

## 2 IT Financing and Management

Section two of the 2009 survey captures financial data from 17 questions about information technology on campus for fiscal year 2008–2009. The section also covers IT management practices, many of which have financial implications. Summarizing the funding and expenditures of campus IT organizations is a challenge. The CDS attempts to define parameters and methodology that would be relevant for all types of institutions.

Figure 2-1 and Figure 2-2 summarize trends in the distributions of centralized IT funding in millions of dollars in nominal (reported) dollars and adjusted for inflation to 2009 dollars,<sup>1</sup> respectively. After adjusting for inflation, most Carnegie classes<sup>2</sup> show an increase in median IT funding over the past five years. Increases in funding have roughly kept pace with enrollment,<sup>3</sup> even outpacing enrollment in 2009, including DR EXT, as shown in Figure 2-3 and Figure 2-4.

Respondents were offered a list of nine sources of funding for central IT organizations, plus a category of “Other funding.” For each category, respondents indicated the amount of funding received from that source. Respondents were not allowed to skip any source; the survey required an entry of \$0 or a non-zero value. The percentage of institutions reporting non-zero entries for each source is summarized in Table 2-1. Respondents could choose multiple sources of funding, so the columns of the table do not add to 100%. Other than DR EXT institutions, most campuses were able to capture all of their funding in one of the nine sources. (Refer to the percentage of institutions indicating “Other funding.”)

As shown in Table 2-1, almost all institutions report funding from operating appropriation, and approximately two-thirds report funding from capital appropriations. Other funding sources are more variable across classes, notably revenue from sale of centralized services. Trends in operating appropriations are summarized in Figure 2-5 and Figure 2-6. Figure 2-7 shows operating appropriations per student FTE.

As seen in Figure 2-8, staff compensation as a percentage of centralized IT funding has been fairly consistent within classes over the past five years, with some differences among classes. Trends in staff and student worker compensation (including benefits) per FTE are summarized in Figure 2-9 through Figure 2-12. Compensation has remained fairly stable for both groups, especially after adjusting for inflation. Table 2-2 shows different types of personnel employed by the central IT organization. Figure 2-13 displays trends over time in percent of total compensation used for each type of personnel. Not surprisingly, the bulk of compensation is used for staff across all classes. The percentage of the budget used for consultants and contractors is about the same across classes.

Ongoing professional development can be a critical factor in recruiting, retaining, and retraining a qualified IT staff. Respondents were asked how many dollars are set aside in the annual budget for professional development or training per centralized FTE IT staff member. The amount of funding budgeted per year per FTE has remained fairly stable within each class, as seen in Figure 2-14.

IT-related expenditures outside the centralized IT organization vary dramatically across classes. This includes expenditures for categories such as personnel, hardware, and software in administrative offices and academic departments. Only about 70% of respondents could give a reasonable estimate of decentralized IT compensation, and less than 60% could give a reasonable estimate for other decentralized IT expenditures. DR institutions were least likely to be able to estimate decentralized expenditures, owing perhaps to their institutional complexity and distributed nature and the higher level of decentralized IT activities. Because the response rate is lower and the precision of responses is questionable, they are not presented in this report.

Figure 2-15 shows trends in the percentage of schools charging a general student technology fee. BA LA institutions are far less likely to have such a fee in place. Figure 2-16 shows that, when charged, the student technology fee is most often charged as a flat fee per year, semester, or quarter, except at AA institutions, which are more likely to charge a flat fee per credit hour. This is not surprising, due to the relatively high percentage of part-time students at these institutions.

Another type of technology fee is a separate fee for residence-hall network connections. Overall, this is not a common practice and has become slightly less common in the past year. In the 2009 survey, only about 12% of all campuses report charging such a fee. More detailed data are not included in this report.

Figure 2-17 summarizes the number of computers owned or leased by the institution per student FTE. In general, there is an increasing trend across the past five years. It is challenging for IT managers to assure that this equipment is replaced in a timely fashion in order to capitalize on newer technologies and to reduce support costs. As seen in Figure 2-18, from 50% (DR EXT) to nearly 90% (MA II) of campuses report having planned computer replacement cycles in place. Most cycles fall in the three-to-four-year range, although over 20% of MA II and AA institutions reported planned replacement cycles greater than four years in 2009.

Not all institutions provide funding to support computer replacement plans, however. As shown in Figure 2-19, the percentage of computers with budgeted replacement funding varies widely, even within classes. Irrespective of formal replacement plans and budgets, Figure 2-20 shows trends in the percent of institutionally owned computers actually replaced each year. Based on the number of institutions lacking funded replacement cycles, many institutions are reporting a low percentage of computers replaced: the median percentage of computers replaced ranges from 20% to 25% across the seven Carnegie classes.

As with computers, network infrastructure must also be refreshed or replaced. As shown in Figure 2-21, fewer than 60% of the institutions in any of the seven Carnegie classes report that their centralized IT funding model includes renewal of cabling, electronics, and related hardware and software. While some institutions fill gaps with one-time allocations and end-of-the-year "budget dust," absence of a robust funding model for critical infrastructure represents a serious problem on many campuses.

Respondents were asked about the use of service level agreements (SLAs) between the centralized IT organization and departments, and about outsourcing to external service providers. Figure 2-22 and Figure 2-23 show institutions reporting use of SLAs and external service providers, respectively. Use of both has been increasing in most classes. Table 2-3 and Table 2-4 provide more detail about how SLAs and external service providers are being used. Note that respondents could select multiple options, so the columns do not sum to 100%.

## Endnotes

1. The US Bureau of Labor Statistics provides an “inflation calculator” at <http://data.bls.gov/cgi-bin/cpicalc.pl>. Using this calculator, data from previous surveys was converted to 2009 US dollars.
2. This CDS summary report uses the basic classification system from the 2000 version of *The Carnegie Classification of Higher Education*. See Appendix D for more detail. The seven classes with the largest number of respondents are included in this report:
  - DR EXT (Doctoral Institutions/Extensive): 50 or more doctoral degrees per year across at least 15 disciplines
  - DR INT (Doctoral Institutions/Intensive): 10 or more doctoral degrees per year across three or more disciplines or at least 20 doctoral degrees per year overall
  - MA I (Master’s Institutions I): 40 or more Master’s degrees per year across three or more disciplines
  - MA II (Master’s Institutions II): 20 or more Master’s degrees per year
  - BA LA (Baccalaureate Colleges—Liberal Arts): At least half of baccalaureate degrees in liberal arts fields
  - BA GEN (Baccalaureate Colleges—General): Less than half of baccalaureate degrees in liberal arts fields
  - AA (Associate’s Colleges): Offer Associate’s degrees, but typically no baccalaureate degrees
3. Data on student enrollment FTEs is collected from the Integrated Postsecondary Education Data System (IPEDS). 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 post-secondary 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 in to the CDS database as “total student headcount.” The FTE student number is derived by adding the total full-time student number to one-third the total number of part-time students for all three categories.

