Methodology and Respondent Demographics

This ECAR study used a multipart methodology to gather quantitative and qualitative data about our respondent institutions’ practices surrounding IT help desk management. We investigated the state of college and university help desk organizations, services, tools, resources, and management practices, and how these and assorted other measures relate to desirable help desk outcomes.

Research Approach

Our research proceeded along four major pathways: a literature review, a quantitative Web-based survey of IT leaders at higher education institutions among the EDUCAUSE member base, qualitative interviews with IT executives and other staff from selected institutions, and case studies.

The literature review helped identify and clarify issues, suggest hypotheses for testing, and provide supportive secondary evidence. Besides examining articles and studies from journalistic, academic, and IT practitioner sources, we relied heavily on IT service management standards and frameworks to develop study objectives and survey questions. Among these sources, we relied especially on the U.K. Office of Government Commerce’s Information Technology Infrastructure Library (ITIL) service delivery guidelines1 and the publications of the IT Service Management Forum.2,3 Also important was Barbara Czegel’s Running an Effective Help Desk.4

With input from CIOs and IT staff, the ECAR research team designed the Web-based survey for IT administrators. We sent invitations for the survey to 1,649 EDUCAUSE member institutions and received 454 responses (a 27.5 percent response rate). Appendix A lists respondents to this survey, which can be found at http://www.educause.edu/SurveyInstruments/1004.

ECAR used qualitative interviews to gain deeper insights into findings from the quantitative analysis and to capture ideas and viewpoints we might otherwise have missed. We interviewed 32 individuals involved in IT help desk concerns, including higher education CIOs, help desk managers, and others. (Appendix B lists the interviewees.) We conducted most interviews by telephone and several at the 2007 ECAR Symposium hosted by HP and EDUCAUSE. The event was held in Boulder, Colorado, in June 2007.

The case studies that accompany this report provide an in-depth look at several topics that emerged from the research as particularly interesting, including

- the challenges and rewards of two approaches to transforming campus perceptions of IT at Bowdoin College and Colgate University;

Grown-ups love figures.
—Antoine de Saint-Exupéry, Le Petit Prince
the deployment of a widely distributed IT support framework at the University of North Carolina at Chapel Hill; and

the adoption of best practices in IT service support and delivery from the IT Infrastructure Library at New York University.

Classification Schemes

For purposes of comparison, we grouped institutions using categories derived from the 2000 edition of the Carnegie Classification of Institutions of Higher Education, developed by the Carnegie Foundation for the Advancement of Teaching. To obtain adequate numbers for statistical and descriptive purposes, we collapsed the Carnegie 2000 classifications as follows:

- Doctoral (DR) institutions group the doctoral-extensive and doctoral-intensive universities together.
- Master’s (MA) institutions group master’s colleges and universities I and II together.
- Baccalaureate (BA) institutions combine the three Carnegie 2000 baccalaureate groups.
- Associate’s (AA) institutions are the same as the Carnegie 2000 associate’s category.

In addition, for demographic purposes we report an “Other Carnegie” category that includes specialized institutions and U.S. higher education offices. Owing to the diversity and small size of this category, it does not figure in our detailed data analysis by Carnegie class. We also tracked Canadian institutions in a separate, single category.

In November 2005, the Carnegie Foundation for the Advancement of Teaching introduced a new classification scheme employing additional institutional characteristics. We have not provided a crosswalk to the new scheme, in large part because we suspect that our readers, at least in the near term, will be more familiar with the older 2000 taxonomy.

Analysis and Reporting Conventions

We adhered to the following conventions in analyzing the data and reporting the results:

- Some tables and figures presented in this study have fewer than 454 respondents and have been adjusted for missing information.
- Percentages in some charts and tables may not add up to 100.0 percent due to rounding.
- We analyzed the data for each online survey question for differences in response patterns among Carnegie classes, private and public institutions, and institutions of varying size. Institution size is determined by the number of full-time equivalent (FTE) enrollments. We also looked for associations between other combinations of variables as appropriate. We noted differences that were both meaningful and statistically significant in the text and/or the supporting figures and tables. Note that a statistically significant relationship between variables does not necessarily indicate a causal relationship.
- The Likert scales used in the online surveys are footnoted in the tables and figures showing results for these survey questions.

Overview of Respondents

We distributed the Help Desk Management Survey to the EDUCAUSE institutional representative at each member institution. In most cases, this was the CIO. Of the 454 respondents, 428 were from the United States or its territories and 26 were from Canada.
Figure 3-1 compares the distribution of CIO survey responses using the Carnegie class categories described above, alongside EDUCAUSE membership and overall population size in each category. The responding schools mirror the EDUCAUSE membership much more closely than the overall population by Carnegie class. Proportionately, we had the strongest participation from doctoral institutions (29.1 percent of respondents).

The median FTE student enrollment of our survey institutions was 4,278, while the mean, reflecting the weight of the largest responding institutions, was 7,804. Overall, however, smaller institutions made up the bulk of this survey’s respondent base. Figure 3-2 shows the distribution of respondents by student enrollment. Institutions of 4,000 or fewer students accounted for 46.0 percent of respondents, those of more than 15,000 accounted for 16.8 percent, and those in between made up 37.1 percent.

Among respondent institutions, 57.8 percent were publicly controlled and 42.2 percent were under private control. As Figure 3-3 illustrates, control was strongly associated with FTE enrollments, with control more commonly public as enrollments increased.

Our survey was completed mainly by respondents holding the position of CIO (51.3 percent of the total). Highest-ranking help desk administrators accounted for another quarter of the respondents, with other IT administrators and staff making up most of the remainder (see Figure 3-4). With, at most, 4.1 percent of respondents representing non-IT positions, we emphasize that the survey results reflect a CIO and IT management point of view.

**Study Organization**

The remainder of this report presents our findings and investigates the factors that we found to be associated with help desk success.

Chapter 4 examines the institutional context that shapes the help desk’s mission and goals. In Chapter 5, we look at the help desk itself, its organization, the services it
offers, and its availability. Chapter 6 reports our findings on help desk funding and staffing, and the alignment of client expectations and help desk resources.

In Chapter 7, we examine the tools used by help desk staff as well as the tools the help desk makes available to its clients. Chapter 8 looks at the use of service level agreements (SLAs) by help desks, including current and planned status, constituencies, barriers to implementation, and management practices. In Chapter 9, we investigate
help desk goals, the factors driving and inhibiting those goals, the status of strategic planning for the help desk, and the central IT organization’s use of a set of formal IT service management practices.

Chapter 10 discusses the means by which help desks measure their effectiveness, assess user satisfaction, and communicate the help desk’s costs and value to various constituencies; we also report on the overall maturity level of help desk processes at respondent institutions. Chapter 11 considers a range of help desk–related outcomes and how they are associated with other variables from the survey. Chapter 12 concludes the study with a look at the future of the IT help desk in higher education as derived from survey responses, ECAR’s qualitative interviews with selected respondents, and insights from HDI, a prominent membership association for IT support service providers.

**Endnotes**