitment, admissions, financial aid, required coursetaking (including developmental education), academic performance/standing, selection of colleges and majors, etc.

   Ask about the specific role of the program in decision-making an/or carrying out the policies in any of the areas discussed.

5. **Examine academic approaches** likely to affect low-income students. Some possible policy areas in which to focus: developmental education, organization of instruction, freshman educational experience, advising, academic support offerings (learning centers, writing centers, departmental tutoring, opportunities for research, etc. Ask about links of provider (respondent) to those academic offerings discussed.

6. Describe the range and types of **social support opportunities on campus**.

   Possible types of services: affinity groups that provide a means for students to develop group and institutional identity; study groups, means to link students and faculty (e.g., mentoring programs), other systematic efforts to develop relationships with other students, faculty, etc. (organizations, activities, clubs, sports, etc.) Programs (such as EOP, SSS, MESA, other departmental programs) that provide a "home base" for low income or underrepresented students (or students with disabilities) and that offer social and academic services or link students with services on campus.

   Then, focus on describing the program for which the respondent is responsible. Obtain more detailed information on its recruitment, student characteristics, content, duration, evidence of effectiveness, etc. Ask about its relationship to other support services, both social and academic, as well as to policymaking that affects low income students.

7. What accommodations does the institution make for students who are also parents? Working? Need a job on campus? Have a disability? Must adjust their schedules around other responsibilities or needs? What services are available to help these students?

8. What additional approaches, activities, programs, on this campus play a role in the retention and completion of college, especially for low-income students?

APPENDIX B: MATRIX

	Institution type	Student characteristics	Student performance indicators (entrance, retention, graduation, avg. time to degree, other important info)	Faculty info (size, student/fac ratio, % tenured or track, % race/ ethnicity, other important info)	Recruitment	Admissions	Financial aid	Other institutional policies that affect low-income enrollment, retention, and graduation	Developmental education	Advising
INSTITUTION A	Small private liberal arts. Largest majors: business, social science. "Selective." Rural region of large state.	Undergrad enrollment is 31,361, 5% part-time, 53% female. Majority are in residence, including almost all freshmen as they must spend 4 sem. in residence. Undergrads are largely traditional age students. College draws from public schools, lower-middle/working class backgrounds. Student body is not very diverse, but motivated — they want to improve economically.	3/4 have SATs over 1000, 30% over 1200. 81% fresh to soph retention, 49% graduate in 4 yrs, 65% in 6 yrs. Faculty member: "We take average students and turn them into outstanding students."	78% FT. Most have the terminal degree for their field. Hiring and promotion decisions take teaching into account. Official: "We hire people who care about students and we try to keep them here and caring about students." Research valued, but teaching quality is most important.	Institution sees constituency as poor, traditional age, first-generation, talented students (although some full-pay students desired). Seek out of state (say retention is higher). Work w/ CBOs, foundations to get urban, minority students. Tout value for $ and generous aid. Large staff (14 in recruit/admiss) throughout northeast states. Attracting minorities "a challenge." Campus visits orchestrated to "sell" school, w/ faculty and student participation. Parents meet w/ financial aid staff who show how financing is possible. Also sell school as supportive of students w/ non-physical disabilities. Continue to recruit AFTER acceptance letters go out — described as "pricing wars, student by student."	Attracts "non-privileged" from surrounding poor region in state and large city. Generates 2,000 applicants for 500 1st yr slots (and gets 80 transfers — not a priority). Attracts many from larger region. 1000 SAT floor, but 75-82 special admits per year, as well as EOP students. 76% acceptance rate w/ 34-35% yield rate. Admissions is need blind. Described as a "poor man's college" although "evolving" to higher income. "We get our enrollment one at a time."	Generous aid program, 95% get some aid. Initial aid decisions use 6 point system (4 for academics, 1 for special interest, 1 minority), then generate package based on income, in/ out state. Lots of discounting. Avg. student has est. $17K debt at grad. Service-oriented financial aid office — works w/ parents on financial planning. Monitors student academic performance to ensure repeat of D courses, no loss of aid.	1) Must spend 4 semesters in residence halls — lots of activities, early intervention warnings, plans for improvement, no segregation, no study groups. 2) In each college, scholastic standards committees review grades and issues for all students below C every semester. Make individual recommendations. Usually give second chance but may recommend probation, suspension for a sem., etc. Students can appeal and provide plan for improvement, approx. half are reinstated.	No developmental ed, but College of Business offers 1/2 yr math tutorial for no credit. 1/3 of college curriculum closed to EOP students, primarily due to lack of math.	Intensive advising: Fresh have orientation week before first sem. w/ testing, advising. Proactive — meet w/ faculty before each semester to schedule courses, get e-mails about mid-term grades, letters to all who are subpar, faculty meet w/ all in jeopardy, as do deans, to ask about problems. Must see advisor to drop/add course. Est. 3 mtgs per sem, each 20-30 min. 12 advisees per faculty member. Annual faculty training for advisors available. Also see residence hall discussion — lots of interventions. Greek system also has comparable interventions.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness'	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
Curriculum reform not a major priority until recently. College moving heavily toward learning communities — called Freshman Year Experience, which includes 3 courses.	Freshman year in College of Bus: gen ed and "tool" courses, math/statistics, writing. 1/2 sem non-credit tutorial for very low math scores (or might transfer to liberal arts w/ wider range of "math" courses). Small class sizes (35 is very large in bus, 17 is max in LAS — a few intro lectures have 60 but most are 30-35). For its size, school has wide range of programs (business, engineering, arts, humanities, social sciences). Some programs team taught, lots of tutoring, SI, labs, by faculty and tutors accompany classes. Freshman Year Experience (learning community) new but growing — in LAS, bus, engineering. Many faculty take attendance — almost no one gets lost.	Writing center for papers, undergrads staff it. Departmental tutors. Learning disability program has note takers. Faculty don't assume students have basic skills — spend time on study habits, reading and writing skills. See discussion of advising.	Over 100 clubs, lots of "hooks" on campus to draw students in: radio, theater, dance, music (participate and get recognition), student govt., affinity groups, skill groups. Each has faculty advisor. School is an "enclave" where students can experiment, be safe. Faculty and students "extraordinarily close." Faculty advocated for minorities who felt discriminated against in town. "Midnight breakfasts" during exam weeks (faculty make meals). Fresh and soph in residence halls — they're small w/ 70-90 per hall.	Supportive program, registration priority for students with non-physical disabilities. Active, effective counseling center w/ 3 profs, many referrals from faculty, support groups. Judicial system offers hearings, peer review board. Few employment opptys on campus.	Key items: 1) attracting high performing and motivated students; 2) full-time faculty dedicated to undergrad education; 3) small class size; 4) close student/faculty relations; 5) scholastics standards committee; 6) a niche for everyone; and 7) solid support services.	Faculty and administrators believe they are largely responsible for whether students succeed or fail. They see themselves as quite good at building student knowledge, skills and self esteem, if students are willing to make an effort. Limits of assistance: students who make no effort — it's better to sever ties early than waste their time. Sometimes students are dropped for a semester but if they go to another college and do ok they return. Est. half of appeals are reinstated if they show how they will improve. One said "there are lots of second chances but we don't set students up to fail." (LAS drops 30-40 a year out of 800-900). Most say students leave primarily because they can't take physical isolation, sentiment echoed by students as well.	Concur with items identified by respondents about college effectiveness.	This is an extraordinary college. The supportiveness of the faculty and the opportunities for student-faculty interaction are exceptional. Students and faculty respect each other. The school is really physically isolated but everyone tries to make up for that with great warmth and lots of activities.	EOP: Program is statewide and aimed at attracting and retaining minority students. College participates and works hard to make program a success. Students attend five-week bridge program to improve skills, get orientation/advising. Enter regular classes in fall, get special advising. Appear to have higher attrition rate but college trying to change that.

