ONE

# IT Organization, Staffing, and Planning

The first section of the 2005 core data survey included questions that can be clustered into three areas: campus information technology (IT) leadership and organization, IT staffing, and IT strategic planning.

## **IT Leadership and Organization**

Survey responses for the title of the highest ranking technology administrator beg the question, "What's in a name?" The title for this highest ranking IT administrator continues to be anything but consistent or predictable! Of the 933 institutions whose data were included in the frozen data set upon which the analyses in this 2005 summary report are based, 249 unique titles were reported (the same number as in last year's frozen data set of 890 institutions), reflecting many combinations and permutations of every level

(vice president, assistant/associate vice president, dean, director, and others) and area descriptor (information systems, services, or technology, and others). These various combinations and permutations often include an addendum such as "and CIO" or "and CTO."

The most commonly reported title was in fact CIO (chief information officer), which was reported either as a unique title (18.3%) or as part of a broader title (17%) for a total of 35.3% of ALL responses, up from 32.8% last year. Also, this year 41 additional campuses reported that their top IT administrator's title is or includes chief technology officer (CTO), an increase of more than 50% over last year. CIO as a unique title was followed by director of information technology (4.1%) and vice president for information technology (3.3%) as the most common titles.

Table 1-1
Title of Highest Ranking IT Administrator

	ALL	DR	MA	BA	AA	OTHER
VP, Deputy VP, Vice Chancellor, Vice Rector	22.5%	39.0%	19.5%	15.8%	21.5%	16.9%
CIO	25.6%	35.7%	29.8%	21.2%	16.6%	21.1%
СТО	3.9%	2.7%	3.8%	4.9%	4.3%	3.5%
Vice Provost, Assistant or Associate Vice Provost/VP/VC	11.9%	14.8%	19.8%	9.2%	6.7%	2.8%
Director, Dean, Executive Director	32.8%	6.0%	26.3%	46.2%	44.2%	48.6%
Assistant or Associate Director/Dean	0.8%	0.0%	0.0%	1.6%	2.5%	0.0%
Head, Manager, Other	2.6%	1.6%	0.8%	1.1%	4.3%	7.0%

Table 1-2
Percentage of Top IT Administrators Reporting
to Various Campus Officers

	ALL	DR	MA	ВА	AA	OTHER
President/Chancellor/CEO	30.7%	28.0%	26.3%	29.3%	42.3%	30.3%
Highest Ranking Academic Officer (Provost, Academic VP, Dean)	26.5%	33.5%	34.7%	31.0%	13.5%	11.3%
Highest Ranking Administrative Officer (Administrative VP, Executive VP)	23.7%	20.3%	19.1%	14.1%	30.1%	41.5%
Highest Ranking Business Officer (Business Officer, CFO)	11.5%	4.4%	13.7%	17.4%	9.8%	10.6%
Second-Level Academic Officer (Assistant or Associate Provost/VP)	0.9%	1.6%	1.1%	0.5%	0.0%	0.7%
Second-Level Administrative Officer (Assistant or Associate Administrative VP)	0.9%	1.1%	0.8%	1.1%	0.6%	0.7%
Jointly to President/ Chancellor/CEO and Chief Academic Officer	1.2%	2.2%	1.1%	1.6%	0.0%	0.7%
Jointly to Chief Academic Officer and Chief Administrative or Financial Officer	2.5%	6.6%	1.5%	2.2%	1.2%	0.7%
Other	2.4%	2.2%	1.5%	2.7%	2.5%	3.5%

Table 1-1 shows percentages of the various titles<sup>1</sup> by Carnegie classification,<sup>2</sup> to allow for easy comparison across segments of the higher education community. As shown in the table, the vice presidential title is most common in research universities (DR), while director is the dominant title in liberal arts colleges (BA), associate's colleges (AA), and institutions in the OTHER category. In MA institutions, the title of CIO was most often reported.

These highest ranking IT administrators not only have a variety of titles, they also have a variety of reporting relationships within their respective organizational structures. Table 1-2 shows the percentage of top IT leaders reporting to various officials on their campuses, once again broken out by Carnegie class.

