



E D U C A U S E

CORE DATA SERVICE



2002 Summary Report

Brian L. Hawkins, Julia A. Rudy, and Joshua W. Madsen



EDUCAUSE is a nonprofit association whose mission is to advance higher education by promoting the intelligent use of information technology. Membership is open to institutions of higher education, corporations serving the higher education information technology market, and other related associations and organizations. Resources include professional development activities; print and electronic publications, including books, monographs, and the magazines *EDUCAUSE Quarterly* and *EDUCAUSE Review*; strategic policy advocacy; teaching and learning initiatives; applied research; special interest collaboration communities; awards for leadership and exemplary practices; and extensive online information services. The current membership comprises nearly 1,900 colleges, universities, and education organizations, including 200 corporations. EDUCAUSE has offices in Boulder, Colorado, and Washington, D.C.; www.educause.edu, e-mail info@educause.edu.

© Copyright 2003 EDUCAUSE

All rights reserved. No part of this monograph may be reproduced in any form without permission in writing from EDUCAUSE.

Art direction by Joseph Daigle, Studio Productions

Information Systems

Since colleges and universities began to prepare for Y2K toward the end of the last decade, administrative systems have become a major focus of campus information technology units, in many cases after years of neglect. The need to support better campus decision support systems with an integrated view of data has also become important. Systems that support enterprise resource planning (commonly called ERPs) have taken on a significant role in campus IT strategies.

In this section, we examine ERP systems and the sources of costs associated with them, along with methods of implementing such information systems. In particular, seven of the most commonly used campus information systems are explored from the perspective of their age, most common vendors, replacement plans, and so forth.

ERP Systems

ERP systems are a major focus, as well as a concern, on many campuses; the challenges associated with such systems have been the top-ranked issue in the EDUCAUSE Current Issues Survey in two of the last three years and second-ranked in the third.¹ These systems are becoming a standard, but the cost and complexity of their implementation continues to be an issue.

As seen in Table 5-1, the majority of all CDS survey respondents either have implemented or are in the process of implementing an ERP, with fewer than a quarter reporting no plans to do so. The level of implementation is essentially the same for doctoral, master's, and baccalaureate institutions, but is significantly lower for associate's colleges and institutions in the "Other" category.

Table 5-1
ERP Project Completed, In Process, or Planned

	All	DR	MA	BA	AA	Other
Implementation completed	36.6%	34.3%	34.3%	45.1%	30.3%	37.5%
Implementation in process	22.5%	31.3%	25.4%	18.8%	21.3%	11.5%
RFP stage	3.9%	6.0%	3.0%	4.5%	4.5%	1.0%
Considering	13.5%	11.9%	16.6%	8.3%	16.9%	14.6%
No plans	23.5%	16.4%	20.7%	23.3%	27.0%	35.4%

Table 5-2
Average Percentage of the Total Cost of the ERP by Area of Expenditure

	All	DR	MA	BA	AA	Other
Software and Licenses	24.8%	17.4%	25.1%	33.8%	22.4%	24.7%
Software Maintenance	10.9%	7.2%	11.3%	13.9%	11.0%	11.8%
Training	8.4%	6.0%	8.9%	11.0%	8.0%	7.6%
In-house Staff Costs	20.1%	24.2%	18.3%	16.2%	24.2%	18.5%
Consulting Fees	19.1%	28.3%	19.5%	11.0%	12.3%	23.2%
Hardware	12.4%	12.2%	12.4%	11.4%	13.9%	13.0%
Other	4.3%	4.8%	4.5%	2.7%	8.2%	1.2%

Table 5-2 shows the percentage of overall ERP costs spent on various elements of the project. Doctoral institutions spend the least on software and software maintenance, but this may well be an artifact of their much larger spending on consulting fees. Doctoral institutions also spend a notable proportion on in-house staff costs, which in combination with their higher percentage of consulting costs reflects the substantial personnel commitment required to implement such systems at large, complex institutions. Baccalaureate schools are spending a significantly larger percentage of total ERP costs on training. The percentage spent on hardware and other expenses is constant across institutional types.