	Institution type	Student characteristics	Student performance indicators (entrance, retention, graduation, avg. time to degree, other important info)	Faculty info (size, student/fac ratio, % tenured or track, % race/ ethnicity, other important info)	Recruitment	Admissions	Financial aid	Other institutional policies that affect low-income enrollment, retention, and graduation	Developmental education	Advising
INSTITUTION B	Public four-year college in rural area in west. Isolated campus, no commercial area, mostly commuter. Students preparing for teaching. Most common majors: liberal studies, business.	5,400 students, 69% full-time, 66% female. Ethnicity: 3% Black, 23% Hispanic, 8% Asian, 53% white (13% unknown). Most from rural region.	73% from top half of hs class, 55% have over 500 in verbal SAT, 57% over 500 in math SAT (few over 600 in either). 82% fresh to soph retention, increase from past. 10% graduate in 4 yrs, 23% in 5 yrs, 41% in 6 yrs. Most entrants are traditional age students. Females, Hispanics more likely to graduate, Blacks less likely to graduate.	70% tenured, 61% FT. 15:1 ratio. Faculty aging; many started when institution began. Few minorities. Classroom performance counts toward promotion, along w/ research. Students participate in evaluation.	Institution participates in some programs in public schools to encourage college attendance. Want to increase enrollment, but this year exceeded limit set by state. Small summer bridge, EOP program, re-entry adult program.	In-state: C+ hs avg. and 900 SAT (point system). Seek top half of hs class. Will need college prep curriculum in 03. Higher requirements for "impacted" programs. enrollment increasing, seeks to expand substantially, from 7,000 to 10,000 or more over time. Some special admits (EOP, music, athletes, some adults). Transfers from CCs.	Last yr: $23m in aid (of which $8m was loans). 61% get some aid. They take pride in keeping students out of loan program. Some talent scholarships (in arts, athletics). Asians, Hispanics resistant to loans. Loan forgiveness for those who go into teaching (large % of grads in ed).	Center for Student Success sets explicit retention goals, monitored by institutional committee. Mandatory orientation after placement tests. If needed, developmental courses required and must pass in 1 year. Few really leave — get multiple tries.	Large number need developmental classes based on exam given to 2/3 of entrants (with SAT below 530). Must remain in them until they pass. Hard to drop remedial classes. Can take other English, math. If don't pass in year, referred to CC. Interactive approach used — small classes, instructors as coaches. In past, hard to pass (remedial standards were higher than general math course), revising downward. 50% don't pass remedial math but get multiple tries.	Students find advising inadequate, say little relationship between students and advisors. First year program (new) has advising and testing office, class on college survival, orientation, multi-disciplinary classes. EOP, SSS AMP, Summer Bridge use peer counselors and faculty advisors to assist new students.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
Special programs provide lots of direction. EOP participants see advisors every month, cultural component; also SSS Program; AMP program (NSFS). All work together. Workshops, career counseling, writing, study skills, resumes, study groups if on probation. Also programs for veterans, returning students.	Most intro courses taught by FT faculty, no TAs. Science teachers teach labs section of their classes. Most intro classes are in liberal studies. Classes small (biggest room on campus holds 110). Est. 10% drop over semester. Fresh year experience block rosters for two classes (new program).	Tutoring: support for math, English, other basic skills, as well as more advanced classes. Math lab open every day, tutorials grouped by class but mostly one-on-one. 95 student tutors work 10 hrs each per week. Student Success Center established 2001: comprehensive first year program, summer reading program for new students, orientation events (parts of program were already in existence).	Student leadership opportunities, active student govt. College organizes low-cost trips (skiing, hiking, city visits). Social service and academic organizations for students, but not a lot of involvement. Lack of social options an issue for those who leave college. Plan to double number of dorm rooms to help improve campus life. Women's athletics gets more support than men's (more women on campus).	Hard for some to juggle school and work. Parking an issue, also classroom and facility overcrowding. New facilities have led to better class schedules.	Students say others leave because of finances, seek more interesting campus (institution doesn't track students). Financial aid office doesn't think finances a major reason in leaving.	Students get multiple tries to complete developmental courses. Few leave due to academic failure, despite nominally rigorous policy. Emphasis on retaining students and improving their performance.	Increasing interest in studying and improving retention. School sets retention targets for different groups of students. Many special programs that support students, help keep them in school. Officials stress personal involvement, small classes, lots of direction. Remediation seen as key to persistence. Other positive factors cited: small classes, FT faculty teaching freshman classes, teaching a factor in promotion, staff commitment to students, ombudsman, faculty mentor program for first-generation students (w/ faculty training), community advisory board (reviews quality of student life, e.g.), active student government.	For a small school with limited campus life they do quite well. They stress the "small school" theme — a school close to home.	Stable presidency with consistent vision. Not much use of institutional data in decision-making. School isolated, few Hispanic faculty, despite sizeable Hispanic enrollment.