The percentage of IT leaders reporting directly to the president is significantly higher

for associate's colleges, while there were no significant differences in the percentage of IT leaders reporting to the highest ranking academic officer or the president for DR, MA, and BA institutions. Few respondents reported that their top IT administrator reports below the level of the highest ranking academic or administrative officer. BA schools, however, have more top IT officers who report to a business officer or chief financial officer than to an administrative or executive vice president.

Although 39% of the top IT administrators at doctoral institutions carry the title vice president, vice chancellor, or something equivalent, only 28% report to the president or chancellor. It is likely that their title reflects a level of significance and seniority within the executive leadership team, not necessarily a structural reporting relationship or an indication of who

Table 1-3
Percentage of Top IT Administrators Who Are Members of the
President's or Chancellor's Cabinet

	ALL	DR	MA	BA	AA	OTHER
Yes	46.2%	53.8%	40.8%	39.7%	58.9%	40.1%
No	53.8%	46.2%	59.2%	60.3%	41.1%	59.9%

conducts this person's performance appraisal.

While reporting relationships are potentially interesting, who actually does the IT leader's performance evaluation is less important than whether the IT leader is a member of the executive cabinet. The ability to sit on the president's cabinet, executive committee, or whatever the top policy forum is called is far more important, in that this seat allows the top IT leader to actively engage in campus-level discussions about strategic directions and policy and to work with other senior officers in understanding the role that IT can play in the various functional areas on campus. As shown in Table 1-3, the percentage of top IT administrators sitting on an executive council is substantially greater than the percentage of those who actually report to the president.

With regard to the various functional areas that report to the top IT administrator, there are as many variations as with titles. Because of the increasing complexity of information technology, there are many subgroupings and focal areas into which IT staff resources fall. Once again the core data survey attempted to identify what functions lie within the line operations of the top IT administrator as the head of the centralized campus IT organization.

There is a rather remarkable consistency in the responses to this question, with the same areas ranked in the top 15 (areas checked by more than 50% of ALL respondents) of 22 functional areas, regardless of Carnegie classification. These areas, in descending order, are:

- Network Infrastructure and Services
- Desktop Computing Support/User Support Services/Training/Help Desk
- Administration of IT Organization
- IT Security
- IT Policy

- Administrative/Enterprise Information Systems
- Operations/Data Center
- Web Support Services
- Enterprise Infrastructure/Identity Management
- Telephony
- Academic Computing
- Student Computing
- Instructional Technology
- Multimedia Services
- Technology R&D/Advanced Technology

While not all Carnegie groups had precisely this order, the differences were insignificant, as shown in Table 1-4. However, if you examine the table more carefully by rank ordering the functions that report to the top IT administrator and then look at these rankings across the Carnegie groups, an interesting pattern emerges. The rankings indicate that DR and MA institutions are the most similar to each other, but interestingly the MA schools were also similar to BA and to AA schools, suggesting that MA schools are the most typical of higher education as a whole with regard to IT reporting structures.

The following functional areas (listed in rank order) showed a significant increase from last year in reporting to the top IT administrator for ALL schools:

- Student Computing
- Academic Computing
- Enterprise Infrastructure/Identity Management
- Research Computing
- Multimedia Services
- Distance Education
- Telephony
- Technology R&D/Advanced Technology