Information Systems Analysis

The survey requested information about methods of developing and implementing information systems in general, including the types of system modifications campuses make. Respondents were asked to provide data about seven common information systems that are found on all types of college campuses. Data are presented for these seven systems with respect to their age, plans for replacement, whether they are provided at the system or district level for schools that are part of a multi-campus system, and the most common vendors for purchased systems.

To avoid repeating the same discussion for each of the seven systems, several key points and aspects of the methodology used need to be addressed here. In looking at the data about the age of the systems, there is a rela-

tively large difference between the mean and the median when examining the year of implementation of the various systems. The mean, which is a statistical average, is almost inevitably lower than the median, which is the year for which there are an equal number of responses greater than that value and lower than that value. The mean being lower than the median is the result of a significantly greater number of respondents reporting earlier years, thereby reducing this value. This is likely because of legacy systems that may date back to the late 1970s or early 1980s. This finding should be considered as the various strategies of implementation are discussed, with specific attention to the strategy to enhance older legacy systems with Web-based front ends.

Also, a word of explanation concerning the data captured about specific system vendors is warranted. In the section below describing the seven types of information systems, a table is included for each of the systems in which we have listed the vendors, in descending order, who were named by 5% or more of respondents for that system. Note that these vendors are categorized generically, not by individual product. Thus there may be several products that have been combined for a single vendor, or in the case of acquisitions, several companies may be incorporated under the company that acquired these firms. For example, if a campus is using a Quodata product, it is reflected in the percentage for Jenzabar because Quodata was acquired by Jenzabar.

In the actual data available through the online database service to those who completed

**Table 5-3
Strategies for Acquiring Information Systems**

	All	DR	MA	BA	AA	Other
Develop systems in-house	52.2%	64.9%	49.7%	33.1%	57.3%	60.4%
Develop systems in partnership with a vendor	30.4%	37.3%	30.8%	15.0%	34.8%	37.5%
Purchase a commercial product without customization	58.9%	67.9%	56.8%	54.9%	56.2%	58.3%
Purchase a commercial product and customize	69.2%	76.9%	69.8%	66.9%	55.1%	74.0%
Buy best-of-breed applications	37.8%	47.0%	39.1%	27.8%	27.0%	46.9%
Buy a package of integrated systems	53.5%	54.5%	60.9%	60.2%	40.4%	41.7%
Enhance legacy systems and provide Web interfaces	44.4%	60.4%	42.6%	30.8%	46.1%	42.7%
Outsource administrative systems	7.9%	5.2%	7.7%	8.3%	12.4%	7.3%

the core data survey, both these aggregate listings, as well as the specific individual product names, are available. For purposes of simplicity this report shows only the aggregate (normalized) data. Since vendors with less than a 5% share are not listed, the totals do not equal 100%. The actual total percentage for the applicable vendors is shown to help the reader understand the relative presence of these vendors within a given segment of the higher education community, based on data reported by respondents to the core data survey. Note that EDUCAUSE does not present these data as evidence of market share or vendor dominance.

In all seven of the systems, if a campus developed its own system, this is shown in the category of “homegrown,” giving the reader a sense of what types of institutions are opting for this kind of strategy. Homegrown solutions are included in the analyses if this approach exceeded 5% for that institutional type.

System Implementation Strategies

Through the years, there have long been

vigorous discussions about the appropriateness of building versus buying administrative systems. A recent ECAR study found that modification of the basic vendor code was the single most important factor related to budget overruns, and yet these modifications might be necessary to achieve the goals of a given campus.² Table 5-3 presents commonly used methods of implementing systems. The respondents to the survey were allowed to check more than one method, so these do not sum to 100%. Some findings with regard to implementation strategies include the following:

- Developing systems in-house with existing IT staff is most common among doctoral institutions and significantly lower than all other categories for baccalaureate institutions. This is undoubtedly due to the differences in size of the IT staff (as illustrated in Section One of this report), with large staffs in doctoral institutions and relatively small staffs in baccalaureate institutions.