	Institution type	Student characteristics	Student performance indicators (entrance, retention, graduation, avg. time to degree, other important info)	Faculty info (size, student/fac ratio, % tenured or track, % race/ ethnicity, other important info)	Recruitment	Admissions	Financial aid	Other institutional policies that affect low-income enrollment, retention, and graduation	Developmental education	Advising
INSTITUTION C	Public HBCU located in small town. Social Science, business, protective services are largest programs. One of the highest graduation rates for athletes among NCAA Division II schools.	Approx. 2,000 students, most full time; 88% in-state status. 75% Black and 23% white; 54% of students live on campus. 70-80% are drawn from surrounding counties, where many are low-income. Many females, single parents, first-generation college students — first in their neighborhood to go to college. Some come from homes without phones, let alone computers. Housing staffed by administrators, student assistants and 24-hour student service professionals.	At entrance, many are underprepared, as area public schools are poor. Many redirected to community college to get 24 transfer credits before they enter. 98% of seniors graduate, above average graduation rate for public institutions in the state with comparable SES. High grad rate among athletes.	Most are full time. Faculty concerned about student success, nurturing. Have caring attitude, "willing to go the extra mile" to help students. Many are college alumni. College recently faced faculty shortage.	Use alumni in region to recruit students. School sells its proximity to beaches, that it's comfortable, inexpensive (a "point of pride"). Recent emphasis on expanding enrollment — using TV, signs, spots, events to promote school. College offers excellent financial aid package to high performing students to compete with state university.	College is tightening its admissions standards, establishing a two-year foreign language requirement (2004) and requiring four units of high school mathematics instead of three (2006). Was open enrollment before 1989, when state policy changed. Seek 700-800 SAT (or 17-18 ACT) and 2.0 GPA. Try to do quick turnaround on applications.	Avg. aid: fed grants $2,963, state grants $2,428, institutional grant $2,740, loans $3,662. 85% of undergrads receive aid. In 1987 established the Incentive Scholarship Program, need-based last dollar program targeted to relatively well-prepared, in-state students who want to attend on a full-time basis. Performance based, but can be reinstated if lost. Cannot exceed $3,800; 75% of Incentive Scholarship recipients also receive Pell Grants. Valedictorians get full scholarships. Automated packaging program is speeding aid program. Small endowment, American Indian scholarships, teacher education grants, target men, low-income. Estimate 80-85% get some aid.	Chancellor established a retention task force linked to the school's enrollment management plan and chaired by the Associate Vice Chancellor; the task force developed a strategic plan based on analysis conducted by Noel-Levitz. Specifically, the objectives are to increase full-time freshmen retention rates 6 percentage points, second year students 7 percentage points, and third year students 4 percentage points by 2003. In addition, the plan calls for increasing the graduation rate of first-time degree seekers from about 38 to 45% by 2003.	Students must take developmental courses if they do not score above 500 on SAT. 35% of first-time, full-time freshmen place in the development semester program. Provides intense remediation four days a week in speech, reading, writing, and/ or mathematics (2 classes, 2 labs per day in English, 3 classes, 2 labs in math). Students are re-tested at the end of their first semester; about 80-85% subsequently test-out. Rather than repeating elements of the developmental semester, students who do not test-out are mainstreamed but provided special tutoring services. Get credit for GPA/financial aid but not graduation.	Very regimented academic advisement and counseling system. System's linchpin is a structured "First Year Experience." Program is very much a "hand holding, old-school" intrusive approach. Each student is assigned an academic advisor in their field of study; faculty and staff assigned to Program advise undeclared students. Students are advised to declare majors asap, deadline of beginning of their third year. First-year students required to meet with advisor 3 times a semester. Checkpoints: the week following posting of mid-term grades, and prior to pre-registration for the upcoming semester. Interventions are prescribed as appropriate. Students develop class schedule in consult w/ advisors, who have final approval. Add/drops require adv. signature. Students positve on prog., mid-term reviews.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
All students must take placement tests in English and mathematics unless 500 or more on the respective sections of the SAT. Students scoring below placement test cutoff points are required to enroll in developmental courses. Mandatory orientation program for new students. Summer bridge in math. Undeclared are recruited by departments several times a year.	All newly enrolled students must register for the Freshman Seminar during their first semester, a one-credit course designed to help students gain knowledge about university policies, academic programs, and college survival skills. The structured first year program also includes a summer reading assignment, provides a buddy system and peer education activities, and sessions with career counselors who give guidance on how to obtain internship opportunities in certain career fields. The typical freshman carries between 15-16 credit hours per semester with a hard cap of 18 hours. Freshman to sophomore summer bridge with hands-on research projects. Avg. class size 18 students.	Basic education and enrichment program: individual/group/online peer tutorial services. Center for special needs students: academic support for disabilities with professional and peer tutors. ROTC special programs: Ranger challenge, simultaneous membership, special challenge. College has several special programs aimed at improving student retention and graduation. School sponsors a pre-college freshman summer bridge program for 25 students who plan on majoring in mathematics or one of the physical sciences. A residential summer bridge program lasts 4-6 weeks providing participants weekly stipends. Peer tutors (33) teach learning strategies, get mixed reviews from students. At-risk sophomore program (below 2.0 GPA), SSS program.	College inventory survey administered to incoming students to identify those at risk of failure. Instrument identifies students with both marginal and severe needs by measuring their academic motivation (i.e., study habits), coping skills (i.e., opinion tolerance), and receptivity to guidance. At-risk students are provided special one-on-one services, which include both academic and personal counseling. Peer mentors regularly visit with at-risk students and help monitor their academic progress. Events: homecoming, concerts, dorm programs, Greek programs. Dry campus. Commuter lounge. Students need to take initiative to get involved. Active residence hall programs. Theme housing (Greek, honors, ROTC, basketball, choir, etc.) Residence halls active 24 hours a day. Students take probation seriously. Must leave halls if use drugs, alcohol. Judicial court.	Limited child care by ed school, office for student adaptive needs (physical and learning disabilities). Many students work.	Students who participated in discussion group generally expressed appreciation for the parental nature of advisement services. In particular, students endorsed the mandatory one-on-one sessions with faculty advisors immediately following the mid-term assessments. Students talked about being grounded by the "reality check" of such a consultation, valuing faculty help in devising corrective actions.	In general, respondents said college has hands-on, friendly atmosphere. Institution wants to improve retention — goal is 73% fresh to soph retention by 2003.	The greatest "leakage" occurs between freshman and sophomore years. There are also many "stop outs" due to both financial and academic problems. School sends letter warning of possible termination. They also do exit interviews to find out why students leave. Say students who leave are unclear about their goals or have personal problems. Some good students transfer to more prestigious state university nearby. Some students are bored by life in small community, although others like it. Older students sometimes find the campus too strict. In general, those with goals and majors are more likely to stay.		More than 50 buildings, "beautiful and modern campus"; state-of-the-art library with online services, bowling alley, the first planetarium in the area, aquarium, greenhouse, 24-track recording studio, and a brand new fine arts complex and academic computing center. Large internship programs in business economics and humanities. Career center holds job fairs twice a year.