Table 1-4
Functions Reporting to the Top IT Administrator

	ALL	DR	MA	ВА	AA	OTHER
Academic Computing	73.3%	78.0%	78.2%	80.4%	64.4%	59.2%
Administration of IT Organization	97.3%	100.0%	97.7%	96.7%	94.5%	97.2%
Administrative/Enterprise Information Systems	94.4%	94.5%	95.4%	93.5%	92.6%	95.8%
Computer Store	14.4%	27.5%	9.9%	18.5%	2.5%	14.1%
Desktop Computing Support/User Support Services/Training/Help Desk	97.7%	97.3%	97.3%	97.8%	98.8%	97.9%
Enterprise Infrastructure/ Identity Management	81.8%	90.1%	83.6%	75.0%	74.2%	85.2%
Distance Education	21.7%	13.7%	30.2%	15.8%	23.9%	21.1%
Institutional Research	5.5%	2.7%	8.0%	5.4%	6.1%	3.5%
Instructional Technology	71.2%	75.3%	76.3%	78.3%	62.6%	57.0%
IT Policy	94.9%	99.5%	92.4%	92.4%	94.5%	97.2%
IT Security	96.2%	97.3%	95.8%	93.5%	96.3%	99.3%
Library	13.4%	8.2%	14.9%	17.9%	12.9%	12.0%
Mailroom	4.6%	2.7%	3.4%	6.5%	5.5%	5.6%
Multimedia Services	58.3%	59.3%	65.3%	60.9%	50.9%	49.3%
Network Infrastructure and Services	98.2%	99.5%	97.7%	96.7%	98.2%	99.3%
Operations/Data Center	92.0%	98.4%	90.8%	86.4%	91.4%	93.7%
Print/Copier Services	28.3%	22.0%	19.8%	38.0%	32.5%	34.5%
Research Computing	28.8%	48.4%	23.7%	29.9%	8.6%	35.2%
Student Computing	72.8%	72.5%	75.6%	81.0%	62.6%	69.0%
Technology R&D/ Advanced Technology	57.7%	65.4%	58.0%	62.0%	50.3%	50.0%
Telephony	80.1%	89.6%	79.8%	69.6%	79.8%	82.4%
Web Support Services	86.1%	93.4%	85.1%	80.4%	84.0%	88.0%
Other Function	11.3%	15.9%	11.8%	7.6%	6.7%	14.1%

- IT Policy
- Administration of IT Organization

## **IT Staffing**

The core data survey requested data related to staffing levels, which we have used to suggest several staffing ratios. Data related to staffing practices are also reported.

## Staffing Levels

While it is fine to state that a given set of functions reports to the CIO, perhaps the more interesting question is how each of these functions is staffed on a comparative basis. The

survey requested data not only for regular full-time-equivalent (FTE) IT staff but also for student FTE employees because most IT organizations could not meet the needs of their campus constituencies without the skills and talents of the students who serve in a variety of capacities in IT support.

The core data survey respondents were allowed to assign decimal numbers of individuals to the various functions, which is especially important to smaller schools with fewer staff who must cover more than one functional area. Thus, if for fiscal year 2004–2005 a given individual spent 50% of her time doing

Table 1-5
Average Number of FTE Staff
in the Centralized Campus IT Organization in Each Functional Area

	ALL	DR	MA	ВА	AA	OTHER
Administration of IT Organization, IT Planning, Technology R&D	5.7	13.4	3.1	1.9	2.1	9.8
Administrative/Enterprise Information Systems	12.8	35.3	7.0	3.6	3.7	17.0
Desktop Computing Support, User Support Services, Training, Computer Store	8.9	19.3	5.6	3.5	4.5	13.9
Enterprise Infrastructure and Services, Identity Management	3.5	9.6	1.6	0.6	0.8	5.6
Help Desk	4.2	8.2	2.5	1.3	1.9	8.8
IT Policy	0.4	0.9	0.3	0.2	0.3	0.7
IT Security	1.2	3.2	0.7	0.3	0.5	1.6
Instructional Technology, Multimedia Services, Student Computing	6.9	16.6	4.8	2.5	4.3	6.9
Network Infrastructure and Services	5.7	15.8	3.4	2.0	2.1	6.2
Operations, Data Center, Print/Copier Services, Mailroom	5.4	16.7	2.5	1.0	1.5	6.7
Research Computing, Academic Computing	2.2	6.9	1.1	0.6	0.6	2.3
Telephony	4.5	15.0	2.3	0.9	0.9	4.2
Web Support Services	2.6	5.8	1.8	1.0	1.3	3.6
Other Function	5.5	7.8	2.7	1.2	2.8	12.0

network architecture, 30% of her time doing database work in administrative computing, and the remainder in security, the numbers 0.5, 0.3, and 0.2, respectively, would be appropriate to enter into those functional area cells for that individual.