**Table 5-4
Method and Extent of Modification of Commercial Packages**

	All	DR	MA	BA	AA	Other
Modify underlying code	29.3%	41.8%	26.0%	28.6%	24.7%	22.9%
Modify configuration	59.8%	69.2%	59.8%	53.4%	49.4%	65.6%
Modify external modules	57.3%	77.6%	56.8%	45.9%	42.7%	59.4%
Other	2.6%	3.7%	3.0%	0.8%	3.4%	2.1%
Do not buy and modify	23.2%	14.2%	21.3%	29.3%	34.8%	19.8%

- Developing systems in partnership with a vendor is the least common of the major methods and one that is used significantly less at baccalaureate institutions.
- The strategy of buying a package and implementing it without any modification is the second most common strategy, used significantly more at doctoral institutions than at schools in the other categories. (This also is true of selecting best-of-breed applications but, again, since multiple responses were allowed and doctoral institutions probably have more general systems than other types of institutions, this is probably not all that noteworthy.)
- Purchasing a system and customizing it is the most common strategy, with two-thirds of all types of institutions using this strategy except for associate's colleges.
- The strategy of buying a package of integrated systems is clearly a preferred method for masters and baccalaureate institutions, although least used by associate's colleges and "Other" schools. This is consistent with the previous discussion about use of ERPs.
- Data show that the strategy of enhancing legacy systems is used significantly more at doctoral institutions, consistent with the findings about the average age of systems presented later in this section. (Doctoral institutions overall have older systems, having likely decided to continue to patch and enhance these systems with more

friendly Web-based front ends, keeping them going rather than replacing them.)

- Finally, the strategy of outsourcing administrative systems is not particularly common to any of the Carnegie groups, but it is used significantly more at associate's colleges.

Modifying systems is a more commonly used strategy at all types of campuses than might have been expected. It is important, therefore, to understand if there are any differences in the kind of modifications being made. Table 5-4 shows that more doctoral institutions modify the underlying code of administrative systems than all other groups. The most common method of modification among those who buy and modify software is modification of the system configuration, and there are no significant differences among campus types when looking at this subset. In terms of modifying external modules, doctoral institutions, once again, do far more of this than any other Carnegie group. The strategy of buying a package and not modifying it at all is far less common than might have been expected, with this strategy being used less than one-fourth of the time when all campuses are considered. Not modifying a system is an approach used more than one-third of the time at associate's colleges, followed closely by baccalaureate institutions. Again, this probably somewhat reflects staff levels and the ability of these schools to undertake such projects.

Seven Types of Information Systems

The survey requested data about seven basic information systems that are probably

**Table 5-5
Percentage of Institutions Having Various Major Information Systems**

	All	DR	MA	BA	AA	Other
Student Information System	99.0%	100.0%	99.4%	99.2%	95.5%	100.0%
Financial Information System	98.7%	100.0%	98.8%	99.2%	95.5%	99.0%
Human Resources System	91.5%	100.0%	94.1%	81.2%	91.0%	89.6%
Development System	77.9%	86.6%	87.0%	92.5%	44.9%	60.4%
Library Information System	88.7%	88.1%	89.3%	88.7%	86.5%	90.6%
Course Management System	91.8%	95.5%	93.5%	86.5%	95.5%	87.5%
Grant Management System	40.6%	79.1%	32.0%	19.5%	16.9%	53.1%

the most common on college and university campuses. Table 5-5 presents the average percentage of each Carnegie class for each type of system. As is evident from the table:

- Virtually all campuses have student information systems and financial information systems in place, and there are no significant differences among groups.
- Human resources systems are very common across all groups, but fewer baccalaureate institutions have these than the other groups.
- Associate’s colleges employ development systems significantly less than other types of institutions.
- Library systems are nearly ubiquitous, and no significant differences were found among groups.
- Course management systems are also extremely common, but baccalaureate institutions have a significantly lower usage of such systems than the other Carnegie classes.
- We see a range of use of grants management systems, with doctoral institutions

having the highest use followed by master’s institutions, and baccalaureate and associate’s colleges having a relatively low level of deployment of these systems. Because of the highly heterogeneous set of institutions in the “Other” category, the percentage falls in the middle of the range. All of this is fairly predictable, in that the use of grants management systems directly correlates with the research mission of the campus, and the data reflect that pattern.

With this overview of the use of such systems in mind, a brief discussion of the findings for each type of system follows.