	Institution type	Student characteristics	Student performance indicators (entrance, retention, graduation, avg. time to degree, other important info)	Faculty info (size, student/fac ratio, % tenured or track, % race/ ethnicity, other important info)	Recruitment	Admissions	Financial aid	Other institutional policies that affect low-income enrollment, retention, and graduation	Developmental education	Advising
INSTITUTION D	Private HBCU located in a large city. A moderately high-cost institution at almost $19,500 per year (with R&B), modestly selective admissions policy. Provides degrees in Arts, Science, and Music, as well as a Master's in Arts.	Approximately 850 students. Females out enroll males 2:1. 91% of freshmen live on campus; 63% of all students live on campus. 56% graduation rate.	Avg. entering freshman has composite SAT of 879 or an ACT of 18.6. 25% of undergraduate students make the Dean's List; 2.6% earn a 4.0 GPA.	63 FT; 22 PT for FTE of 70.83. 70% of FT have doctorate; 14.3% are professors; 59% of faculty are Black. 167 FT employees.	Students are recruited nationally and internationally. Most students come from particular states within the US: Texas, Michigan, Illinois, Ohio, and California, but student body includes students from 41 states and 17 countries.	40% admit rate, 32% enroll. 247 students enrolled in 2000. Students with a 2.5 GPA and ACT score range of 19-20 are admitted. Have a minimum gap of 2.5 (on a 4.0 scale). Catalogue lists it as a selective institution accepting only students from the top 5% hs class (but that does not appear to be the case). Policy is that a student cannot exceed one year, or have more than 12 semester hours, with less than a 2.0 GPA. Each student has an academic review in the registration office at the end of each semester. This is the first year that students will be able to register or access their transcripts online.	Avg. package $10,340. Avg. loan $4,280, avg. Fed. grant $3,217. Loan indebtedness ranges from $20,000 - $25,000 after four years. No institutional work program. Most institutional financial aid is merit-based, which goes to higher-income (non-Pell) students at a rate of 75-80%. According to the financial aid director, 80% of the students that leave do so as a result of financial difficulty. Financial aid is mentioned by the Career Planning and Placement Officer as a major issue because "low-income students don't know where to get money." An ongoing effort of the Board of Trustees is to hold an annual fundraiser for financially needy students.	Registration officials noted that students can repeat a class as many times as they want and receive the last grade as part of their cumulative GPA. Even though the institution does not have an attendance policy, professors can require class attendance. Institution now requires that students under 21 live on campus. Learning Center staff work with the financial aid office to ensure that more students get the financial support needed to live on campus.	Developmental education is intricately linked to TRIO program services. There are currently 150 students being served in the SSS program. The learning center merges all of the classes offered to provide tutorial support for students.	Advising process is constant upon entry. Freshmen have freshman exams, they are assigned faculty advisors within their major, and students are required to declare a major within their second year to ensure faculty support.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
Learning Center coordinates freshman orientation process, and helps students identify resources for questions they may have. Many freshmen go through a freshman orientation process as well as have a sophomore proficiency exam. In the future, the sophomore proficiency exam will be part of a standardized testing process and measure of institution's effectiveness.	47% of classes are under 10 students; almost 80% under 25 students. Bridge program for incoming students in chemistry, biology, math, and science. Students can participate in a "course on learning strategies designed to help them reason," according to a faculty member.	Though the Learning Center offers support to students, the center location moved frequently (on their third move) and changing location affects student's knowledge of where to go to get assistance. However, the Center Staff are trying to make the center's programs more appealing so as to attract more students as well as help them identify where the center is located. The Learning Center staff work with the financial aid office and student affairs office to ensure greater coordination of efforts to help needy students get awards and stay in school. According to staff in the Registration office, the academic counseling center is very new and is expected to be a part of the next wave of collective coordination.	Additional social support offered to students includes religious services and student leadership activities. Provost states, "freshmen orientation extends to the whole person ... to dining etiquette, gender issues, sex, budgeting, life skills, etc." Additionally, "the President has a fireside chat once a month" to help increase student retention. Provost believes in the notion that "discipline is what makes it all successful" in aiding student education completion. Professionals at school have noted the institution's limited ability to serve the students needing health services, technology support. 91% of freshmen live on campus; 63% of all students live on campus.	Faculty member in the science department mentions the need to provide assistantships to students. Additionally, one faculty member notes "we need more mentoring opportunities for poorer science students." Students, mentions one faculty member, are responsible for their counseling and tutoring. Counseling is not viewed as a faculty requirement.	According to the Provost, "practices are fairly dated." Student support center and counseling services are located in one building, student affairs in another building. Consolidation of all student services is to be implemented within five to six months. "				

	Institution type	Student characteristics	Student performance indicators (entrance, retention, graduation, avg. time to degree, other important info)	Faculty info (size, student/fac ratio, % tenured or track, % race/ ethnicity, other important info)	Recruitment	Admissions	Financial aid	Other institutional policies that affect low-income enrollment, retention, and graduation	Developmental education	Advising
INSTITUTION E	Private four-year HBCU located in a mid-sized town 40 miles from the state capital. A second-chance institution for students that didn't take their high school education seriously. Although this is a private institution, it provides a lower cost to students, once packaged with aid, than most public four-year institutions.	Nearly 50/50 split male/female. Almost all full-time students. 99% Black; 55% from within the state; 64% reside on campus. Students are academically less prepared than students at most colleges. Many are first-generation students, with poor academic underpinning and poorly-rooted spiritual backgrounds. Students choose school for a "second chance" opportunity, the low cost, its size, hands-on methods, its religious connection, and because it is an HBCU. They don't get lost in the crowd here. Students are led to understand that they must learn to give back to the community, just as the community, particularly the institution, has given to them. They learn to respect and be responsible for others.	7% were in the top 10% of their hs class, 12% in the top 25%, and 63% in the top half. 89% fresh to soph retention, 56% graduate in 6 yrs. The campus literally embodies "it takes a village to raise a child" mantra. Students have a strong desire to better their lives. Many of these students have been told that they won't succeed in life, let alone academics. This institution provides a good moral, social, interpersonal intervention for students. As the tag line of the college states, it is about "The Power of Potential."	47 FT faculty. 16:1 ratio. No adjuncts. Faculty encouraged to attend conferences to network with colleagues and learn how to improve their teaching and practical knowledge. May be a faculty retention problem, as some faculty leave after one year because they don't fit in to the hands-on philosophy. Also, salaries relatively low, with an avg. of $29,000, well below national avg.	Recruitment exercises include visits to California, Virginia, and DC — typically states that provide out-of-state financial support to students.	Open admissions school, low cost for a private institution — almost all students receive financial aid. Attracts students who have not necessarily applied themselves during high school. Each year the college incorporates a new promotional program to attract students. Last year it was the Open Discount Program, allowing non-traditional students to work and study. Students can early admit during their junior year if their GPA is above 3.0 and sign an intent to enroll; about half attend. Admissions works closely with TRIO programs; about 3/4 of Upward Bound students attend institution.	Tuition and room and board $11,980 per year. Over 95% receive financial aid (25 students of 800+ do not). Approx. 85% receive Pell Grants. Aid office frontloads students with grants during the first two years to the extent that it can. Avg. student receives $4,000 Pell, $3,100 state aid, $1,000 SEOG, and about $1,700 FWS. That covers almost all COA. Debt load is lower than most public colleges. About half of students also work, and half of them have work-study. No emergency aid, but students can use their Stafford eligibility as necessary. Financial aid staff meet with groups of students during summer orientation, closely counseled not to incur unnecessary debt. This past year, the college promoted a 30-day scholarship program (in March), which essentially reduced cost of attendance to $500 for eligible students; over 300 students applied for this scholarship.	College is a "Boot Camp" for students who haven't followed the traditional academic path to postsecondary education. Approach is religious, paternal, and strict. Many students don't like it initially but come to appreciate the college's hands-on nature. Students feel that they can talk to anyone on campus about their academic and personal issues. Nurturing, safe environment. Mandatory "Chapel Service" on Wednesdays at 11am for one hour, designed to "uplift" students. Guest speakers provide motivation to students. Chapel service is an important strategy to encourage students to walk the line, improve themselves, and persist to their goals. Faculty members take attendance at every class and provide that information to the President. If students are overly absent (two times, in some cases), a letter or phone call goes home to their parents. Letter also sent if dorm rooms not kept clean.	There are now no remedial/ developmental courses. During the past two years, they have removed those courses and created new courses that provide a broader learning experience in the basic requisites, such as mathematics, science, and English (five credit courses). As one faculty member remarked, students felt stigmatized by taking the remedial courses.	Must have advisor sign form in order for students to register for classes. As well, students are required to meet with their faculty advisors three times each semester, but often do not. This fact was supported by both students and faculty. Each faculty member advises approximately 15-20 students, formally and informally.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
Freshmen take the Comprehensive Assessment Program (CAP) test during orientation. Test, which is actually the Sophomore Proficiency Exam, is used as a diagnostic instrument, and students are placed accordingly for freshmen year by score in reading, writing, and mathematics. Mathematics majors take the McGraw Hill mathematics exam for placement. CAP is also used as an aptitude test for students' majors.	Incoming students come onto campus for a 2.5 day orientation during July with their family. Entire campus gets involved in the freshman orientation course, which is attended by 299 freshmen at two sessions each week, for credit (2 credits).	Students are told that their goal is to graduate with a degree. Retention is important. The college community fosters the atmosphere to challenge students, academically and socially. Faculty members meet once a month, and department chairs once a week. Retention is often brought up, since it is a foundational piece of the entire college philosophy. Many strategies on campus to help retain students: academic advising, support services, the Writing Center, Technology Center (in the library), teacher education curriculum, and math and science labs. Faculty members encourage students to attend the Writing Center and to use tutors around the campus.	70% of students (450) live in one of four residence halls (two for men, two for women). Halls are well maintained, wired for Internet and email (about 50% have their own computers). Everyone has access. Student Services works closely with fraternities and sororities on campus. It seems that most social activities for students are coordinated by these pan-Hellenic societies. VP for Student Affairs estimates that 60% are involved in one of these organizations. Student recreational center has games and TV for students, and each residence hall has a common area for students.	Childcare through local church.	Respondents felt institution provided a supportive climate, faculty were committed to retention and students; otherwise, they wouldn't be here. Heard the same from students. The financial aid office does a remarkable job of distributing aid, making this a very affordable small school.	Retention is a priority on campus, according to several faculty members. In anticipation of site visit, all faculty on meeting list were distributed a retention mantra/guide from the President. As one faculty member stated, "Retention is everyone's business; it is implicit!" "This school does a pretty good job given the type of students they get." The retention of faculty is perhaps a greater problem than the retention of students.	For a small college, this is a remarkable institution. It keeps the price affordable, provides a supportive environment, and is committed to students and persistence. It is pleasing to see an institution classify itself as a "second-chance" institution. However, this place isn't for everyone. It is extraordinarily hands-on, almost to a smothering state. But that's what makes it work for many students.	The faculty are committed; given small salaries, they must be. They do lose faculty, probably because the institution is strict. The president is a top-down, in control person, and some faculty did not like that. It is also a religious-based institution. Students don't like the level of hands-on control, but similarly, understand it. This place is helping them grow up.	