The deployment of staff and student employees in these functional areas needs to be understood in both absolute and relative terms. The tables in this section reflect those differences, with Tables 1-5 and 1-6 showing the average number of FTE staff and student employees, respectively, devoted to these various functions in the centralized campus IT organization. Tables 1-7 and 1-8 show the percentage of the total IT staff and student employees, respectively, devoted to each func-

tion, thus controlling to some extent for size differences across Carnegie classes.

Looking at Table 1-7, there appears to be a fairly consistent distribution of staff among the various functions across all Carnegie groups, with the greatest percentage of staff being allocated to Administrative/Enterprise Information Systems followed by the functional area that encompasses Desktop Computing Support, User Support Services, Training, and Computer Store. This was true for ALL respondents as well as all Carnegie groups except AA schools, where the order was reversed, that is, the highest percentage of staff are allocated to the support area, with administrative information systems ranking second. Ranking the next five functional areas for ALL respondents in descending order,

Table 1-6
Average Number of FTE Student Employees
in the Centralized Campus IT Organization in Each Functional Area

	ALL	DR	MA	BA	AA	OTHER
Administration of IT Organization, IT Planning, Technology R&D	0.9	1.0	0.3	0.1	0.4	3.5
Administrative/Enterprise Information Systems	0.2	0.6	0.2	0.1	0.0	0.2
Desktop Computing Support, User Support Services, Training, Computer Store	2.9	5.8	2.9	1.5	1.0	3.0
Enterprise Infrastructure and Services, Identity Management	0.2	0.4	0.1	0.0	0.0	0.8
Help Desk	2.6	6.1	2.6	1.8	0.6	1.3
IT Policy	0.0	0.0	0.0	0.0	0.0	0.0
IT Security	0.1	0.2	0.0	0.0	0.0	0.2
Instructional Technology, Multimedia Services, Student Computing	4.9	13.7	5.3	1.8	1.4	1.1
Network Infrastructure and Services	0.6	1.6	0.5	0.2	0.1	0.5
Operations, Data Center, Print/Copier Services, Mailroom	0.4	1.4	0.3	0.1	0.0	0.2
Research Computing, Academic Computing	0.7	1.9	0.8	0.2	0.2	0.6
Telephony	0.4	1.1	0.5	0.1	0.0	0.1
Web Support Services	0.4	1.0	0.4	0.3	0.1	0.3
Other Function	2.5	2.7	1.4	0.3	0.3	7.4

staff are overall allocated as follows:

- Instructional Technology, Multimedia Services, Student Computing
- Network Infrastructure and Services
- Administration of IT Organization, IT Planning, Technology R&D
- Help Desk
- Operations, Data Center, Print/Copier Services, Mailroom

Looking at Table 1-8, it is not surprising to find the highest percentages of students employed by the centralized campus IT organization allocated to three areas: Instructional Technology, Multimedia Services, Student Computing; Help Desk; and Desktop Computing Support, User Support Services, Training, Computer Store. How these three are ranked varies among Carnegie groups, with doctoral universities employing the greatest percentage of students in the instructional technology area, BA schools employing the highest percentage of students on the help desk, and AA schools employing the highest percentage of students in desktop and user support.

The aggregation of data for like Carnegie groups works well for purposes of simplicity, and in almost all cases no significant meaning is lost. However, the total centralized IT staff number (summing the IT staff numbers in all of the functional areas previously described) is

Table 1-7
Percentage of FTE Staff
in the Centralized Campus IT Organization in Each Functional Area