Student Information Systems

In examining student information systems, it is interesting to note that these systems are the oldest of any of the seven systems. And looking at the data for all of the systems for all Carnegie groups, the oldest systems reported by any group are the student systems reported by doctoral institutions (see Table 5-6). The age of such systems for these institutions is about 12 years, reflecting the difficulty in changing this absolutely mission-critical system and perhaps explaining the pattern of maintaining them rather than switching to another system. However, as seen in Table 5-7, nearly 40% of these campuses expect to implement a new stu-

**Table 5-6
Year of Implementation for Various Major Information Systems**

	All	DR	MA	BA	AA	Other
Student System						
Mean	1993.5	1991.1	1993.0	1994.6	1994.3	1995.9
Median	1995.0	1991.5	1995.0	1996.0	1997.0	1998.0
Financial System						
Mean	1994.2	1992.1	1993.8	1994.9	1995.7	1995.4
Median	1996.0	1994.0	1995.0	1997.0	1997.0	1996.5
HR System						
Mean	1995.8	1994.6	1995.2	1996.8	1996.5	1996.6
Median	1998.0	1997.5	1998.0	1998.0	1998.0	1998.0
Development System						
Mean	1995.4	1994.5	1995.6	1995.5	1996.8	1995.6
Median	1997.0	1996.0	1997.0	1997.0	1998.0	1996.5
Library System						
Mean	1995.5	1994.9	1995.4	1995.9	1995.0	1996.6
Median	1997.0	1997.0	1996.0	1996.0	1995.0	1998.0
Course Management						
Mean	1999.4	1998.3	1999.7	2000.2	1999.6	1999.4
Median	2000.0	1999.0	2000.0	2000.0	2000.0	2000.0
Grants Management						
Mean	1996.6	1995.3	1997.1	1997.8	1996.3	1998.2
Median	1999.0	1997.0	2000.0	2000.0	1998.0	2000.0

**Table 5-7
Percentage of Campuses Expecting to Implement a New System in the Next Three Years**

	All	DR	MA	BA	AA	Other
Student Information System	27.5%	38.1%	32.5%	19.5%	19.1%	22.9%
Financial Information System	20.1%	29.1%	24.3%	16.5%	10.1%	14.6%
Human Resources System	18.2%	25.4%	23.7%	11.3%	9.0%	16.7%
Development System	15.1%	20.1%	20.1%	12.0%	7.9%	10.4%
Library System	15.1%	9.0%	16.0%	20.3%	19.1%	11.5%
Course Management System	13.0%	11.9%	14.2%	9.0%	14.6%	16.7%
Grants Management System	12.6%	29.9%	9.5%	3.8%	4.5%	13.5%

dent system in the next three years. Doctoral and master's institutions are significantly more likely than institutions in the other categories to change to a new system in the next three years.

A fairly consistent and relatively low per-

centage of schools have student systems provided at the system or district level, but more than half of all associate's colleges have such an arrangement (see Table 5-8). This is not surprising given that the vast majority of these schools

**Table 5-8
Percentage of Various Information Systems Provided at the System/District Level**

	All	DR	MA	BA	AA	Other
Student Information System	18.4%	15.7%	13.6%	10.5%	51.7%	10.4%
Financial Information System	22.5%	17.9%	23.7%	11.3%	56.2%	11.5%
Human Resources System	22.4%	18.7%	24.9%	9.8%	55.1%	10.4%
Development System	7.1%	9.0%	5.9%	4.5%	13.5%	4.2%
Library System	20.5%	12.7%	18.3%	14.3%	53.9%	12.5%
Course Management System	10.3%	7.5%	7.7%	7.5%	28.1%	6.3%
Grants Management System	6.0%	10.4%	6.5%	2.3%	4.5%	5.2%

**Table 5-9
Most Common Student Information System Vendors**

All Institutions	
Vendor	Percentage
SCT	29.1%
Homegrown	20.3%
Datatel	14.1%
Jenzabar	13.2%
PeopleSoft	8.5%
Total	85.2%
Doctoral Institutions	
Vendor	Percentage
SCT	35.1%
Homegrown	31.3%
PeopleSoft	17.2%
IA	5.2%
Total	88.8%
MA Institutions	
Vendor	Percentage
SCT	39.9%
Jenzabar	16.7%
Datatel	15.5%
Homegrown	14.9%
PeopleSoft	6.0%
Total	93.0%

BA Institutions	
Vendor	Percentage
Jenzabar	32.6%
Datatel	22.7%
SCT	22.7%
Homegrown	6.8%
Total	84.8%
AA Institutions	
Vendor	Percentage
Homegrown	29.4%
Datatel	21.2%
SCT	20.0%
Total	70.6%
Other Institutions	
Vendor	Percentage
Homegrown	25.5%
SCT	19.1%
PeopleSoft	12.8%
Datatel	8.5%
Jenzabar	6.4%
Total	72.3%

are public community colleges, many of which are part of a community college district.