	Institution type	Student characteristics	Student performance indicators (entrance, retention, graduation, avg. time to degree, other important info)	Faculty info (size, student/fac ratio, % tenured or track, % race/ ethnicity, other important info)	Recruitment	Admissions	Financial aid	Other institutional policies that affect low-income enrollment, retention, and graduation	Developmental education	Advising
INSTITUTION F	Public four-year, land-grant college. School located in growing urban area but far from main population centers in state. Most common majors: business, education, engineering, social science.	12,500 at main and branch campuses. 53% female, 50% of freshmen in campus housing, 80% of all students live on or near campus (more residential than commuter institution). Avg. age for undergrad is 23. Many from very small towns, schools. Institution seen as BIG place, attractive to students (based on student survey). Little Greek life.	81% in top half of hs class. 72% fresh to soph retention, higher for females. 10% graduate in 4 yrs, 41% in 6 yrs, 7% still enrolled after 6 yrs. Leaving in sophomore and junior years bigger problem than freshman.	96% FT. 17:1 ratio. 650 tenure-track faculty: 85% white, 10% Hispanic (staff is 44% Hispanic), 34% female. 82% have terminal degree. Reg. load is 12 credits. Tenure-track teach 54% of hours (71% upper div).	No formal recruitment targets but would like small overall increase and substantial increase in Native Americans. 6 recruiters (but faculty, extension officials, staff, all help), multiple visits to all high schools in state, school events, etc. Compete w/ other state schools on aid primarily (yield 48-49%). Considered "best buy" in national publications but there are cheaper in-state alternatives. Discuss scholarships w/ attractive candidates, offer attractive financial aid package to low-income students with high performance.	"Slightly selective" 2.5 GPA and college prep curriculum (2.0-2.4 ok w/ 20 ACT or 21 if below 2.0). Many applicants lack a math credit (can enroll in contiguous cc branch campus to get it). Before 1987, institution was open admission. There are few conditional admits. Goals: 1% increase in overall enrollment each year. 800 rejected a year — most lack 1 credit. 600 (all levels) transfer per year from CC and 4-yr colleges (mostly branches).	Avg. package: 47% gift aid, 49% loans, 4% work-study. Avg. award: $6,000 (cost: $12,000). 92% get some aid. Typical package: 23% gift, 36% loan, 3% work-study 17% state/other scholar, 22% other. Best freshman package: 65% gift (others 60%), typical for on-campus freshmen: 61% gift plus loan and work-study. State scholarship: free tuition w/ 2.5GPA after first semester. There is an all grant aid state program for highly talented low-income students.	Major institutional goals: retention (concern w/ sophomore to junior retention especially); academic reform (e.g., seeking alternatives to developmental ed, implementing learning communities); teaching quality (push to consider teaching quality in hiring, tenure); more Hispanic faculty.	No developmental ed. Unofficially: intro math courses provide remediation, there is lots of free tutoring for other classes and SI accompanies gatekeeper courses. College encourages simultaneous coursetaking at branches that offer the same course if students are experiencing difficulty. Community college next door good place for taking math, other courses.	Small group advising in summer for new freshmen. After that, differs by college. Health, arts/science, education, and business use professional counselors. Engineering, agriculture use faculty. Web-based registration allows bypass of advising after freshman year (some colleges rethinking this). Some faculty directive (e.g., tell student to avoid tough teachers, change colleges, etc.), others not. Freshman orientation course w/ advising taken by some students in all colleges. Est. 20-30 advisees per faculty. Also advising provided in ethnic/ affinity programs, SSS, peer mentoring programs.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
Limited efforts until recently. Main effort beyond advising: freshman experience course (FYE) w/ advising, study skills, careers, etc. Noted by respondents: small class size a plus (for freshmen: most have 25 or less, a few 60-100 w/ assistants). Institution studied "barrier courses" and try to advise against enrolling right away; developing academic support for those classes. Some colleges do more, esp Ag, Engineering: intrusive advising, group study, tutoring, internships, etc. Introducing learning community programs in several colleges.	Survey of students showed that positive classroom instruction and interaction was the thing they liked best about campus. Avg. class size: lower div 39, upper div 22. Typical course load below 15 units (many take 12). Many on academic probation but most improve. Lots of gen ed at first. Some advisors urge repeating courses where D was earned (but this is changing because doing so would preclude free tuition state scholarship).	Wide range of support available, differs by college or dept. Lots of free tutoring, group study options. Campus wide: learning, writing centers. Affinity, home base programs also offer academic support through tutoring, internships etc. Some SI or mastery classes in intro science courses (extra unit credit). In past, more SI and developmental ed — now moved to branch community college. SSS (350) has tutoring. Ag school has 30 student organizations with peer mentoring, job experience, etc. Engineering has minority programs.	Over 300 student organizations. Most students join something. Also student government, housing activities. Associated students an important force (got a "fall break" instituted recently). Students positive about social life on campus. Strong sense of community, links w/ faculty. Staff/faculty volunteer at events, games. Open door policy (students can drop in on faculty). Half of freshmen in dorms — lots of social activities.	Large numbers of students work on campus, through work-study and other campus jobs. School estimates 70-80% work on campus or in nearby communities. Efforts to schedule courses to accommodate work schedules, which are a financial necessity. Some concern w/ time to degree for those taking light loads, but can't do much. Child care available — est. 20% are single parents.	1) Focus on retention. 2) Maintain small campus feel. 3) Campus looks good (student survey). 4) Range of academic support. 5) Faculty/staff interaction w/students. 6) Developmental help in freshman courses. 7) Group work built into instruction. 8) Faculty open door. 9) Classroom interaction #1 in student survey. 10) Admission requirements. 11) Half of freshmen live on campus. 12) Lots of opportunities for suspended to reinstate. 13) Caring faculty, rewards for good teaching. 14) Feeling of community. 15) Affinity groups, many organizations. 16) Hispanics prominent, role models. 17) Student time w/FT faculty higher than elsewhere. 18) Dept. minority progs. 19) Strong student work ethic.	Frequent academic probation, suspension, but clear routes to reinstatement. May be that faculty advisors in tough programs (engineering, sciences) encourage transfer to other colleges, programs, but clearly some just don't have backgrounds for science. Concern that some take too few credits (so they can work), take too long to graduate. Respondents also say students leave for financial reasons, work and scheduling problems, lose free tuition (new program — new problem), families exert pressures to work, help out (don't understand demands of college), very poor feel guilty spending money for college. Some students want more prestigious school.	Largely concur with respondents' views. Additional important factors may be: 1) labs, group work in many courses; 2) location far from state's population center means few "casual" students; 3) students get credits at leisurely pace; 4) few special admits; 5) largely traditional age undergrads; 6) few initially part-time students; 7) active recruitment for low-income, talented students (because of state scholarships); 8) experiential education in Ag, engineering, other fields; 9) low-income aren't isolated — perception is most are low-income. No stigma. 10) 3,000 (!) work on campus.	Same positive views of campus expressed by full range of respondents. Almost no one had discordant views. New arrivals among staff particularly impressed with campus atmosphere.	