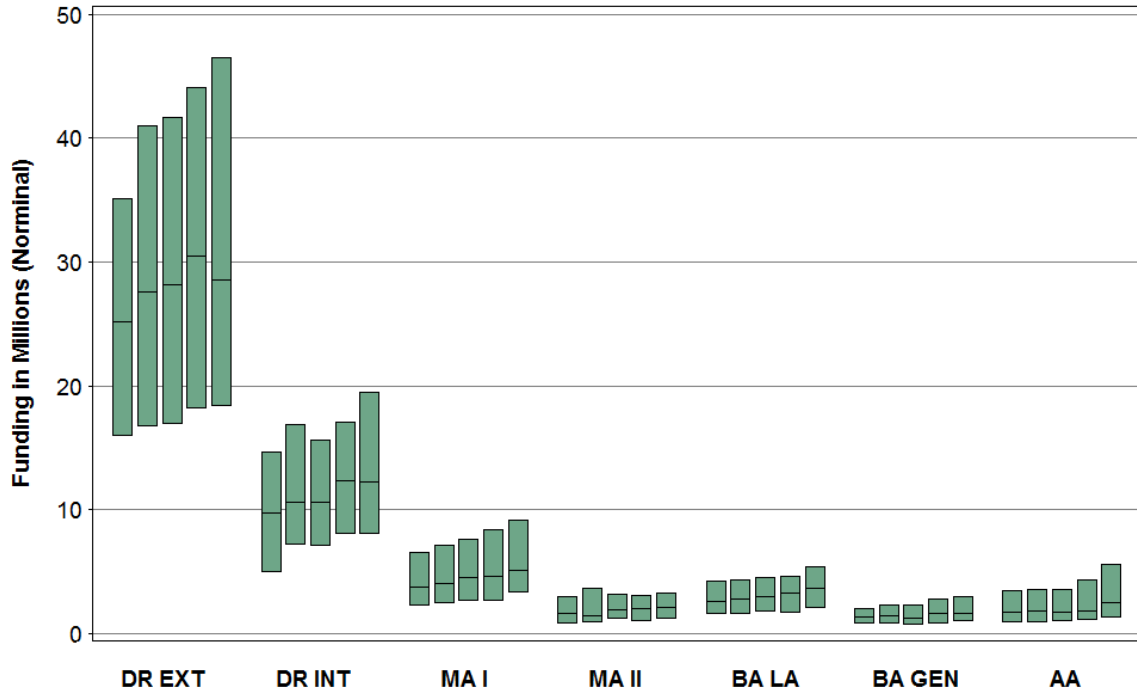


Figure 2-1 Centralized IT Funding (Nominal) 2005-2009

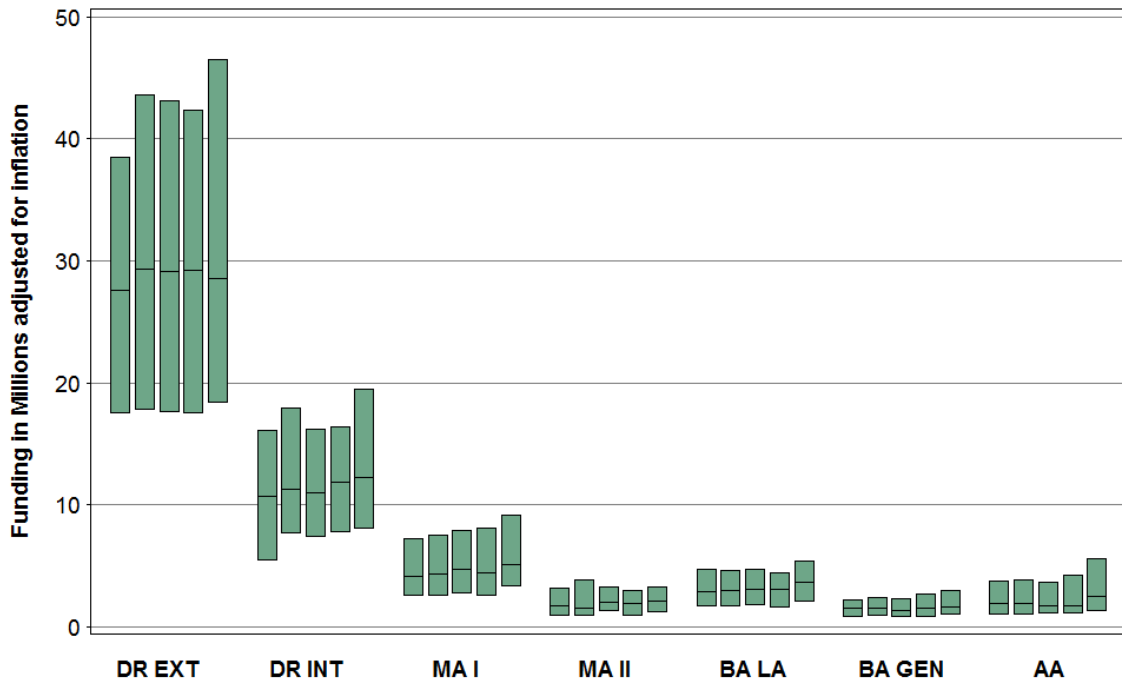


Figure 2-2 Centralized IT Funding (Adjusted for Inflation) 2005-2009

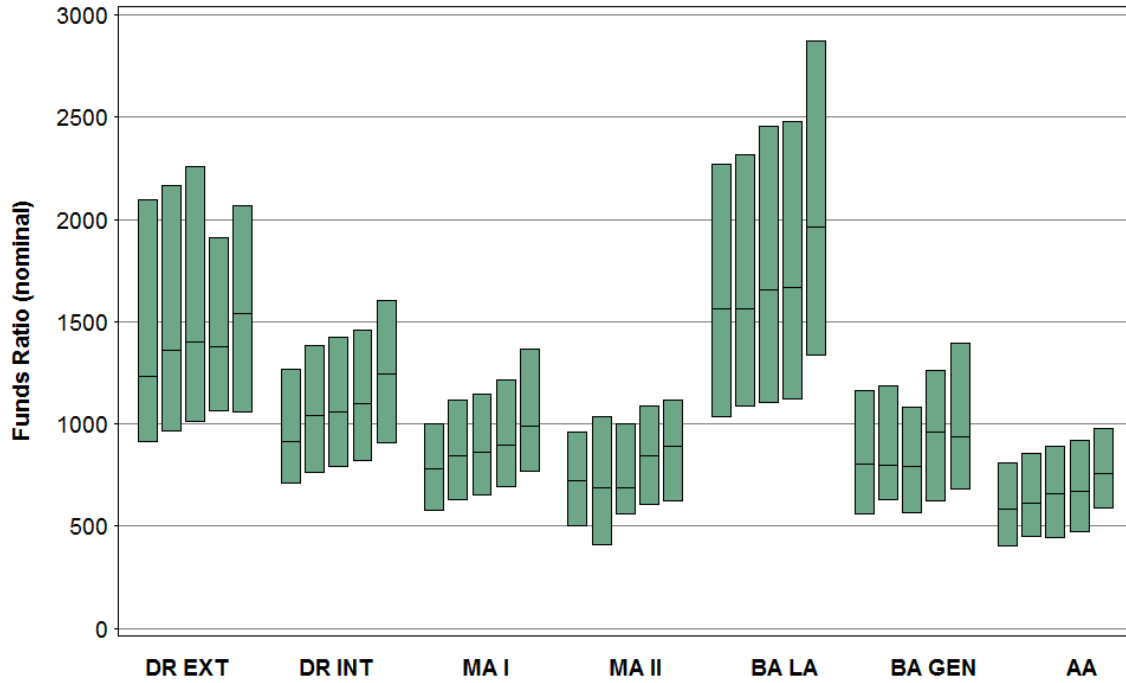


Figure 2-3 Centralized IT Funding per Student FTE (Nominal) 2005–2009

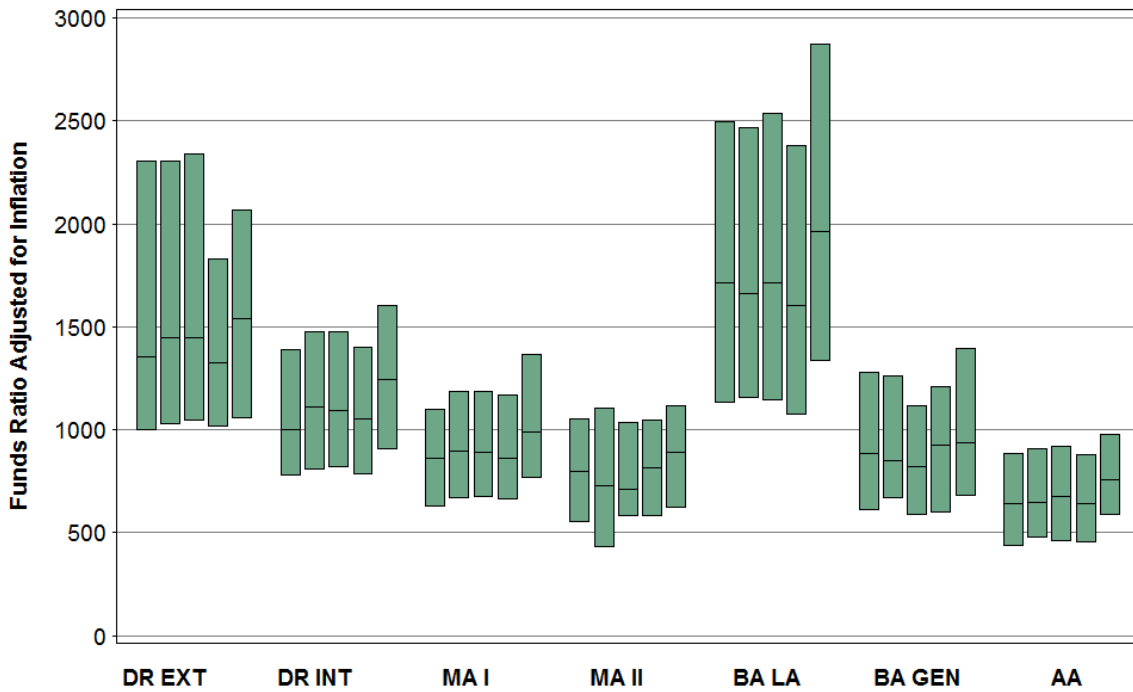


Figure 2-4 Centralized IT Funding per Student FTE (Adjusted for Inflation) 2005–2009