Finally, quite different patterns of vendors of

student information systems are associated with each of the Carnegie classes, as reflected in Table 5-9. This finding likely reflects the features

Table 5-10
Most Common Financial System Vendors

All Institutions	
Vendor	Percentage
SCT	24.4%
Datatel	13.9%
Jenzabar	12.7%
Homegrown	12.2%
PeopleSoft	11.7%
Total	74.9%
Doctoral Institutions	
Vendor	Percentage
SCT	30.8%
PeopleSoft	21.8%
Homegrown	19.5%
Oracle	6.0%
Total	78.1%
MA Institutions	
Vendor	Percentage
SCT	29.7%
Datatel	15.2%
Jenzabar	14.5%
PeopleSoft	12.1%
Homegrown	10.9%
Total	82.4%

BA Institutions	
Vendor	Percentage
Jenzabar	34.1%
Datatel	22.0%
SCT	21.2%
Total	77.3%
AA Institutions	
Vendor	Percentage
Homegrown	26.2%
Datatel	21.4%
SCT	19.0%
Oracle	7.1%
PeopleSoft	6.0%
Total	79.7%
Other Institutions	
Vendor	Percentage
SCT	15.2%
PeopleSoft	13.0%
Oracle	12.0%
Datatel	8.7%
Homegrown	5.4%
Total	54.3%

of the products to a large degree, but the rather marked differentiation within each Carnegie class is also an interesting pattern to note.

Financial Systems

Financial information systems are the second oldest of the systems, and again the oldest of these are found in doctoral institutions. While the mean and the median are nearly the same as for student systems, there is a wider gap between these values for financial systems across all Carnegie classes and a two-year difference for doctoral institutions, as shown in Table 5-6. Again, in Table 5-7 we see that significantly more doctoral and master's institutions expect to replace these systems in the next three years, but this number is smaller than those expecting to replace their student systems in that timeframe. The same pattern again holds for institutions reporting that

their financial systems are managed by a system or district office (see Table 5-8). With respect to the most common vendors in the financial systems area, it is interesting to note that homegrown systems were reported more often than any single vendor by AA institutions (see Table 5-10).

Human Resources Systems

The average age of human resources systems is essentially the same for all categories of institutions (see Table 5-6), and again we see a pattern of more doctoral and master's institutions reporting that they plan to replace these systems in the next three years (see Table 5-7). As shown in Table 5-11, a notable finding related to the most common vendors of HR systems is that homegrown systems were reported sufficiently often to be included in the vendor table by all groups except BA institutions.

**Table 5-11
Most Common Human Resources System Vendors**

All Institutions	
Vendor	Percentage
SCT	20.2%
PeopleSoft	17.3%
Homegrown	15.1%
Datatel	12.3%
Jenzabar	7.6%
Total	72.5%
Doctoral Institutions	
Vendor	Percentage
PeopleSoft	31.1%
SCT	24.2%
Homegrown	21.2%
Total	76.5%
MA Institutions	
Vendor	Percentage
SCT	23.5%
Homegrown	16.3%
PeopleSoft	14.4%
Datatel	13.1%
Jenzabar	11.8%
Total	79.1%

BA Institutions	
Vendor	Percentage
Datatel	21.7%
SCT	20.8%
Jenzabar	19.8%
ADP	9.4%
PeopleSoft	6.6%
Total	78.3%
AA Institutions	
Vendor	Percentage
Homegrown	25.0%
Datatel	22.5%
PeopleSoft	15.0%
SCT	15.0%
Total	77.5%
Other Institutions	
Vendor	Percentage
PeopleSoft	16.7%
Concept	15.5%
SCT	11.9%
Homegrown	8.3%
ADP	7.1%
Total	59.5%

Development Systems

As shown in Table 5-6, there is consistent age of development systems across groups. The intent to replace these systems is once again highest among doctoral and MA institutions. However, looking at all respondents, development systems, along with library, course management, and grant systems, are the systems least likely to be replaced in the next three years. One point of departure from the patterns noted for the previous systems is that for AA schools development systems are less often provided at the district level (see Table 5-8). Table 5-12 illustrates the diversity with respect to vendors of development systems across all types of institutions.