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INSTITUTION G	Four-year private university in urban center. Two main campuses total 13,500 students, 9,000 of whom are undergrads, 5,800, main campus. Profile calls it "moderately difficult" on selectivity. Common majors: business/marketing, computer/info science, health. Little interaction among staffs across the campuses.	13% Black, 11% Hispanic, 14% Asian, 34% white, 11% international, 17% unknown. Majority are first-generation college students from the urban area where school is located. 58% male, 23% residential, average age: 26 (including grad students). Many are from immigrant families. Many work, some at 2-3 jobs; they don't ask parents for help. May attend here for convenience, relatively low tuition.	Entering SATs: 47% over 500; 60% verbal, 73% math, over 500. Est. 70% fresh to soph retention; of those who stay, 90% will finish the third year. 28% graduate in 4 yrs, 52% in 6 yrs. 6 yr rate for Pell recipients same as all students. 6 yr rate for special admits is 32%.	38% FT. 23:1 ratio. IR director says faculty emphasis on teaching over research. Faculty provides personal attention, advising, nurture students. Many are alumni. Students say too many PT and adjunct faculty.	No special efforts to recruit low-income or underrep students (summer bridge program discontinued because of $). Runs a special fresh yr program for low-income, minority special admit students, however. Try to be welcoming, diverse, family-oriented campus.	Modestly selective.	75% get an institutional grant (avg. $6,311) and 67% get loan (avg. $3,670). Avg. Pell $2,749, 55% receive it. 54% get state grants (avg. $3,346). Tuition is $17,030. No info on % of costs covered by typical grants/loan pkg. Special admits pay additional $500 per semester and can't get institutional aid. Small endowment, institutional grants that consider merit and need (avg. $9,300). Students say financial aid is bureaucracy but workshops are run in many languages. Officials think $ a factor in leaving before graduating.	President accessible to students through online chats.	No developmental ed for most students. Special admit program has developmental component with small classes, tutoring,	Professional advising first semester. All students assigned to faculty advisors thereafter for more structured, guided advising with course sequence for all four years laid out by faculty. Faculty teach a course for freshmen called Univ 101, which includes study skills, academic planning, career planning, etc. and provide advising. Students not terribly positive about advising quality. Students with GPA below 2.0 are targeted for intrusive advising within individual colleges.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
Students advised to take no more than 15 units first semester. Most classes are small — avg. of 22 students.	New first-year discovery program with linked courses, team teaching. Students do a co-op in their sophomore year. Summer programs in some colleges (e.g., nursing, accounting). Special admit program for low-income, minority students who show promise but do not meet regular entrance requirements. Those students have a structured freshman year experience with intensive work in the liberal arts core curriculum, advising, academic support services, small classes, peer or faculty tutoring.	Weekend/evening tutoring, learning center (use is high), first year discovery program, co-operative education.	Many ethnic affinity programs, academic clubs. These are often hard for working students to attend. There are leadership opportunities. Multi-cultural events are well attended.	No day care due to budget cuts. Health awareness and wellness programs, counseling. It is often hard for working students to get to classes.	Respondents attribute success to small class sizes (avg. class size of 22) and dedicated faculty. Faculty emphasize teaching over research. Also laud honors program, work-study, cooperative education. Mention improved advising, residence halls. Officials not satisfied with current retention/ graduation rates. Business students proud to be at college, say faculty are good, like new cornerstone course that incorporates fieldwork.	Officials say 80% leave for reasons other than money — many transfer to other colleges (publics that are cheaper), lack skills, have intense family demands, job demands, or have a culture conflict in attending college.	Institution didn't know its record w/ Pell recipients until it did an analysis for site visit. Institution has not paid particular attention to this issue and officials were surprised by findings that grad rate for Pell recipients was the same as for institution as a whole.		