**Table 2-1 Percent of Institutions Reporting Sources of Centralized IT Funding 2009**

	DR EXT	DR INT	MA I	MA II	BA LA	BA GEN	AA
Operating appropriations	100%	100%	100%	100%	100%	98%	99%
Capital appropriations	65%	62%	61%	69%	73%	51%	58%
Appropriation from revenue generated from student technology fees	44%	36%	40%	19%	6%	20%	50%
Revenue from sale of centralized services	95%	73%	45%	31%	38%	27%	12%
Revenue from sale to entities external to the campus	36%	15%	6%	0%	7%	0%	1%
Net revenue from resale of products to campus community	28%	22%	9%	4%	8%	4%	2%
Net revenue from resale of products to entities external to the campus	12%	9%	4%	4%	3%	6%	0%
Your campus share of a multi-campus system dollar equivalent for systems or services provided at the system or district level for which the campus is not charged	8%	18%	21%	23%	4%	16%	25%
Compensation for staff from an institutional budget	27%	15%	24%	15%	26%	27%	18%
Other funding category	33%	13%	15%	19%	9%	18%	13%

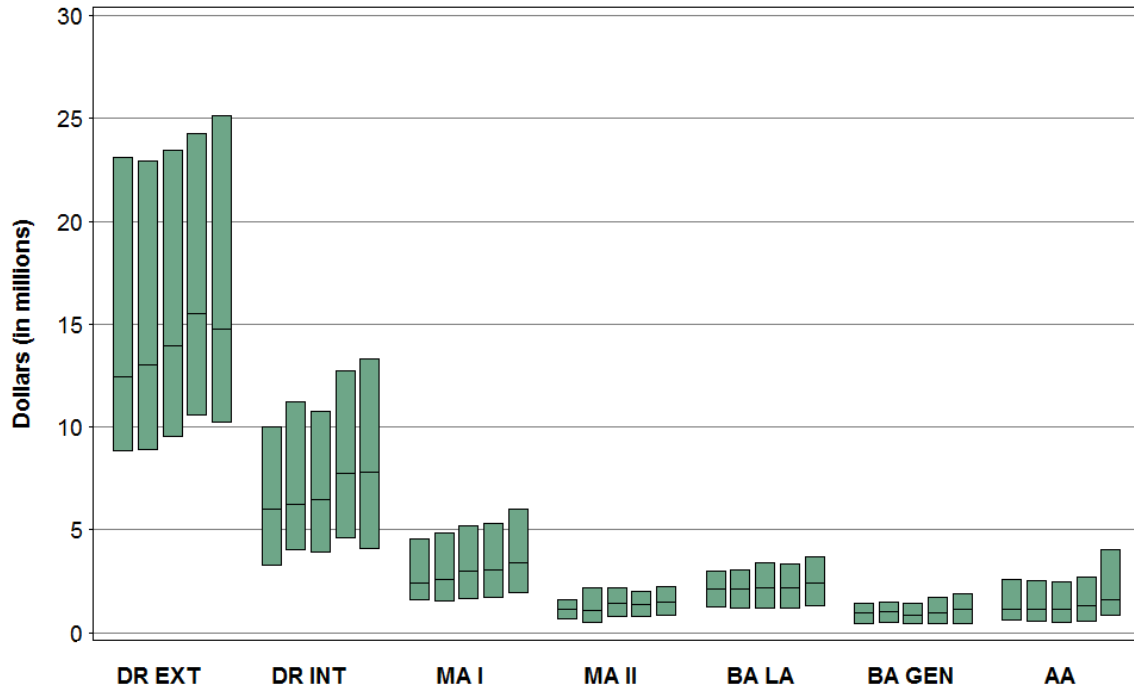


Figure 2-5 Operating Appropriation (Nominal) 2005–2009

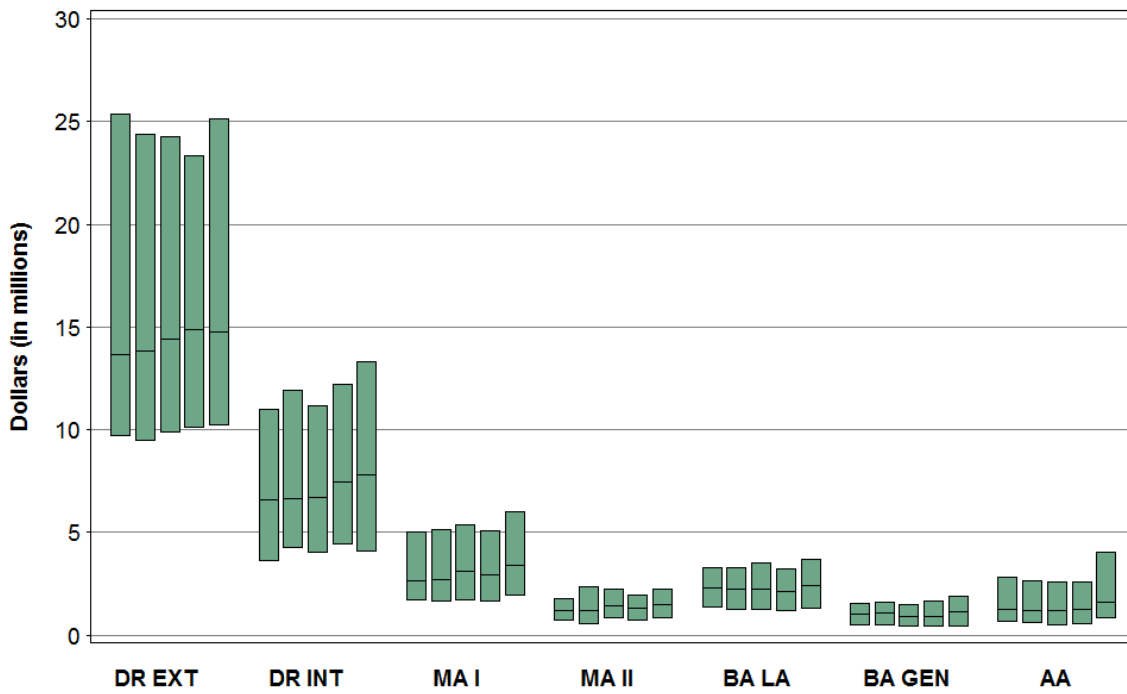


Figure 2-6 Operating Appropriation (Adjusted for Inflation) 2005–2009

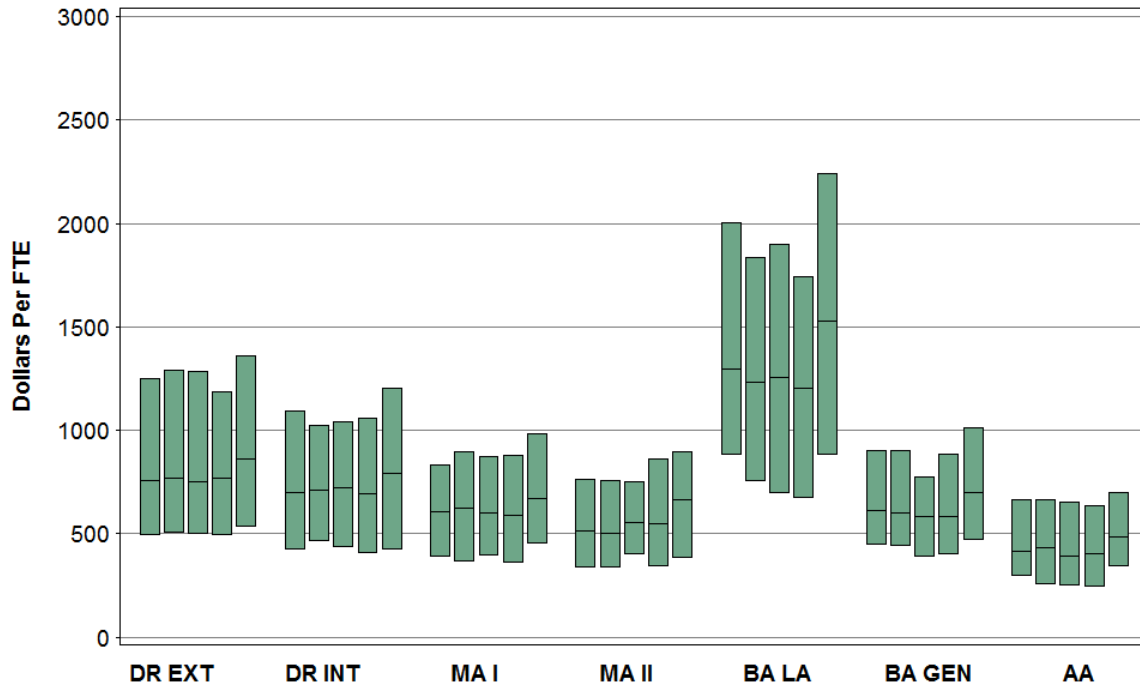


Figure 2-7 Operating Appropriation per Student FTE (Adjusted for Inflation) 2005–2009

