

Foreword

In this fourth annual ECAR study of how undergraduates use and think about information technology (IT), we turn a demographic corner: Many of the student respondents who we report on here as seniors were freshmen when we launched our first study in 2004. Along the way, our study has matured as well, inspiring feelings among the ECAR team that any parent of college-age children will surely recognize. There is shock at how fast time has gone by, pride in the way a cherished child has grown, and excitement about what lies ahead. Beginning with 13 venturesome institutions and 4,374 student respondents in 2004, we now present the results of our 2007 survey of 27,864 students at 103 colleges, universities, and community colleges. The ECAR “student study” is now widely cited as the richest available source of data and insight regarding undergraduates’ experiences with and attitudes toward using IT in their academic lives.

As in previous years, the conclusions we draw here must be limited to the cohort of participating institutions. Yet we also believe that our findings are indicative (if not conclusive) about student behavior and attitudes at similar institutions, and that they contribute valuable empirical information and much-needed nuance to descriptions of the “digital natives” and “millennials” who now purportedly make

up the student body. In this study as in its predecessors, we have indeed found student respondents to be immersed in technology ownership and use, and impatient with instructors who don’t have adequate technical skills. Responding to questions new to this year’s study, majorities of student respondents told us that they like to learn by using Internet searches and programs they can control, such as video games and simulations.

But our respondents have also been far from monolithic, and their responses include themes of skepticism and moderation alongside enthusiasm. They consistently report a greater preference for moderate rather than extensive use of IT in courses (59 percent versus 20 percent in the current study); differ in their self-evaluation of IT skills by freshman/senior standing, gender, and major; and eloquently describe the value they see in face-to-face interaction and personal contact, often in explicit contrast to online tools. This year, more students said they didn’t like learning through some otherwise popular technologies such as instant messaging (IM) than said they did—perhaps because they want to protect those tools’ personal nature. Findings like these illustrate the value of going to the source to study student attitudes and the subtleties that may color a digitally “native” outlook.

We also offer some clues about where that outlook may be headed. This year's findings show substantial growth in several facets of mobility, such as laptop and smart-phone ownership and wireless connectivity to the Internet, and a continued rise in the popularity of social networking sites. The push-pull effect of simultaneously untethering students and linking them together lies at the heart of the emerging Web 2.0 paradigm, which stresses complex personal interactions, collaboration, dynamic rather than static information, and immersive environments. It is too early to tell whether or how our student respondents will embrace these emerging capabilities, but as Chris Dede of the Harvard Graduate School of Education makes clear in his fine Introduction to this study (Chapter 2), they have profound implications not only for pedagogy but also for "our ways of thinking and knowing." Future ECAR studies will keep an eye on these developments.

This study is the result of collaborative work by many people inside and outside of ECAR. The ECAR fellowship has, as always, pursued this project with dedication and meticulous care. Judy Caruso managed a demanding institutional review board (IRB) process and greatly enriched the text by leading student focus groups and synthesizing other qualitative and secondary sources. Coauthor Gail Salaway's superb methodological talents and passion for clear, accurate analysis have graced many ECAR studies and are just as evident in this one. Mark Nelson also assisted with methodology and performed a heroic analysis of the thousands of qualitative comments collected by our survey's open response questions. We are also grateful for reviews of the text by ECAR Fellow Robert Albrecht and our EDUCAUSE colleague Diana Oblinger.

Our work was aided and enriched by the contributions of individuals at many institutions of higher education. We are especially grateful to Chris Dede, Timothy E. Wirth Professor in Learning Technologies at the Harvard

Graduate School of Education, for writing the Introduction and reviewing the quantitative chapters. Chris was exceedingly generous in sharing the insights that have made him a stellar figure in the study of technology and learning. Chris's doctoral student at Harvard, Edward Dieterle, graciously contributed the "how students like to learn with technology" survey questions that are analyzed in Chapter 5. James Jonas, Information Services/Electronic Resources Librarian at the University of Wisconsin–Madison, gave us invaluable assistance with our literature search.

The study of students is particularly sensitive, and much of our work has fallen under the purview of college and university institutional review boards. At each of the many institutions we worked with, individuals assisted us with the essential and often laborious coordination of IRB approvals. Others helped develop randomized samplings of their freshman and senior student populations, deployed the survey, or helped us coordinate focus groups. Our debt to these colleagues for their generous and professional assistance is enormous, but the space available in this Foreword is not, and so we direct the reader to Appendix A to find their names.

ECAR Fellow Toby Sitko has the not always serene task of asking authors to deliver final drafts on time and then making sure they get turned into finished products. It's a demanding role, which in this as in other studies she has performed with perfect tact and skill. Toby, Gregory Dobbin, and Nancy Hays contribute much of the expertise that delivers polished publications to our subscribers, and they oversee the work of a talented body of editors, typographers, and printers who contribute the rest.

Forewords to our studies rarely mention the work of ECAR Founder and Director Richard Katz, in part because he usually writes the forewords and in part because his brilliance is self-evident in everything ECAR publishes. But Richard's absence on an assignment to expand

ECAR's international research provides a rare opportunity to recognize his achievements more explicitly. As a researcher, Richard was part of the ECAR team that conceived of an annual study that would give higher education leaders (and anyone else who was interested) sound empirical evidence about a topic too often dominated by speculation and self-interest. As a leader, he pushed past the many practical difficulties that, once appreciated, go a long way toward explaining why there aren't

more studies of this type. And as impresario and sometime author of the student studies, Richard has made a powerful contribution to improving higher education. His generous acknowledgments of the work of the ECAR fellowship run through everything he writes, and it is a privilege, on behalf of that talented group, to return the compliment.

*Ron Yanosky
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