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INSTITUTION H	Public four-year, land-grant HBCU with approximately 3,600 students, most attending full-time. Located in a small rural town. The university offers over 60 baccalaureate programs in the areas of applied professional sciences, engineering technology, sciences, arts, humanities, education, and business. College has a small number of master's level programs. Largest enrollment in engineering technology and sciences, followed by applied professional sciences. Together, those two areas account for 43% of total enrollment.	58% female; 95% Black; 89% full time, 66% in-state; in-state students come from over 118 high schools. This is a second choice institution for many students. 1,880 students live in residence halls (there is a waiting list). Large percentage of students engage in the Greek system. Intramural sports are very popular, and many students participate in step show, gospel choir, Young Democrats, ASUB, and NAACP. College has a strong ROTC program and produces many minority military officers.	Avg. entering freshman SAT is 867. University receives 3,700 applicants, of whom 40% are admitted, and 15% (569 students) enroll. No year-to-year retention data. 45% graduate in 6 yrs.	96% FT. 16:1 ratio. No large lecture classes. Students described certain faculty members as individuals who helped them in one-on-one situations when they were struggling. The faculty knew students by name in most cases. This strong bond also acts as an early warning system for students. Main atmosphere is "in loco parentis", intrusive in support services that help students to succeed.	Institution did not have a concept of enrollment management or marketing, and until 2000, was in a crisis, with freshman enrollment in steady decline. Brought up from 570 to 616 in '01 and 720 in '02. Now they are trying to stabilize the student population. Institution that students choose mostly because they can get in and because it is relatively low cost.	Avg. SAT for incoming students is 867. For first-time entering freshmen, major emphasis is placed on successful completion of all required college preparatory courses (as determined by the state), GPA, and class rank. SAT I or ACT score is evaluated in conjunction with hs scholastic achievement. Provisional admission status if SAT/ACT score is greater than 830/17 but GPA is less than 2.00, or if SAT/ACT score is greater than 750/15 and GPA is greater than 2.00. Students can be admitted with lower scores if they participate in the Student Support Services program.	Relatively affordable (in-state tuition around $4K). 82% receive Pell grants; 40% receive max Pell. Aid office tries to provide students with SEOG grant, and does their best to forego loans during freshman year. All institutional aid is merit-based; the Presidential Scholarship requires SAT of 1200 or higher; second level is Honors (valedictorians — high achievers). State need-based program used to provide additional support to high achieving Pell grant students, requires a B average, 70th percentile or higher in hs, SAT greater than 1100. Emergency money is available via a donor that gave $10k in revolving funds. State deficit is causing major problems for the financial aid office. Financial aid department conducts a debt management class and now boasts a 4% default rate, down from 19% in 1987.		University does not offer any developmental courses, as mandated by state legislature, so students must now take these courses at a community college. Students do not get degree credits for certain courses in math that are offered, which are developmental in nature, but they do count for aid.	In order to register, students must see an advisor, who will then give the student a PIN number to login for online registration. Drop/adds also require an advisor's signature. Students must declare a major by the end of the freshman year or they stay in the Freshman Program for additional advising. However, one student told us that he never did find his advisor. Faculty are not required to turn in mid-term grades. At-risk students have double advising: a faculty person and a counselor for Freshman Studies.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
School runs a summer orientation for freshman students preceding fall semester. Orientation leaders are very visible and continue to provide role model and mentoring for students after orientation week. Students take placement exams during summer orientation.	All freshman are required to take Freshman Seminar 101, which is taught in 29 sections each semester. Students receive two credits for the course. Instructor of the freshman seminar also acts as student's advisor for that semester. According to students, Freshman 101 helped with time management and the teachers interacted with students outside of class, kind of like parents.	Student Success Center offers both group and individual tutoring. An important part of this program is an early alert system for faculty to contact the program about students in need. The "Psychometric" program provides counseling, tutoring, and psychiatric evaluation for students. Testing labs are available for the teacher education program (PRAXIS). SOCKET program is a multiplatform delivery of instruction that is competency based. Program is content driven (e.g., elementary mathematics), and is campus-wide across all schools/disciplines. Student-sponsored organizations also conduct tutorial assistance, and there is a writing lab (part of writing across the curriculum) and computer labs (in just about all academic buildings and through specific subject matter areas) available for students.	Students whose entrance placement exams are low get support through Freshman studies for tutoring; the mathematics dept. provides additional math tutoring. The University has a Speech major and a Speech clinic for diagnosing speech problems. Writing and critical thinking center are under the freshman center. Speech is required of all students. All students take a math and English placement exam.	Students have complained about safety on campus. Student parking areas are in "not safe" areas, and students also expressed safety concerns around housing — lack of good security.	Enrollment management director felt there was a major problem with faculty attitude. Faculty and staff at the university were not customer-service oriented. Also a problem in perception — for instance, when the EM director came on board, the president thought the college had 83% graduation rate — twice what it really was. Now that they have data, they see it needs work. However, this will take "Patience to the 3rd Power," according to the director.		1) Faculty members have high expectations for students, but staff need to be more customer-oriented toward students. Main atmosphere is "in loco parentis", intrusive in support services that help students to succeed. (2) Friendly, supportive atmosphere kept students at this institution, and students who left did not participate in the campus activities. (3) University has gone through a leadership problem period, and that has not been helpful. (3) Needs to expand on the current support services on campus; what they currently provide seems to work, but they need to do more of it. (4) Resident halls and activities for students are sub-par at best. (5) Not a huge financial aid issue, but institution could use more need-based aid.	Faculty and staff appeared to be committed to the university and retention. Students appreciated the campus. Being an HBCU helps to a certain degree; everyone gets the message and understands that the university is their "village."	Student life on campus is a major problem. According to the housing director, residence halls are "very poor", old physical structures, problems with water, storage space, and electrical wiring. 1,880 students live in the halls, and there is a waiting list. According to students, several had to find temporary housing in town because there was no on-campus space. Each hall has monitors, but not an organized residence life program. Individual rooms are not wired for technology, so students cannot access their email from their rooms. All students voiced concerns about the facilities, particularly housing; one student was embarrassed that university is in such poor condition. The room assignment process for housing was bureaucratic and late — several students lost their room assignments because of financial need for a $150 deposit.