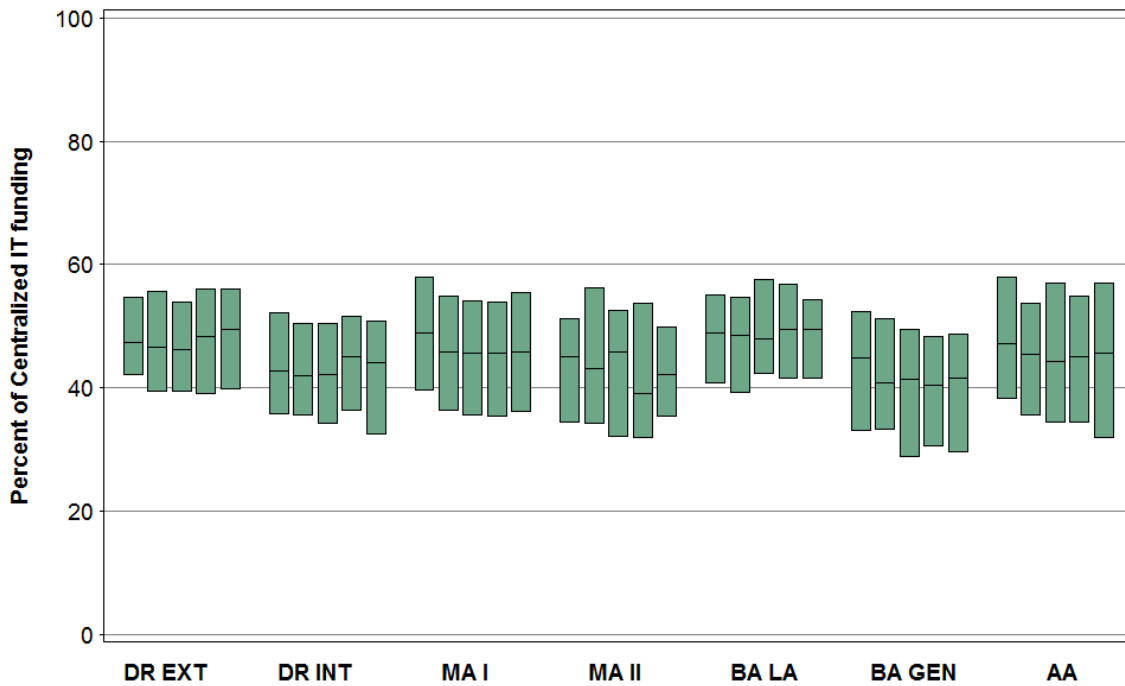


Figure 2-8 Staff Compensation as Percentage of Centralized IT Funding 2005–2009

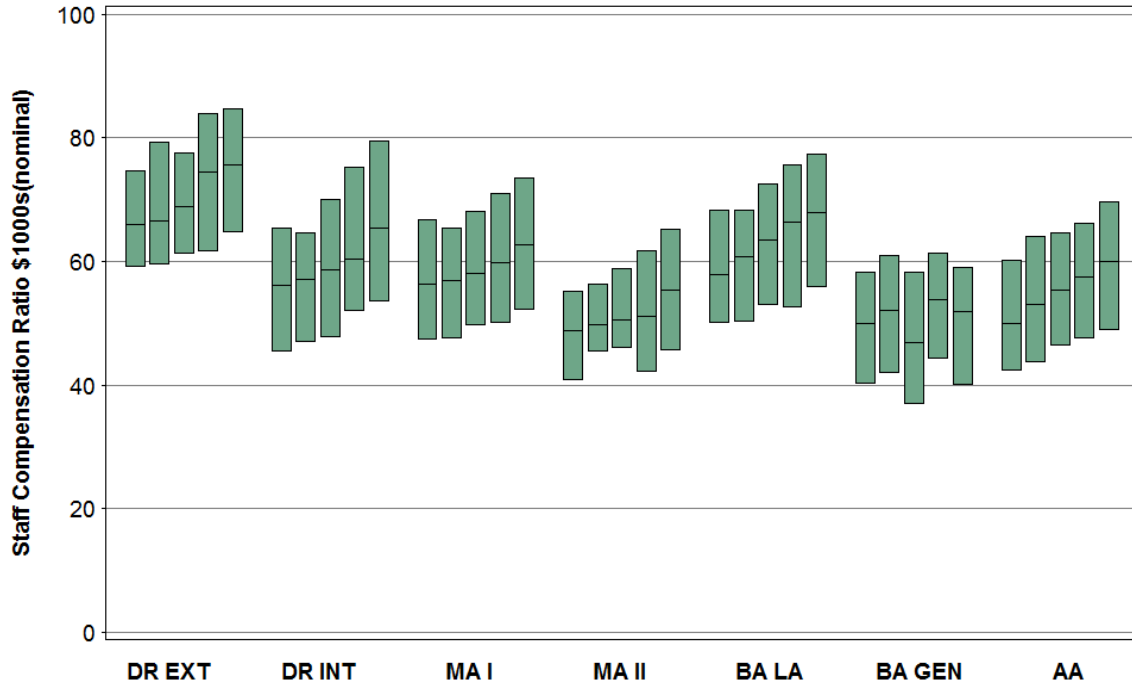


Figure 2-9 Staff Compensation per FTE (Nominal) 2005–2009

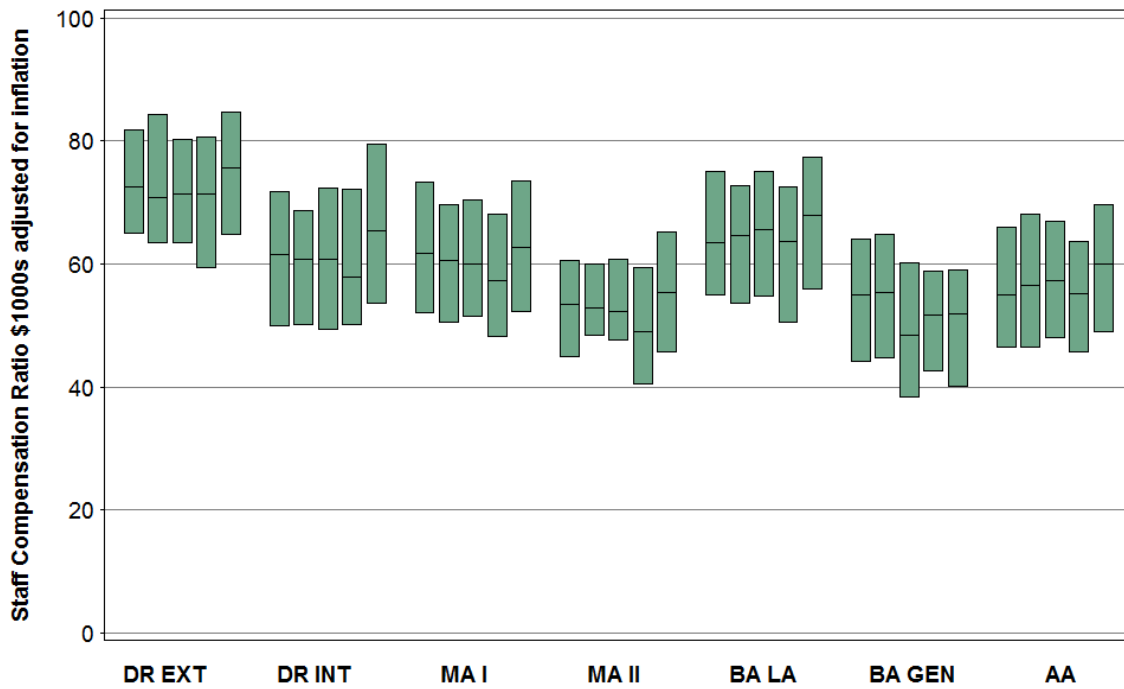


Figure 2-10 Staff Compensation per FTE (Adjusted for Inflation) 2005–2009

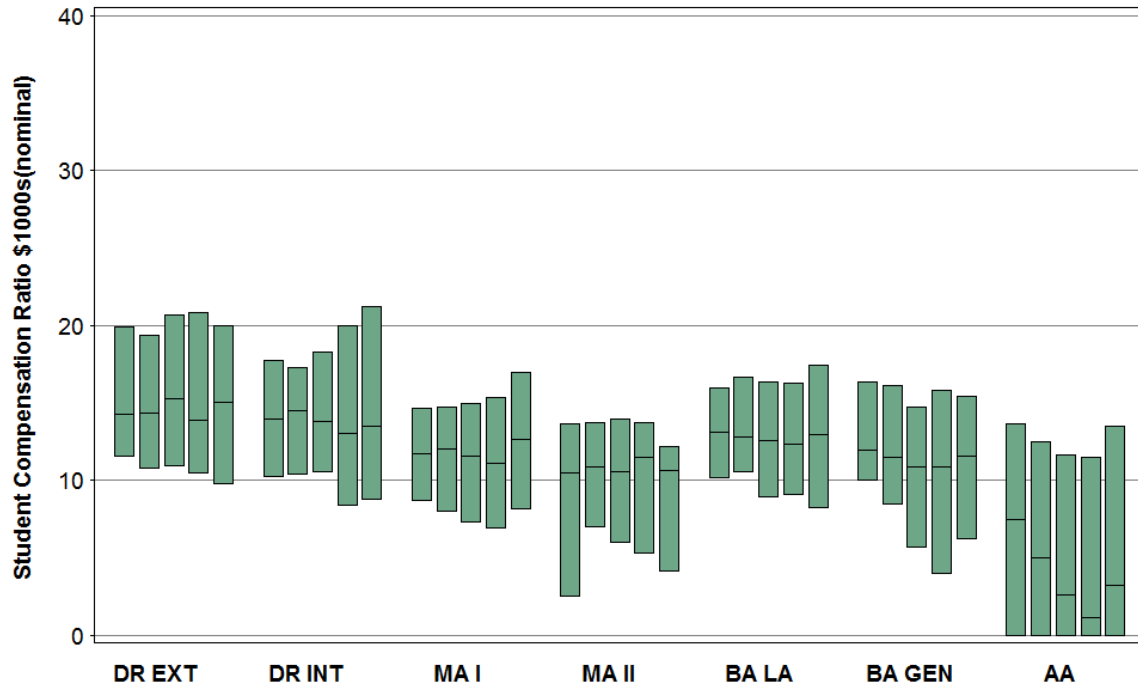


Figure 2-11 Student Worker Compensation per FTE (Nominal) 2005–2009

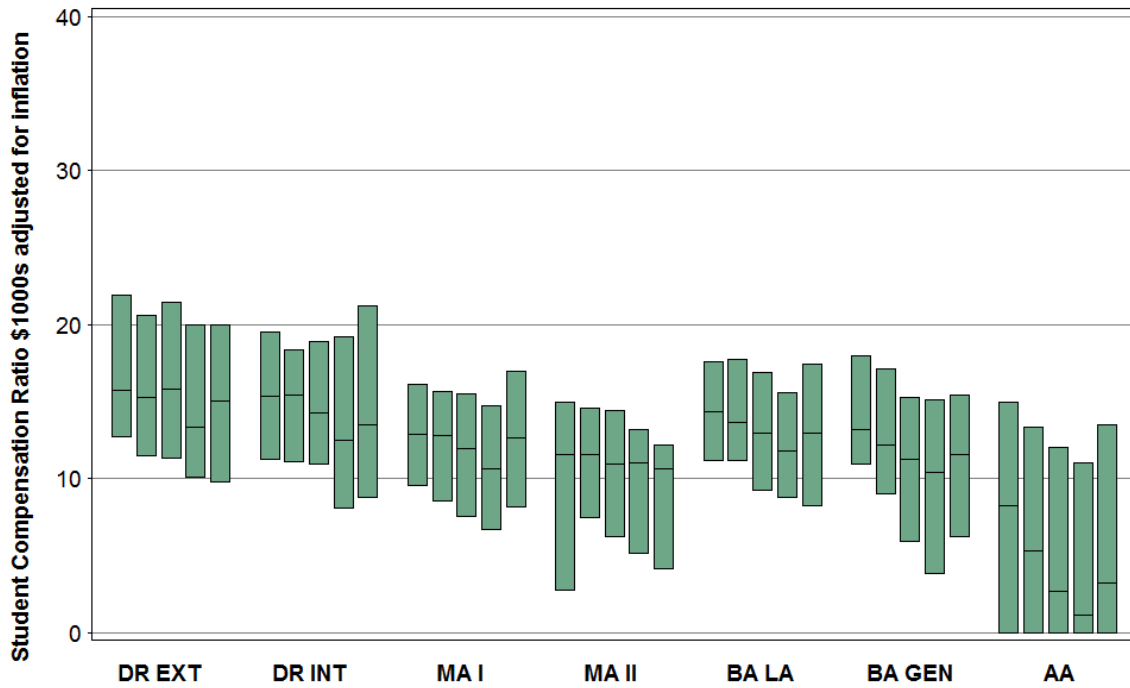
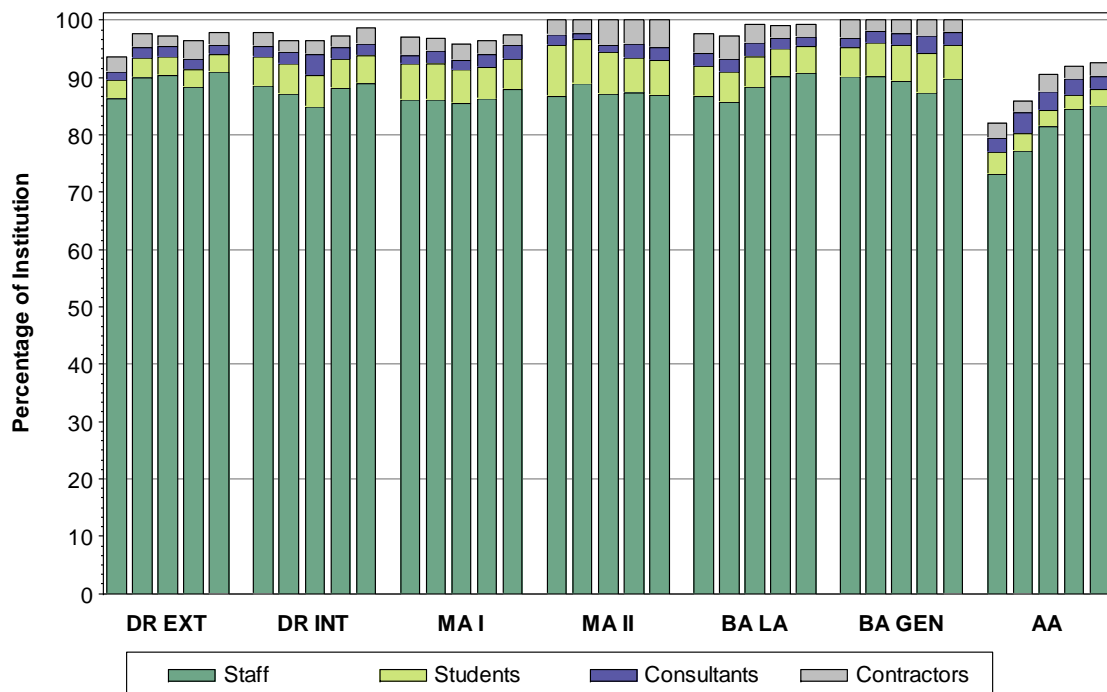