Library Systems

An analysis of data for library systems did not find any differences regarding the age of

systems across groups (see Table 5-6). Fewer institutions reported plans to replace these systems across all Carnegie classes. The baccalaureate institutions show a greater likelihood to replace library systems, with AA schools a close second. The pattern of a higher percentage of AA schools reporting these systems being provided at the district level once again emerged. With regard to vendors of library systems, note that even though there are a relatively small number of vendors listed, these vendors represent only one-half to two-thirds of all vendors mentioned (with the exception of doctoral schools, where the vendors listed represent more than 70%). Thus the diversity of vendors in this area is not readily apparent in Table 5-13 due to the fact that none of the other vendors named by respondents met the 5% criterion to be included.

**Table 5-12
Most Common Development System Vendors**

All Institutions	
Vendor	Percentage
Blackbaud	18.7%
SCT	16.8%
Datatel	15.1%
Jenzabar	10.3%
BSR	10.1%
Homegrown	8.4%
Total	90.7%
Doctoral Institutions	
Vendor	Percentage
BSR	28.5%
SCT	16.4%
Homegrown	12.9%
Datatel	11.2%
Blackbaud	6.0%
JSI	5.2%
Total	91.4%
MA Institutions	
Vendor	Percentage
Blackbaud	24.3%
SCT	22.2%
Datatel	14.6%
Jenzabar	11.8%
JSI	5.6%
Total	87.5%

BA Institutions	
Vendor	Percentage
Datatel	21.1%
Jenzabar	21.1%
Blackbaud	19.5%
SCT	15.4%
JSI	5.7%
Total	90.1%
AA Institutions	
Vendor	Percentage
Blackbaud	17.9%
Homegrown	15.4%
SCT	15.4%
Datatel	7.7%
Total	89.7%
Other Institutions	
Vendor	Percentage
Blackbaud	29.6%
Datatel	16.7%
Homegrown	14.8%
Jenzabar	9.3%
SCT	7.4%
BSR	5.6%
Total	94.5%

Course Management Systems

Course management systems are the newest of all the systems examined, which shouldn't be surprising because such systems are relatively new to the marketplace compared to the other types of systems, which have been available for decades. While not significantly different, it is worth noting that doctoral institutions were the first to implement course management systems. In the discussion of these systems in Section Three, we saw that 6% of baccalaureate institutions do not deploy course management systems or have any plans to do so—a higher percentage than other types of institutions. Consistently, only 9% of baccalaureate schools are planning to implement such a

system in the next three years, compared to 13% of institutions overall. As for provision of such systems at the system or district level, as shown in Table 5-8 the pattern described earlier holds once again, but to a lesser degree for AA institutions. Because of the relatively small number of vendors with products in this area, there is relative consistency across Carnegie groups regarding the vendors of preference (see Table 5-14).

Grants Management Systems

Grants management systems are found primarily in doctoral institutions for obvious reasons. The age of these systems is consistent across groups (see Table 5-6), and while overall fewer respondents reported plans to replace

Table 5-13
Most Common Library System Vendors

All Institutions	
Vendor	Percentage
Innovative	24.00%
Sirsi	17.60%
Endeavor	12.70%
Homegrown	5.10%
PALS	5.00%
Total	64.4%
Doctoral Institutions	
Vendor	Percentage
Innovative	26.30%
Endeavor	20.30%
Sirsi	16.10%
Ex Libris	8.50%
Total	71.2%
MA Institutions	
Vendor	Percentage
Innovative	23.00%
Sirsi	18.90%
Endeavor	16.90%
Homegrown	5.40%
Total	64.2%