	ALL	DR	MA	ВА	AA	OTHER
Administration of IT Organization, IT Planning, Technology R&D	9.1%	8.0%	9.0%	10.0%	9.3%	9.5%
Administrative/Enterprise Information Systems	18.2%	20.2%	18.8%	18.4%	14.4%	19.3%
Desktop Computing Support, User Support Services, Training, Computer Store	16.2%	11.9%	16.1%	17.0%	20.2%	15.9%
Enterprise Infrastructure and Services, Identity Management	4.4%	5.8%	3.9%	3.5%	3.3%	6.0%
Help Desk	7.2%	5.1%	7.5%	7.7%	7.4%	8.2%
IT Policy	1.1%	0.5%	0.9%	1.3%	1.6%	1.3%
IT Security	2.1%	1.9%	2.1%	2.1%	2.3%	2.2%
Instructional Technology, Multimedia Services, Student Computing	10.8%	10.0%	11.7%	10.9%	12.6%	8.0%
Network Infrastructure and Services	9.5%	9.6%	9.3%	10.6%	9.3%	8.1%
Operations, Data Center, Print/Copier Services, Mailroom	6.3%	9.4%	5.6%	4.8%	5.2%	6.7%
Research Computing, Academic Computing	3.2%	3.9%	3.0%	2.9%	3.7%	2.9%
Telephony	5.3%	8.3%	5.4%	4.5%	3.7%	4.2%
Web Support Services	5.0%	3.5%	5.2%	5.6%	5.6%	4.9%
Other Function	5.9%	4.6%	5.4%	5.0%	7.6%	8.5%

more meaningful when similar Carnegie classes are not grouped, but separated out as in Table 1-9. The rather dramatic differences between the Doctoral Extensive and Doctoral Intensive schools shown are of particular interest, and note as well that MA I schools have significantly higher staffing levels than MA II schools and BA LA schools significantly higher staffing levels than BA GEN schools.

Looking at the total number of centralized FTE IT staff this year compared to last year for the 749 institutions in the matched data set, there was a significant mean increase of 1.63 FTE staff for ALL responding institutions. While each Carnegie group also showed a mean increase in total centralized IT staff members,

the difference was significant only for schools in the DR EXT, BA LA, and OTHER groups.

Finally, in looking at these various tables related to staffing levels, the differences noted among Carnegie groups may be due to the available funding or the complexity of the institution. We also recognize that there might be a critical mass for staffing a given area, and thus the comparable percentages may be skewed somewhat due to this factor.

## **Centralized Versus Decentralized Staffing**

Table 1-10 shows the average number of centralized FTE IT staff for each of the Carnegie groupings in the first column, the average total campus FTE IT staff (derived

Table 1-8
Percentage of FTE Student Employees
in the Centralized Campus IT Organization in Each Functional Area

	ALL	DR	MA	ВА	AA	OTHER
Administration of IT Organization, IT Planning, Technology R&D	2.4%	3.1%	2.2%	1.5%	3.3%	1.8%
Administrative/Enterprise Information Systems	1.4%	1.8%	1.1%	1.3%	0.9%	2.6%
Desktop Computing Support, User Support Services, Training, Computer Store	24.1%	18.2%	21.3%	25.3%	37.1%	23.8%
Enterprise Infrastructure and Services, Identity Management	0.7%	0.8%	0.7%	0.3%	0.1%	1.7%
Help Desk	26.8%	20.5%	25.7%	36.0%	20.6%	32.4%
IT Policy	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
IT Security	0.5%	0.5%	0.2%	0.3%	0.0%	0.2%
Instructional Technology, Multimedia Services, Student Computing	27.9%	34.8%	29.7%	22.2%	27.4%	21.3%
Network Infrastructure and Services	3.2%	4.8%	3.5%	2.3%	2.2%	2.3%
Operations, Data Center, Print/Copier Services, Mailroom	2.0%	3.0%	1.8%	2.2%	1.1%	1.9%
Research Computing, Academic Computing	3.8%	3.9%	5.1%	1.8%	3.6%	4.0%
Telephony	2.3%	3.2%	3.4%	2.0%	0.0%	1.2%
Web Support Services	2.7%	2.7%	3.0%	3.0%	2.3%	1.9%
Other Function	7.4%	6.2%	7.1%	9.3%	7.4%	9.5%