Figure 2-12 Student Worker Compensation per FTE (Adjusted for Inflation) 2005–2009

**Table 2-2 Use of Various Types of Personnel 2009**

	DR EXT	DR INT	MA I	MA_II	BA LA	BA GEN	AA
Staff	100%	100%	96%	96%	89%	88%	98%
Students	97%	95%	93%	81%	95%	90%	58%
Consultants	61%	49%	45%	46%	43%	43%	44%
Contractors	45%	35%	28%	27%	35%	33%	34%
Other	6%	5%	3%	0%	3%	0%	5%



**Figure 2-13 Percent of Total Compensation for Various Types of Personnel 2005-2009**

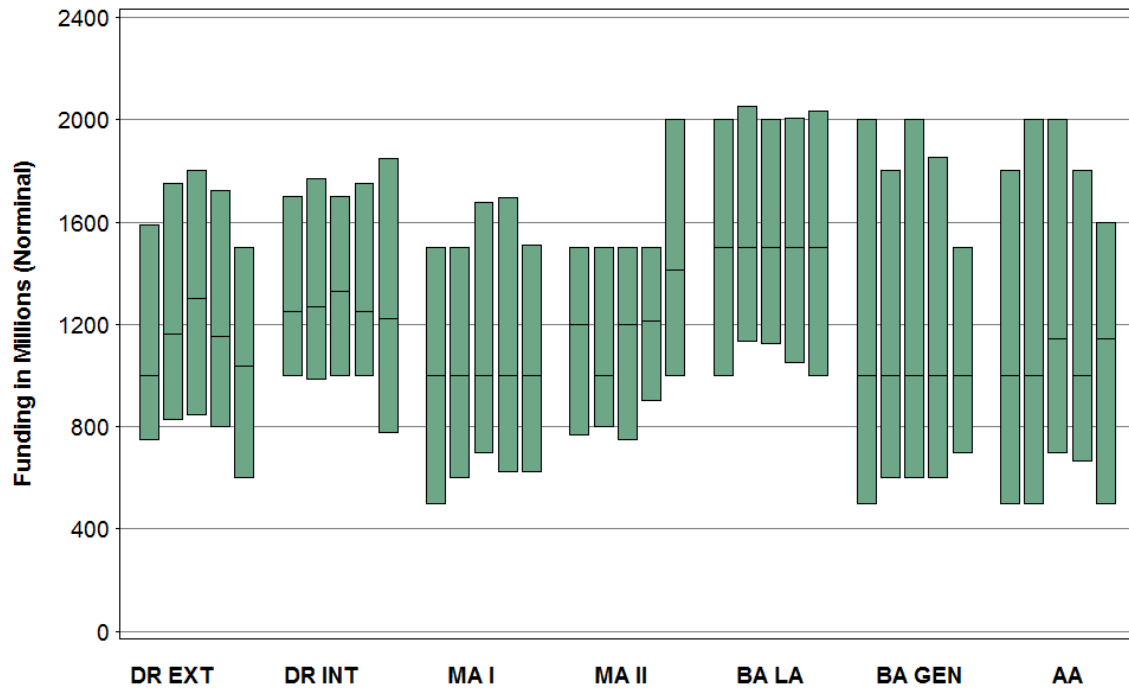


Figure 2-14 Annual Budget for Professional Development per Staff Member 2005–2009