BA Institutions	
Vendor	Percentage
Innovative	31.30%
Sirsi	18.30%
Endeavor	7.00%
Total	56.6%
AA Institutions	
Vendor	Percentage
PALS	26.00%
Sirsi	18.20%
Homegrown	11.70%
Innovative	5.20%
Total	61.1%
Other Institutions	
Vendor	Percentage
Innovative	29.90%
Sirsi	16.10%
Endeavor	10.30%
Voyager	5.70%
Total	62.0%

Table 5-14
Most Common Course Management System Vendors

All Institutions	
Vendor	Percentage
Blackboard	42.5%
WebCT	33.5%
Homegrown	7.2%
Total	83.2%
Doctoral Institutions	
Vendor	Percentage
WebCT	40.2%
Blackboard	34.6%
Homegrown	6.3%
Total	81.1%
MA Institutions	
Vendor	Percentage
Blackboard	53.8%
WebCT	26.9%
Total	80.7%

BA Institutions	
Vendor	Percentage
Blackboard	53.6%
WebCT	23.6%
Homegrown	6.4%
Jenzabar	6.4%
Total	90.0%
AA Institutions	
Vendor	Percentage
WebCT	43.5%
Blackboard	36.5%
IPSI	5.9%
Total	85.9%
Other Institutions	
Vendor	Percentage
WebCT	38.8%
Blackboard	23.8%
Homegrown	21.3%
Total	83.9%

**Table 5-15
Most Common Grants Management System Vendors**

All Institutions		BA Institutions	
Vendor	Percentage	Vendor	Percentage
Homegrown	35.7%	SCT	34.8%
SCT	14.3%	Datatel	17.4%
Total	50.0%	Homegrown	17.4%
Doctoral Institutions		Blackbaud	8.7%
Vendor	Percentage	Jenzabar	8.7%
Homegrown	45.8%	Total	87.0%
SCT	12.5%	AA Institutions	
PeopleSoft	8.3%	Vendor	Percentage
Oracle	7.3%	Blackbaud	18.2%
Total	73.9%	Datatel	18.2%
MA Institutions		Homegrown	18.2%
Vendor	Percentage	SCT	9.1%
Homegrown	27.7%	Total	63.7%
SCT	19.1%	Other Institutions	
Datatel	8.5%	Vendor	Percentage
Jenzabar	8.5%	Homegrown	36.2%
Oracle	6.4%	Research Master	19.1%
Total	70.2%	Blackbaud	6.4%
		Jenzabar	6.4%
		PeopleSoft	6.4%
		Total	74.5%

**Table 5-16
Status of Web Portal Deployment**

	All	DR	MA	BA	AA	Other
Implemented	27.4%	35.1%	26.0%	24.8%	19.1%	30.2%
In process	18.4%	23.1%	18.3%	18.0%	9.0%	20.8%
Planning	39.5%	30.6%	43.2%	38.3%	48.3%	38.5%
No plans	14.8%	11.2%	12.4%	18.8%	23.6%	10.4%

these systems, they are the second most likely to be replaced for doctoral institutions. There are no differences among groups with regard to the provision of these systems at the system or district level. Once again we see rather striking differences in the vendors of choice across the various Carnegie groups (see Table 5-15).

Web Portals

While not exactly a traditional information system, a Web portal offers access to a variety

of campus resources, including major administrative systems. Table 5-16 shows the various stages of portal deployment that characterize each of the Carnegie groups. More than 85% of survey respondents have implemented a Web portal or have such an implementation in process or planned. A significantly higher percentage of doctoral institutions have already deployed Web portals compared to all other groups. AA institutions have the fewest portals deployed, and significantly fewer of

**Table 5-17
Development and Procurement Strategies for Web Portals**

	All	DR	MA	BA	AA	Other
In-house only	14.4%	10.9%	12.8%	21.3%	7.4%	18.6%
Purchased product only	44.0%	31.9%	56.8%	48.1%	48.5%	30.2%
Open source only	5.7%	11.8%	2.0%	1.9%	7.4%	7.0%
In-house and purchased product	7.0%	9.2%	2.7%	6.5%	7.4%	11.6%
In-house and open source	8.9%	11.8%	6.1%	7.4%	11.8%	9.3%
Purchased product and open source	11.9%	12.6%	10.8%	8.3%	14.7%	15.1%
In-house, purchased product, and open source	3.4%	6.7%	3.4%	3.7%	1.5%	0.0%