Table 1-9
Summary Statistics of Total Centralized FTE IT Staff

	Mean	Median	Minimum	Maximum
ALL	65.7	31.0	1.0	1,045.0
DR EXT	212.7	183.0	40.6	660.0
DR INT	85.3	70.1	6.0	242.5
MAI	40.2	34.0	4.0	164.0
MA II	18.5	15.5	3.0	55.0
BA LA	23.8	22.5	3.0	64.6
BA GEN	13.3	11.7	1.0	64.0
AA	25.1	16.0	2.1	261.0
OTHER	90.7	64.5	2.0	1,045.0

from adding the total of centralized staff to the number of distributed/departmental IT staff reported in the survey) in the second column,

and the percentage of the total campus IT staff that the centralized IT staff represent in the third column.<sup>3</sup> Clearly the number of distrib-

Table 1-10 Centralized FTE IT Staff as a Percentage of Total Campus FTE IT Staff

	Mean Number of Central FTE IT Staff	Mean Number of Total Campus FTE IT Staff	% Central FTE IT Staff
ALL*	60.7	98.6	81.1%
DR EXT	208.7	429.3	55.3%
DR INT	85.8	134.4	68.5%
MA I	39.0	49.8	83.6%
MA II	18.3	21.1	90.2%
BA LA	24.1	27.4	89.2%
BA GEN	13.2	15.0	90.0%
AA	24.7	28.7	89.0%
OTHER	86.0	125.0	77.9%
* N = 834			

Table 1-11
FTE Students Supported per Centralized FTE IT Staff Member

	ALL	DR	MA	BA	AA	OTHER
Mean	155.1	125.2	169.0	131.5	208.9	135.4
Median	144.0	116.7	155.6	106.6	192.0	143.2
Minimum	0.1	23.2	51.2	0.5	49.0	0.1
Maximum	758.2	412.7	434.3	758.2	621.9	445.0

uted/departmental IT staff increases at a significant rate as the complexity of the institution increases, just as it did last year, with the percentage of distributed staff greatest at DR EXT campuses, at 44.7%.

Highly complex, large, research-oriented institutions have a greater need for specialized, often disciplinarily trained IT staff in the departments and colleges to support faculty. These staff may focus far more on the academic applications in a particular field, while the centralized IT staff concern themselves more with infrastructure, system-wide applications, general support, and so forth. In years past, there was a movement toward a more decentralized support model in all Carnegie groupings, but this year the percentage of distributed support remains mostly unchanged.

## **Staffing Ratios**

While it is not clear whether stable ratios regarding staffing are possible, part of the CDS effort is to provide benchmarks for compari-

son, not just descriptive statistics. Ratio analysis has long been a standard in examining business performance, and it is hoped that a variety of key ratios will emerge via the CDS that allow for effective comparison of IT data.

In terms of staffing, we were able to calculate a ratio for the number of FTE students supported per centralized IT staff member, derived by dividing the number of FTE students (a number calculated from data reported by campuses to IPEDS<sup>4</sup>) by the number of FTE centralized IT staff (derived from the total of the numbers entered into the survey question about functional area support). This ratio is shown in Table 1-11.

Looking at the matched data set for 2004 and 2005, the number of FTE students supported per centralized IT staff member was not significantly different from the previous two years' comparison, which had shown an increase of supported students from 2003 to 2004. This might suggest that the pressure to provide support for more students is subsiding.

Table 1-12
Headcount Supported per Centralized FTE IT Worker

	ALL*	DR	MA	BA	AA	OTHER
Mean	190.3	152.7	177.0	129.0	331.1	206.4
Median	151.8	138.8	152.1	100.0	283.6	177.2
Minimum	22.8	41.1	41.8	28.0	76.7	22.8
Maximum	947.8	410.9	587.0	639.7	947.8	796.6
*N = 625			•		•	•

Table 1-13
Separate Salary Scales for IT Professionals

	ALL	DR	MA	ВА	AA	OTHER
Yes	31.5%	44.0%	35.5%	19.0%	25.2%	31.7%
No	68.5%	56.0%	64.5%	81.0%	74.8%	68.3%

Table 1-14
Separate IT Job Titles or a Broadband IT Classification and Compensation System