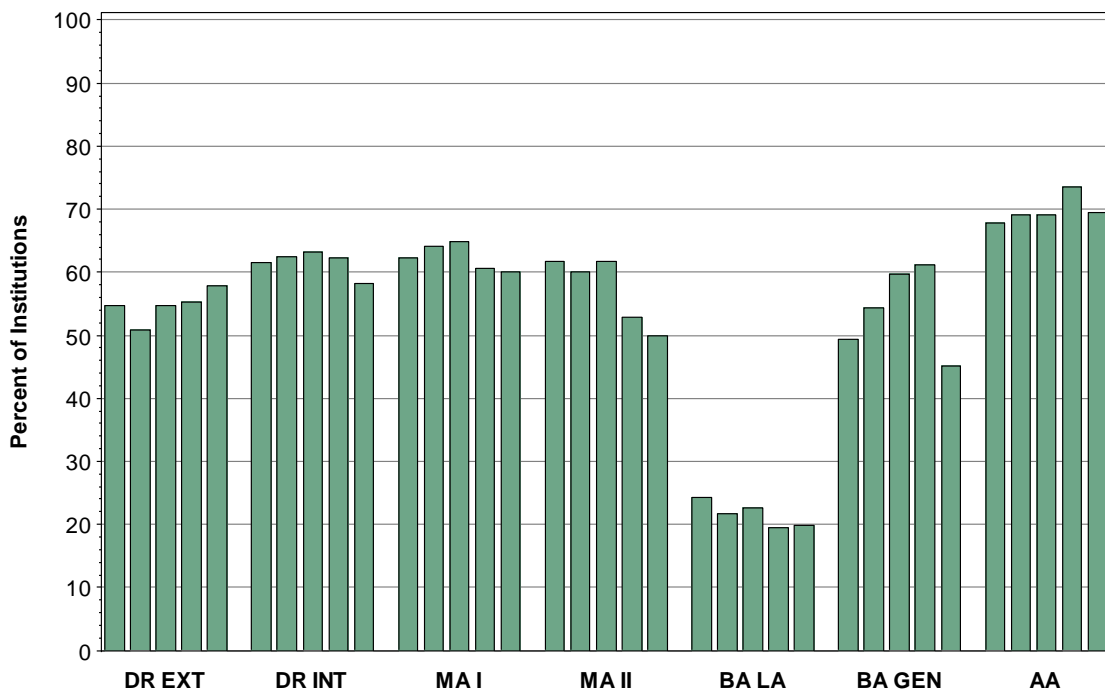


Figure 2-15 Charging of Student Technology Fees 2005–2009

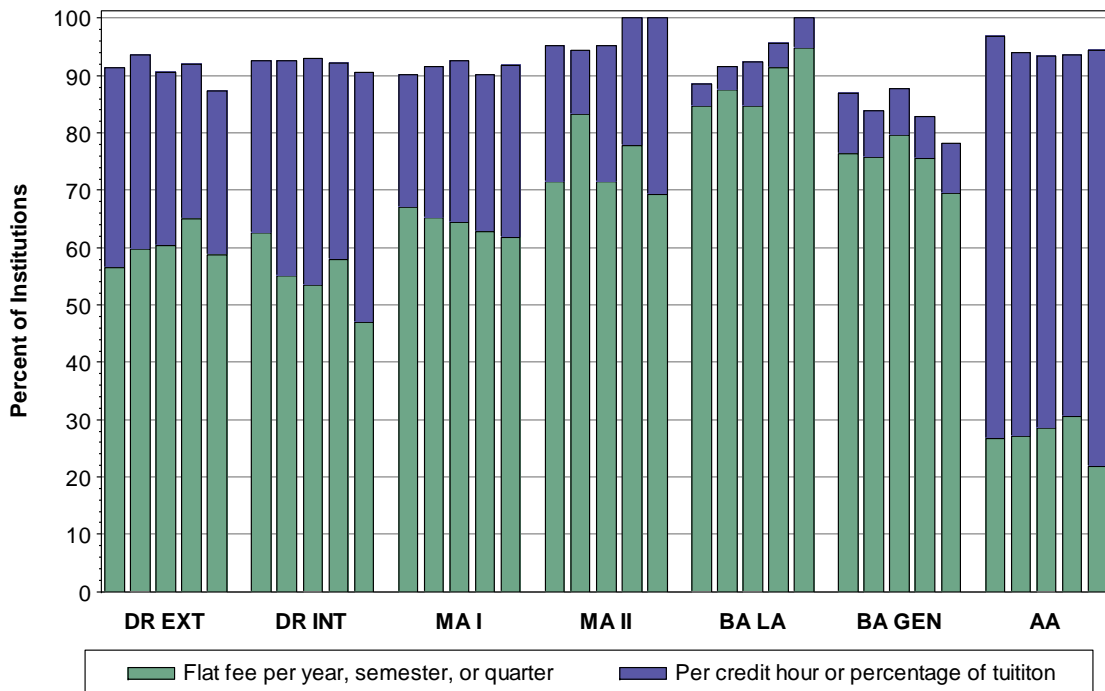


Figure 2-16 Method of Charging Technology Fee 2005–2009

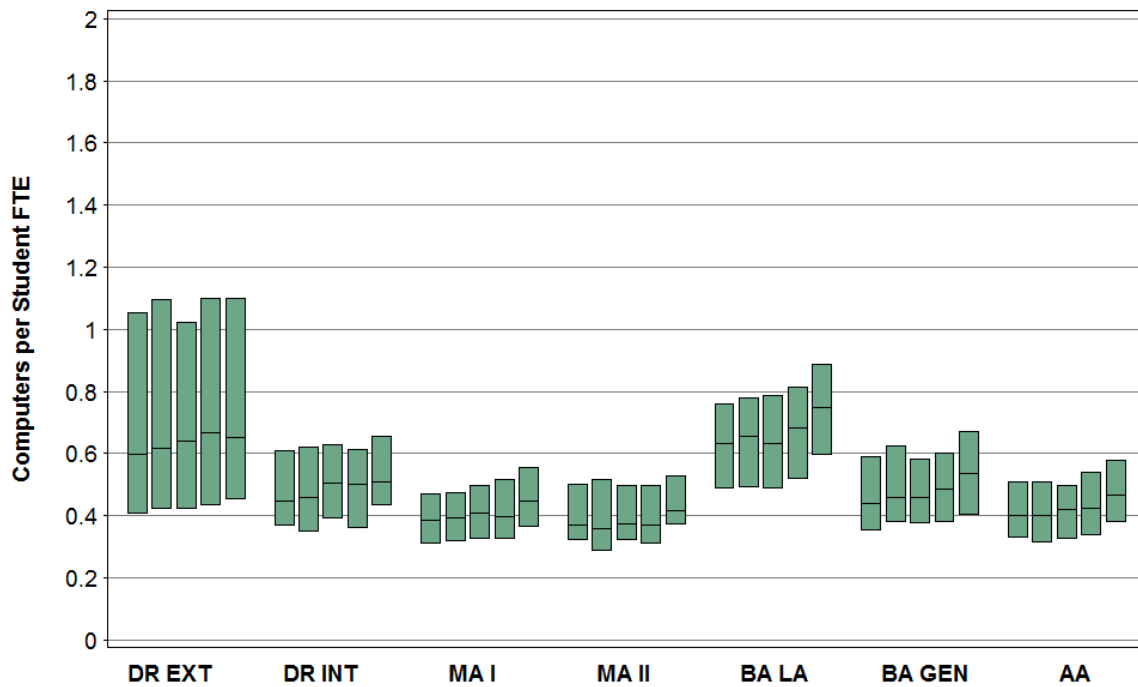


Figure 2-17 Computers Owned/Leased by the Institution per Student FTE 2005–2009

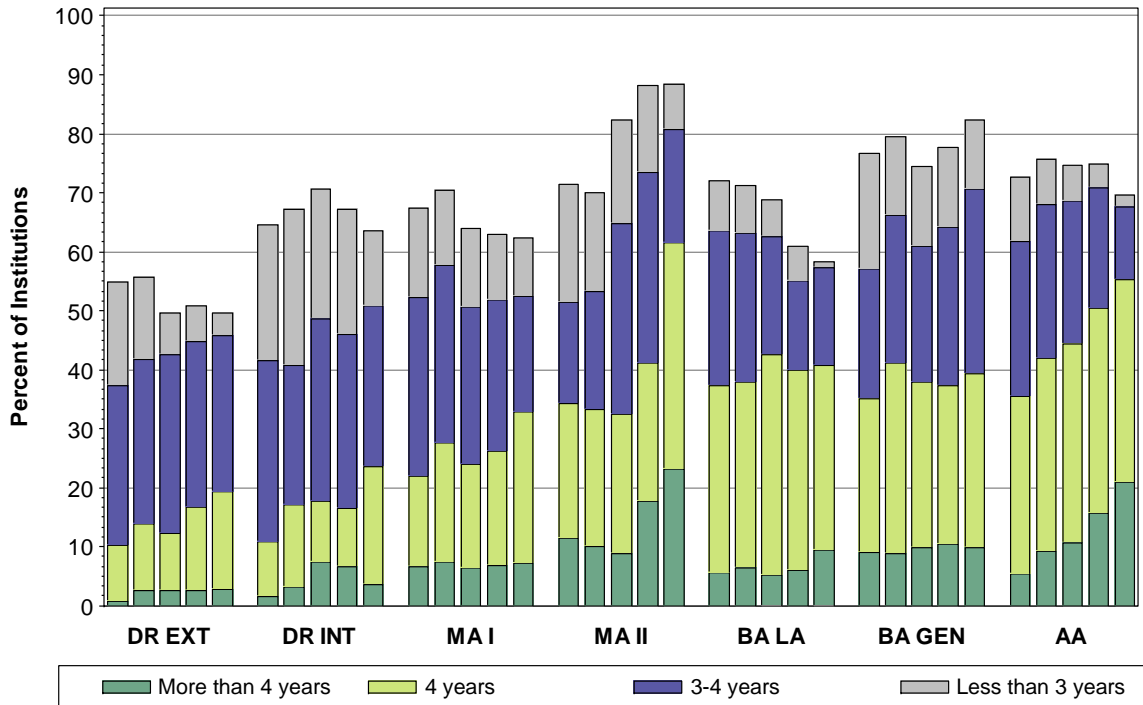


Figure 2-18 Computer Replacement Cycles 2005–2009

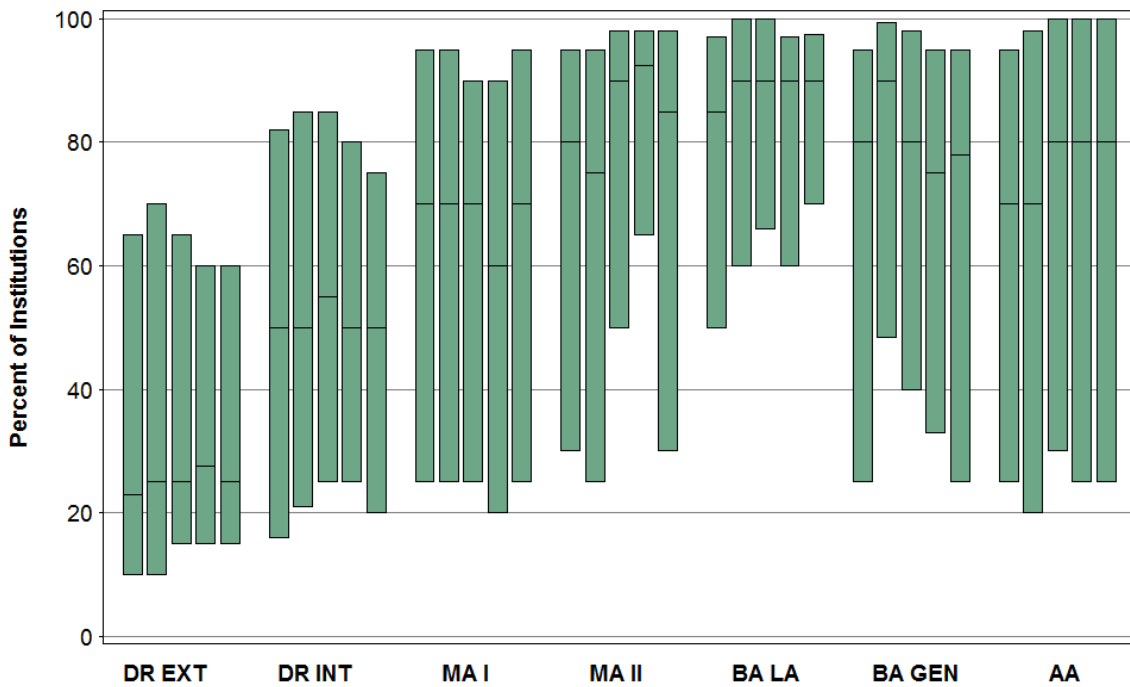


Figure 2-19 Replacement Funding for Computers 2005–2009

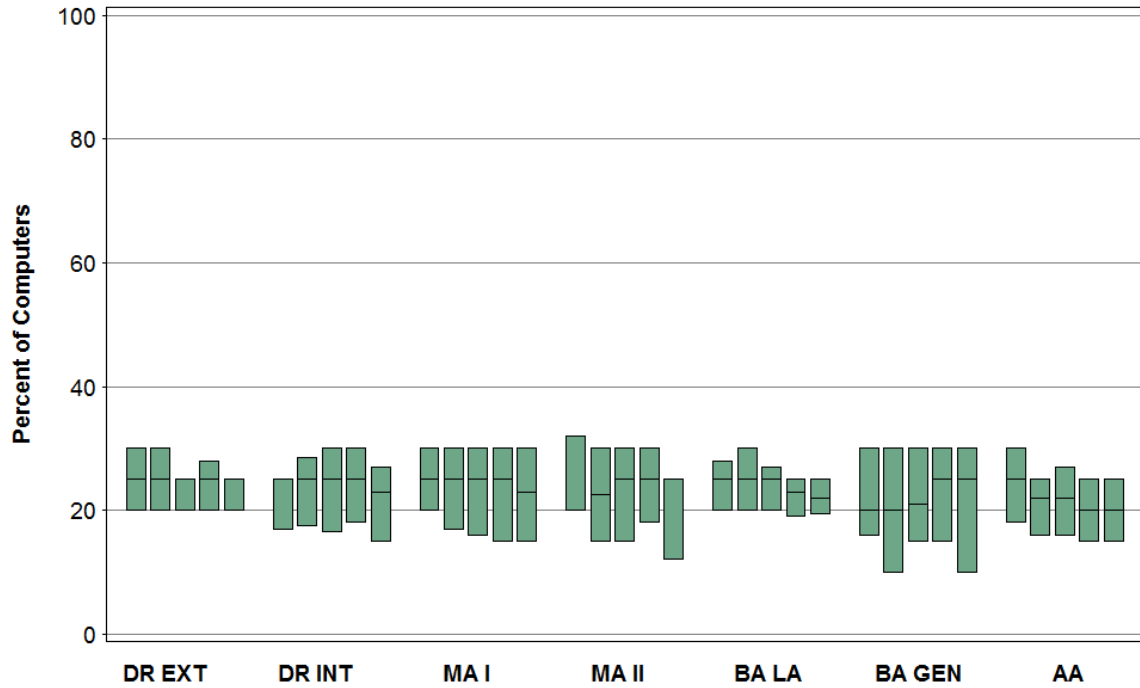


Figure 2-20 Actual Replacement of Computers 2005–2009

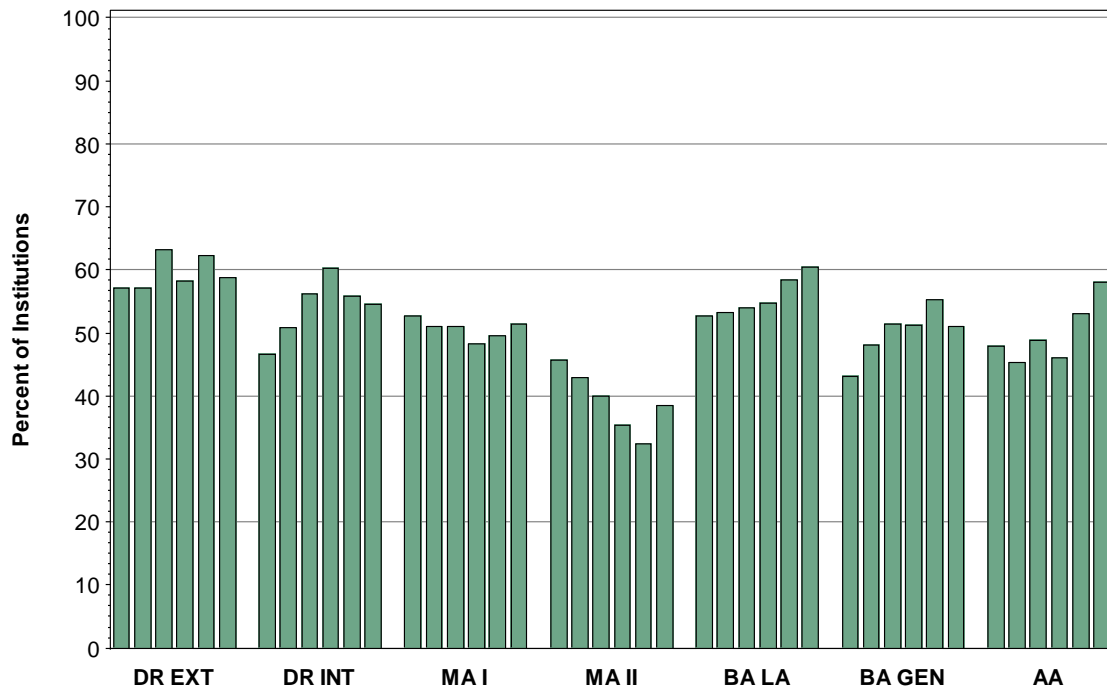


Figure 2-21 Funding for Network Infrastructure Renewal 2005–2009

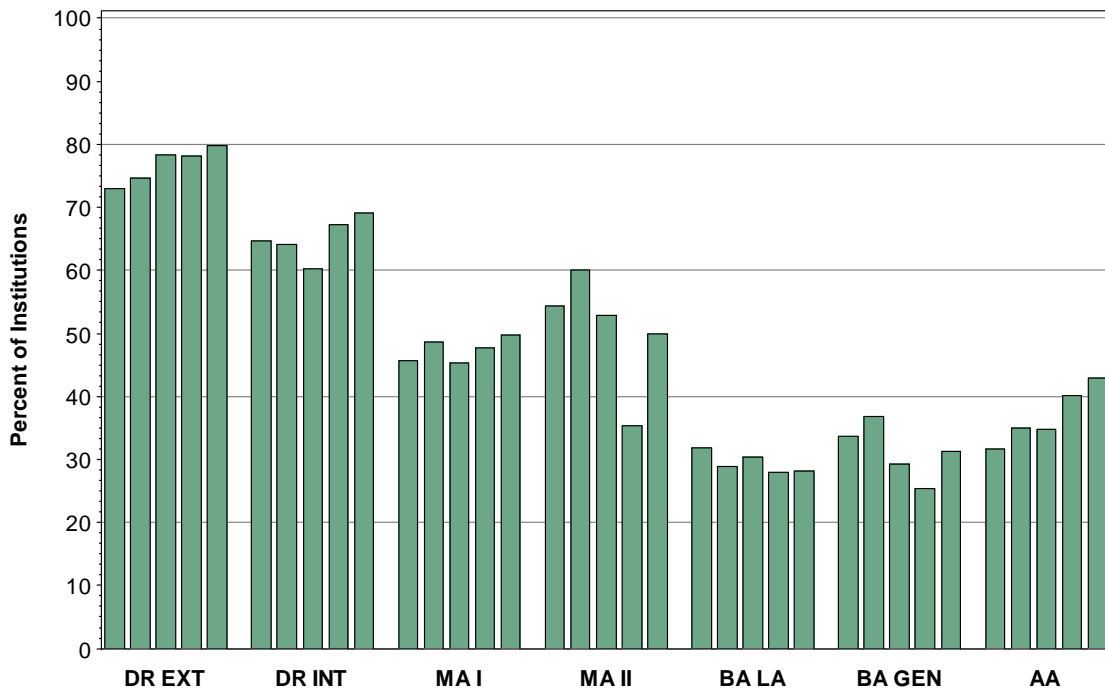


Figure 2-22 Use of Service Level Agreements (SLAs) 2005–2009