**Table 5-18
Percentage of Web Portals That Are Customizable by the Individual**

	All	DR	MA	BA	AA	Other
Yes	59.4%	76.5%	60.8%	50.0%	44.1%	57.0%
No	40.6%	23.5%	39.2%	50.0%	55.9%	43.0%

**Table 5-19
Percentage of Web Portals That Are Customizable To the Individual**

	All	DR	MA	BA	AA	Other
Yes	47.3%	65.5%	43.9%	40.7%	44.1%	38.4%
No	52.7%	34.5%	56.1%	59.3%	55.9%	61.6%

these schools have portal implementations in process. However, nearly 50% of these schools say they are planning a Web portal implementation. More baccalaureate and AA institutions reported no plans to implement a Web portal than schools in other categories.

Looking at responses from the 529 institutions that reported a Web portal implemented, in process, or deployed, there are fairly distinct differences among Carnegie groups with regard to procurement strategies and characteristics of the portal. A higher percentage of doctoral institutions than any other group reported using or planning to use only open-source solutions, and schools in this category also report-

ed using or planning to use only purchased products significantly less than the other Carnegie classes. AA institutions rank second in using or planning to use only open-source code for their portals, with just 2% and 1.9% of MA and BA institutions, respectively, reporting this development strategy. As evident in Table 5-17, doctoral institutions reported a myriad of strategies. Overall, the strategy of deploying only a purchased product is most common.

Customizability of implemented or planned portals differs significantly across Carnegie classes. Portals at doctoral institutions are more often customizable by and to the individual (see Tables 5-18 and 5-19). Interestingly,

Table 5-20
Percentages of Web Portal Customization for Specific Constituencies

	All	DR	MA	BA	AA	Other
Current Students	93.6%	93.3%	93.2%	93.5%	91.2%	96.5%
Prospective Students	63.1%	73.9%	63.5%	66.7%	47.1%	55.8%
Faculty	91.3%	91.6%	91.9%	95.4%	89.7%	86.0%
Staff	87.9%	90.8%	86.5%	88.9%	85.3%	87.2%
External Community	31.9%	35.3%	29.7%	30.6%	33.8%	31.4%
Alumni	55.6%	54.6%	58.1%	60.2%	48.5%	52.3%

Table 5-21
Web Portal Integration with Campus Administrative Systems

	All	DR	MA	BA	AA	Other
Yes	80.0%	87.4%	81.1%	74.1%	64.7%	87.2%
No	20.0%	12.6%	18.9%	25.9%	35.3%	12.8%

the only difference in the target audiences across groups (see Table 5-20) is for prospective students, with this customization most common at doctoral institutions and least common at AA institutions.

One of the main reasons for having a portal is to serve students better by providing easier access to the information they need to register for classes, conduct business with the university, and so forth. Table 5-21 shows the extent to which campus portals are connected or will be connected to their administrative systems. There are significant differences in this level of connectedness, with doctoral institutions most often having or planning to have these connected, followed by master's and then baccalaureate institutions. Fewer than two-thirds of AA institutions with a portal deployed, in process, or planned reported having or planning this level of integration.

Notes

1. Summaries of the annual Current Issues survey are available at <<http://www.educause.edu/issues/index.asp?page=activities>>.
2. Robert B. Kvavik et al., *The Promise and Performance of Enterprise Planning Systems for Higher Education* (Boulder, Colo.: EDUCAUSE Center for Applied Research, 2002). Information about ordering this publication is available at <<http://www.educause.edu/ecar/research/doclisters.asp>>. See also two summaries of this major research study, which are available at no charge through the EDUCAUSE Web site: Robert B. Kvavik and John Voloudakis, *The Promise and Performance of Enterprise Systems for Higher Education. Summary of Findings, 2002*, <<http://www.educause.edu/ir/library/pdf/EDU0220.pdf>>, and Paula King, *Respondent Summary: The Promise and Performance of Enterprise Planning Systems for Higher Education, 2002*, <http://www.educause.edu/ir/library/pdf/ecar_so/ers/ERS0204/ekf0204.pdf>.