	Institution type	Student characteristics	Student performance indicators (entrance, retention, graduation, avg. time to degree, other important info)	Faculty info (size, student/fac ratio, % tenured or track, % race/ ethnicity, other important info)	Recruitment	Admissions	Financial aid	Other institutional policies that affect low-income enrollment, retention, and graduation	Developmental education	Advising
INSTITUTION I	Public four-year university. Several branch campuses, with total of 14,000 undergrad and grad students; approximately 7,600 on main campus. Largest number of degrees in education, criminal justice, accounting, and nursing.	54% white, 27% Black, 2% Hispanic, 14% unknown; 56% female. Many come from surrounding rural/small town areas, characterized as conservative, religious. 37% are first-generation. 30% at main campus in residence hall or university apt. Also 11 sorority/frat houses — over half of students plan on Greek living — and most others live near campus. Administrators see school as residential, students w/strong work ethic, motivated educationally and economically.	Avg. entering ACT is 20.9. 38% in top quartile of hs class, and 72% in top half. 74% fresh to soph retention. 43% graduate in 6 yrs.	28:1 ratio. Faculty say teaching is primary mission of institution, consider 23:1 low ratio facilitating teaching. Frosh classes taught by FT faculty.	Draw largely from 15 county area, largely rural and small towns. School is cheaper than some others in area but about the same as other state colleges. No specific low-income targets in recruiting but area from which they draw is heavily low-income and first-generation. Want to increase #s of distance learners, transfer students.	Admission criteria: 1) 2.0 GPA, 18 ACT or 870 SAT; 2) 15 Carnegie units incl. 3 in English. Have articulation agreements to facilitate transfers from many other institutions.	Annual in-state tuition and fees: $3,296. Full cost of attendance: $8,100 for residents. 74% get some aid. Avg. Pell $3,750, plus avg. $2,000 in loans. (est. avg. indebtedness at graduation: $17,125.) Scholarship program is merit-based (31 ACT and 3.7 GPA qualifies). Priority deadline for financial aid is relatively late (May 1), good for low-income students. Low default rate (4.2%).	Fresh under 19 must live in residence halls. Course repeats allowed, second grade holds. Conditional admits must attend counseling/advising and fresh orientation course. Undecided majors must take career class.	ACT/SAT scores or placement exams used to determine need for developmental ed. 30% need math and/ or English. Completion of developmental ed is flexible. Lots of free tutoring available for students who have difficulty in regular courses.	Professional advising for undeclareds. No requirement to see advisor for those w/ majors even if on probation. Liberal course drop policy.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
Summer orientation for first year students. Undergrad majors are primarily in professional fields that have highly prescribed curricula by sophomore year.	30% take developmental math or English. All must take one credit required freshman orientation course. 12 units is typical load and not just in first year. Entering students take a core curric of 42 units w/ exit testing before courses in majors. No SI. Starting various reforms — learning communities, structured first year programs.	Learning center for writing, natural sciences, general computer lab. Offers writing across curriculum, tutoring, developmental classes. Many colleges/depts offer free tutoring, have projects to work w/ students on academic probation, study skills workshops. Tutoring/ academic support program for athletes.	Strong student affairs component promotes residence hall activities, counseling, career, disabilities centers. Lots of clubs (over 100), organizations, Greek (including black); participation high. Use many Noel-Levitz products, first year mentoring program, 200 students participate in residence life living/learning communities (new). No SSS (had one in past).	Limited child care, office for student adaptive needs (physical and learning disabilities). Many students work.	1) homogeneous student values: rural work ethic rural. 2) residential campus — requirement for fresh residence on campus. 3) faculty share same backgrounds as students, give appropriate advice. 4) liberal course repeat policy, liberal probation/suspension policy. 5) advising requirements for conditional admits. 6) freshman orientation course.	Same items cited in institutional effectiveness.	1) Relatively high avg. entering ACT score (21) and hs rank (higher than institutional requirements). 2) Residential campus. 3) Students share values, beliefs across racial lines, including strong work ethic. 4) Many faculty/staff are alumni, respect students like selves, serve as role models, have personal stake in student outcomes. 5) History of active concern w/retention, setting targets; important institutional goal to increase retention — reiterated by wide range of respondents.	Because many faculty and staff attended institution and come from the area, they have a strong sense that the students can succeed. They take responsibility for student outcomes.	

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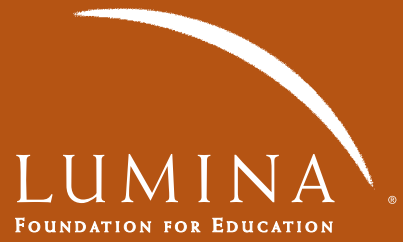
INSTITUTION J	Private four-year rural HBCU. Enrollment of over 2,400 and annual tuition and fee charges of $10,500. 58% of students receive Pell, and 43% of students graduate within 6 years. Engineering is the largest program on campus, followed by health, natural sciences, and business.	Over 95% Black, and nearly two thirds are female. 96% are full time. Students come from around the US, and half from within the state. Freshmen, sophomores, and all first-year transfer students are required to live in the residence halls. The school and student body have a strong religious underpinning, and religion is a strong presence on campus. Students are energetic and motivated to learn. Greek life is big at this university, as is choir singing.	27% have a 500 math or verbal SAT score. School describes admissions as moderately selective. 71% fresh to soph retention in 2000-01, 77% in 2001-02, 43% graduate in 6 yrs.	Faculty is 328, 90% FT. 10:1 ratio. Students say that faculty take your hand and want to make you succeed, and can go talk to faculty at any time about academic and non-academic issues.	Recruit nationally for students, but also have special targeting programs within the home state. Use institutional aid mostly for merit-based programs to recruit gifted students. Somewhat selective college, looking for academically gifted students. Alumni are heavily involved in recruiting around the state and around the country. The university also uses current students to visit their old high schools on semester breaks and hand out recruitment information.	Rolling admissions policy allows for more flexibility in packaging students. Minimum GPA is 2.0, avg. is 3.0. Students are "encouraged" in literature to have an SAT above 1000 in order to succeed. Conditional admittance policy for students who have less than 2.5 GPA, 720 SAT, or 15 ACT.	91% receive some type of financial assistance, and 85% receive federal aid. The aid office attempts to frontload grants as much as possible. In addition to the federal funds, they also work with banks, Sallie Mae, and Plato for alternative loan programs. The state grant program provides up to $2,500 per year to eligible students. There is little need-based institutional aid, and what exists is fading fast. Institutional aid is merit-based. The university is very strict about institutional aid funds, and when students lose scholarships, they never get them back.	Retention is a focus; retention program staff are housed in the Office of the President. Provide tutoring and other skill development activities. Institutional life is important, and having students live on campus for first two years helps retention. Conditional admits must take part in retention programming. At the end of May, Provost sends out a list of students with less than a 2.0 GPA. Retention staff reviews each student. Conditional admits must earn a GPA above 2.0 for the full year in order to register for sophomore year. Students who do earn less than a 2.0 GPA must write an essay stating why this happened.	It does not appear that institution has developmental programming.	Advising appears to be a new problem on this campus. Since the installation of telephone and now online registration system, students do not have to see their advisor. They are strongly encouraged, but most students do not meet, and faculty see this as a problem. Students do say that they end up discussing academic and course issues with faculty informally. Mid-term reports are sent to parents if student is failing, and students who earn less than a 2.0 GPA are put on probation.

Shaping students' initial instructional program	Typical freshman education	Academic support system	Other social supports	Accommodating students	Respondents' views on institutional effectiveness	Respondents' views on institutional responsibility	Site visitors' views on institutional effectiveness	Site visitors' views on institution, faculty, students, etc.	Other important information
Summer orientation provides an initial dialogue about courses.	Freshman take 18 credits per semester. Freshman students, including transfers, must take a one-credit freshman seminar course and pass that course. It will be broadened to a two-semester, two-credit hour program. Students are supposed to enter with their major declared, but one-third of the freshman class is undeclared.	Tutorial services provided for students during Sunday through Thursday evenings at various locations around campus. Sunday session runs all day and is busiest day of operation. Program is centralized, covering the five colleges. 75% of freshman receive tutoring. Colleges provide their own programs as well. Biology has a credit-bearing seminar program that they feel is very good compared to the campus-wide version. 375 students participate in the college's Student Support Services program.		Institution has extensive work-study program; institution offers 48 apartment units for graduate students with families, and special units for 500 upper classmen.	Faculty believes institution does good job of retention, and isn't sure how it can do much better (even though they feel that it could be better). Faculty-student relationships are important. Campus has a familial environment that nurtures students. According to students, institution offers them a sense of family, where everyone sticks together. Building on the personal touch issue, the campus is a safe, gated community.		Institution is effective because they have a retention plan and work hard to implement it. Campus is a wonderful environment, and the culture is friendly. Students are hard-working. The cost of the institution takes away from retention, and the use of institutional aid on merit is a negative.	Students complained in typical fashion, especially about residence halls and visitation rules. However, they felt it is a good institution and that faculty cares about them.	



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