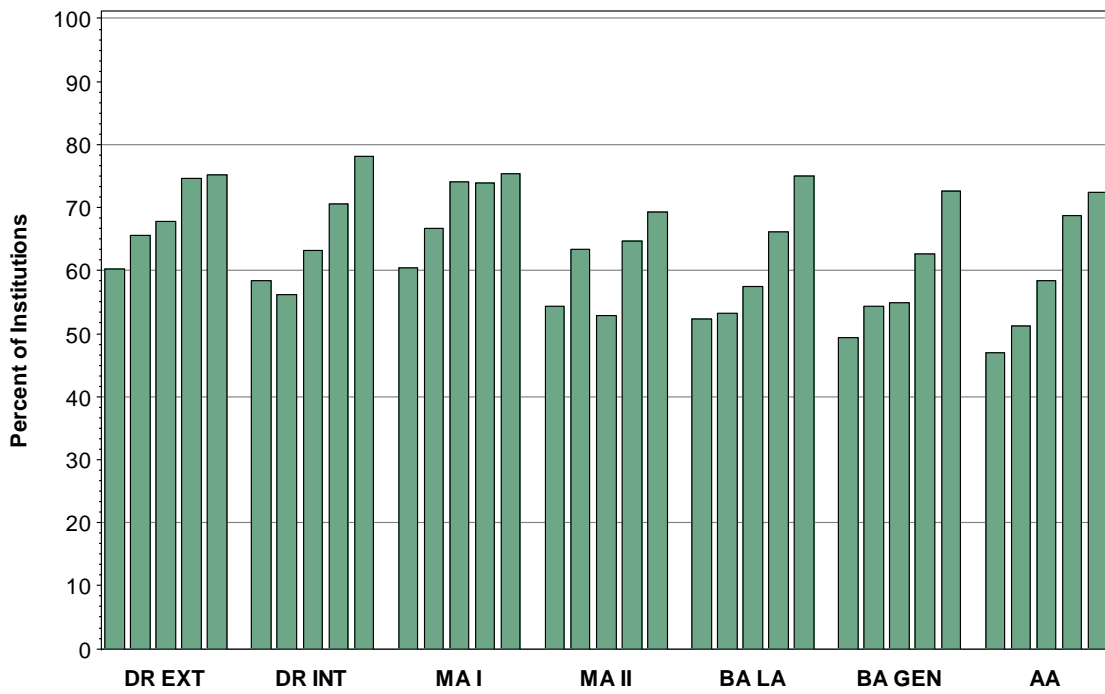


Figure 2-23 Use of External Suppliers 2005–2009

**Table 2-3 Use of SLAs 2009**

	DR EXT	DR INT	MA I	MA II	BA LA	BA GEN	AA
Academic/research support	36%	29%	16%	8%	4%	0%	8%
Admin/enterprise info systems support	37%	31%	25%	27%	13%	22%	23%
Computer/network security	19%	24%	11%	19%	5%	6%	22%
Data center services	50%	40%	21%	35%	7%	12%	17%
User support serv./help desk	56%	49%	31%	31%	17%	16%	31%
Instruc. technology support	21%	29%	16%	19%	4%	6%	13%
Multimedia services	17%	16%	13%	12%	4%	4%	13%
Network services	35%	31%	22%	31%	10%	14%	25%
Print services	14%	16%	11%	19%	4%	10%	15%
Telephone services	32%	33%	26%	23%	6%	16%	23%
Training	5%	5%	4%	4%	3%	2%	5%
Web support services	29%	24%	16%	15%	2%	6%	12%
Other	21%	13%	9%	4%	2%	4%	3%
No SLAs	20%	31%	50%	50%	72%	69%	57%

**Table 2-4 Use of External Suppliers 2009**

	DR EXT	DR INT	MA I	MA II	BA LA	BA GEN	AA
Admin. system(s): transaction systems operation	27%	20%	24%	12%	17%	14%	17%
Admin. systems: application development	9%	11%	9%	4%	4%	8%	13%
Admin. systems: project mgmt for implementations	12%	9%	8%	8%	2%	2%	10%
All/nearly all centralized IT staff and services	0%	2%	2%	0%	0%	0%	2%
CIO/top IT administrator	0%	0%	2%	0%	0%	2%	3%
Computer and network security	2%	9%	4%	0%	0%	2%	3%
Computer operations	2%	4%	3%	0%	2%	0%	3%
Data center	5%	2%	5%	0%	2%	0%	2%
Desktop computer maintenance, and/or repair services	11%	16%	9%	4%	11%	4%	4%
Distance education	9%	7%	13%	12%	1%	2%	17%
Help desk	7%	15%	8%	0%	2%	6%	15%
Course management system	10%	24%	25%	23%	19%	16%	31%
Multimedia services	4%	2%	4%	0%	4%	4%	4%
Network services on campus	4%	5%	3%	0%	6%	2%	4%
Portal	4%	11%	5%	8%	3%	2%	4%