	ALL	DR	MA	BA	AA	OTHER
Yes	64.4%	78.6%	68.3%	52.7%	58.3%	61.3%
No	35.6%	21.4%	31.7%	47.3%	41.7%	38.7%

This year we present a new ratio (see Table 1-12), using an additional (and optional) data point from the 2005 survey.<sup>5</sup> Respondents were asked to enter the total number of headcount employees (including faculty) that their campuses last reported to IPEDS. In addition, we imported into the CDS database the total student headcount number campuses reported to IPEDS in 2004. Thus we were able to derive a total campus headcount that represents all employees, including faculty, plus all students, whether part-time or full-time. Using these data points, it was possible to derive a ratio of headcount individuals supported per centralized FTE IT worker (with IT worker defined as including both staff and student employees). Since this is a new ratio, no trend analyses are possible, but the analysis does indicate that centralized IT staff in AA institutions support the largest number of people, while the centralized IT staff at BA and DR institutions support the fewest number of individuals. This in many ways reflects the relative wealth of institutions and is an important ratio to watch over time.

#### **Staffing Practices**

The CDS also provides insight into a number of staffing practices. In terms of meeting market pressures related to hiring and keeping qualified staff, campuses turn to a variety of techniques. Overall, 31.5% of ALL respondents reported having separate salary scales for IT professionals, which did not change significantly from the previous year. Table 1-13 indicates that this practice is employed to a greater extent among DR and MA institutions (44% and 35.5%, respectively). Alternatively, participants were asked if their campuses use either separate IT job titles or a broadband IT classification and compensation system. Table 1-14 shows that over 64% of ALL respondents use one of these approaches, with a notably higher percentage of "yes" responses by doctoral universities. Once again, these figures did not change appreciably from the 2004 survey.

Finally, ongoing professional development is critical to recruiting, retaining, and retraining a qualified IT staff. Respondents were asked how many dollars are set aside in the annual budget and provided for professional

Table 1-15

Dollar Amount in Budget per Centralized FTE IT Staff Member for Professional Development/Training

			1			
	ALL	DR	MA	BA	AA	OTHER
Mean	\$1,205	\$1,187	\$1,056	\$1,354	\$1,160	\$1,364
Median	\$1,000	\$1,000	\$1,000	\$1,250	\$1,000	\$1,174
Minimum	\$0	\$0	\$0	\$0	\$0	\$0
Maximum	\$8,000	\$3,500	\$6,100	\$3,700	\$5,200	\$8,000

Table 1-16
Campus Strategic Plan Includes Strategies and Directions for IT

	ALL	DR	MA	ВА	AA	OTHER
Yes	80.5%	72.5%	80.9%	78.3%	90.8%	81.0%
No	19.5%	27.5%	19.1%	21.7%	9.2%	19.0%

Table 1-17 Campus Has a Stand-Alone IT Strategic Plan

	ALL	DR	MA	BA	AA	OTHER
Yes	73.0%	76.4%	76.3%	55.4%	82.2%	74.6%
No	27.0%	23.6%	23.7%	44.6%	17.8%	25.4%

development or training per centralized FTE IT staff member. Table 1-15 shows a relative consistency in the statistical measures across all Carnegie classes, with the exception that baccalaureate schools and those in the OTHER group invest significantly more in the development of their staffs than do doctoral and comprehensive universities and associate's colleges. On average, the amount of money that the centralized campus IT organization budgets annually per IT staff member for training remained remarkably consistent from the 2004 to the 2005 survey. This data point continues to bear watching, given the importance of keeping staff up-to-date in skills and providing professional development opportunities for growth and job satisfaction.

#### **IT Planning and Advisory Groups**

In reference to IT planning, the core data survey asked whether the campus strategic plan includes strategies and directions for IT and whether the campus has a stand-alone IT strategic plan. As seen in Table 1-16, more than 80% of ALL respondents indicated that their institutional plans do address IT directions and strategies, which is unchanged since last year. Furthermore, 73% of ALL institutions also have a stand-alone IT strategic plan, as shown in Table 1-17, which was also essentially the same as the previous year. Relatively high percentages of schools report stand-alone IT plans across all the Carnegie groups, but AA schools were significantly higher than other Carnegie groups.

The last question in the first section of the survey requested data on the various groups that provide feedback about campus IT strategies. Results are reported in Table 1-18. Respondents could mark as many responses as were applicable, so the percentages do not total 100% but rather reflect the frequency of usage of each type of advisory group.

The number of institutions that involve varying campus constituents in the development of campus IT strategies is large and growing. The president's cabinet/council, administrative committee, academic/faculty committee, and

Table 1-18
Groups Providing Advice on IT Strategy

	ALL	DR	MA	BA	AA	OTHER
Trustee Committee	16.8%	25.3%	15.6%	24.5%	8.6%	7.7%
President's Cabinet/ Council	63.9%	59.3%	66.8%	64.7%	79.8%	45.1%
Administrative Committee	58.5%	76.9%	58.8%	45.7%	57.7%	52.1%
Academic Committee/ Faculty Senate	67.0%	83.5%	73.7%	54.3%	59.5%	58.5%
Technology Advisory Committee	80.7%	86.8%	78.2%	72.3%	85.9%	82.4%
Student Committee	30.2%	47.3%	35.9%	20.7%	23.9%	17.6%
State Agency	17.6%	18.1%	20.2%	5.4%	34.4%	8.5%
System/District Office	10.5%	11.5%	14.1%	3.8%	16.6%	4.2%
Other	14.4%	23.1%	14.1%	10.3%	5.5%	19.0%
No IT Advisory Groups	2.9%	1.6%	2.7%	2.7%	1.2%	7.0%

technology advisory committee provide advice on IT strategy in significantly more than half of ALL responding institutions. Furthermore, there are significant increases in the number of campuses reporting president's cabinet/council, student committee, academic/faculty committee, and technology advisory committee usage this year compared with last.

One trend we are watching is the percentage of campuses that have and use a trustee committee for advice on IT strategies. This is the case at more than 25% of doctoral universities and nearly that percent of BA schools, but only 8.6% of associate's colleges reported using advice from trustees. Although this number overall has increased once again from the 2004 survey, it is not statistically significant.

#### **Notes**

- Title data were normalized for analysis into the groupings shown in Table 1-1. A vice president or vice chancellor level title that also included CIO or CTO in the title was normalized in the VP/VC category, while any other title that included CIO or CTO was normalized in the CIO or CTO category.
- Carnegie classifications include more distinct breakouts than shown for most tables. For our analyses, we combined Doctoral/Research Universities-Extensive and Doctoral/Research Universities-Intensive into DR; Master's Colleges and Universities I and Master's Colleges and Universities II into MA; and Baccalaureate Colleges-Liberal Arts, Baccalaureate Colleges-General,

- and Baccalaureate/Associate's Colleges into BA. Our AA group includes institutions with the classification of Associate's Colleges. Our OTHER category includes Tribal Colleges and schools in the Specialized Institutions category as well as those institutions without a Carnegie class (primarily international institutions).
- 3. Note that not all of the 933 schools in the data set estimated the number of distributed/decentralized staff; thus this ratio could only be calculated for the 834 schools that provided all the data points needed for this calculation.
- 4. The Integrated Postsecondary Education Data System (IPEDS) is a single, comprehensive data-collection program designed to capture data for the National Center for Education Statistics (NCES) for all institutions and educational organizations whose primary purpose is to provide postsecondary education in the United States. Among other data, campuses report the number of full-time and part-time undergraduate, graduate, and professional students to IPEDS. The total of those three categories is imported into the CDS database as "total student headcount." The full-time-equivalent (FTE) student number is derived by adding the total full-time students for all three categories.
- 5. Note that not all of the 933 schools in the data set opted to provide the employee headcount number, and student headcount numbers were not available for many international respondents unless they provided this number when contacted. Thus this ratio could only be calculated for the 625 schools for which all the data were available for this calculation.