

EDITOR'S NOTES

Nearly twenty years ago, I edited an issue of *New Directions for Community Colleges* that focused on student tracking. A number of articles in that issue concentrated on how student tracking was being used, or could be used, to identify and communicate with prospective students, students in academic difficulty, and students making their way through an institution. Now, student tracking is of even greater interest. But there has been a shift in focus. There is less interest in prospective students and students in academic difficulty, and more in understanding student progress through and beyond a single college or university. This new emphasis comes from a variety of sources, among them state and public calls for accountability, accreditation criteria placing more attention on learning outcomes, and increased awareness that many students swirl through multiple institutions as they move from initial entry in postsecondary education to completion of an undergraduate degree or final dropout. At the same time, National Center for Education Statistics (NCES) longitudinal datasets such as the Baccalaureate and Beyond, Beginning Postsecondary Students, and High School and Beyond are giving researchers the tools to document and create wider awareness of transfer and swirling behaviors. These are critical resources, but they do not help institutions know about their own students.

Another powerful driver is recognition by colleges that enrollment alone is not necessarily tantamount to success. No longer satisfied with offering only access, community colleges are now focused on students' success. Many indicators of success, discussed in subsequent chapters, require tracking students both during their tenure within an institution and after they leave it.

The shift to understanding student success is accompanied by a related change: using data from student tracking to (1) measure institutional or programmatic effectiveness and (2) employ tracking results to identify how effectiveness might be improved. In other words, tracking results are being used to help the institution improve, not just to increase individual students' success.

In addition, legal, organizational, and technical changes have prompted more interest in tracking students and at the same time greater ability and more concerns about doing so. What are some of the key changes? The Higher Education Act requires colleges to report the graduation rate of first-time, full-time students, using a three-year timetable for community colleges, and the transfer-out rate for the same cohort. The National Student Clearinghouse, which did not exist twenty years ago, now has student unit

records for more than 90 percent of students enrolled in higher education. Similarly, state student unit record (SUR) systems were in their infancy. Now, more than forty states have such systems, although many include just public institutions or do not link with K–12 or other systems. At the state level, there is much activity in linking state higher education data with data from other sources, such as unemployment insurance (UI) wage records, to gain a fuller understanding of what happens to students and alumni in the labor market. National initiatives such as Achieving the Dream require or strongly encourage participating institutions to track cohorts of students from entry through graduation, transfer, or dropout.

From a technical perspective, electronic capacity to store and link datasets has expanded exponentially in the past twenty years. Relational databases, query tools, graphic data displays, and electronic transfer of data are among the tools we now take for granted. Together, they make it possible for institutional researchers and others to compile, manipulate, display, and share large amounts of student data while still preserving individual student anonymity. Although technology has made tracking more feasible, human intervention is still required to ensure data security, maintain compliance with operational definitions of variables, clean data, and monitor creation and use of datasets.

Because student tracking continues to be a topic of great interest and importance, and because so much has changed in the last years, I proposed a new issue of *New Directions for Community Colleges*, again focused on student tracking. The authors who accepted my invitation to participate in this issue have great experience in building, maintaining, understanding, and using data systems that permit us to identify and then follow students across time, within and between institutions, and into the world of work. More important, they recognize that tracking students is not an end in itself but a vehicle for understanding how students navigate postsecondary education, and for gauging and measuring student success.

A common theme threading together these chapters, one not prescribed at the outset of this project, is reliance on quantitative data at the student and employee level as the core building block on which the ability to track students rests. I shall return to the subject of student unit records in my concluding chapter. Suffice it to say here that other approaches for tracking students, such as conducting surveys to elicit self-reported data from current and former students or contacting employers to learn about graduates employed in their businesses, did not receive much attention from chapter authors. Although important methods for learning about student outcomes and success, they do not appear brightly on the radar screen of those who engage in tracking students.

This issue is organized from the particular to the general, from looking at the course-level work of individual students to understanding employment patterns in broadly defined geographic regions, within and across industries, and among populations defined by characteristics such as age and gender.

Linda Serra Hagedorn and Anne Kress draw from the Transfer and Retention of Urban Community College Students (TRUCCS) Project to present examples of how transcript analyses yield insights into how students attend college, enroll in courses, and achieve—or do not achieve—success. They assert that using transcripts gives researchers data about actual student behavior, data not degraded by poor memory or a desire to tell a story different from reality. Hagedorn and Kress also offer concrete instructions to enable researchers to conduct similar analyses at their home institutions. Their work demonstrates the rich analyses possible with data to which most institutions have ready access, if not the skilled personnel to compile and present the data meaningfully.

In his chapter about tracking cohorts through an institution, Fred Lillibridge demonstrates how researchers can compile data on students' progress through an institution term-by-term, including stop-out semesters, and into other institutions. Focusing primarily on responding to the federal government's required reporting of graduation and retention rates, Lillibridge's model permits investigation of cohort patterns by race and ethnicity, gender, age, or other variables captured in the student information system. His approach differs from the Hagedorn and Kress model; they look at students' course-taking patterns and attainments, while Lillibridge concentrates on the more global variables of semester enrollment and degree and certificate completion.

Joanne Bashford's chapter describes several examples of institutional use of state- and college-level tracking data to benchmark performance, improve student success, and enhance program effectiveness. Miami Dade College is located in Florida, a state with one of the most comprehensive SUR data files. She illustrates how an institution can make excellent use of state and local data to examine the progress and performance of its own students. In particular, the author shows how comparing Miami Dade's data with statewide data yielded a framework to help the institution better understand its own students. Bashford's chapter also illustrates how qualitative research can complement and enrich understanding of student performance in ways that quantitative data alone cannot.

Moving from the institutional to the state level, the chapter written by Jay Pfeiffer and Patricia Windham describes the evolution, content, and use of Florida's unit record system, which includes K–16 and employment data. As just noted, the Florida system is widely regarded as one of the most mature and comprehensive student systems and permits tracking in ways that other state systems cannot support. Chapter Four includes examples of how information derived from tracking is used for state-level, state-agency-level, and institution-level research and practice. Together, Chapters Four and Five furnish an excellent perspective on the benefits of student tracking for different constituencies.

In Chapter Five, Craig Schoenecker and Richard Reeves present a description of the National Student Clearinghouse, which now includes

enrollment data from more than three thousand postsecondary education institutions, representing approximately 92 percent of the nation's postsecondary students. They give sufficient information about the Clearinghouse's StudentTracker program to enable readers to understand how it works and make a preliminary assessment of whether their institution can benefit from joining, especially supplying degree information to augment enrollment information. Using data from Minnesota and neighboring states, Schoenecker and Reeves illustrate how clearinghouse data show higher transfer numbers than state systems alone, and the interstate movement of students to and from Minnesota.

In his chapter, David Prince describes how the Washington State Board for Community and Technical Colleges used the findings from a tracking study for low-skill, working-age adults to significantly influence and change state policy and practice for this critical component of the state's workforce. He summarizes results of a number of studies. One of them found a substantial difference in earnings between students who completed one year or more of college plus a credential and those who did not make it to that tipping point. In another study, the board looked at results of the Integrated Basic Education and Skills Training (I-BEST) program. I-BEST pairs English as a second language (ESL) or adult basic education (ABE) and professional-technical instructors in the classroom to concurrently plan curricula, instruction, and shared learning outcomes. Results from the pilot programs demonstrated that I-BEST students were substantially more likely to earn college credits and complete training than were traditional ESL students during the same time period.

In Chapter Seven, Peter Ewell and Davis Jenkins present results of a recent eleven-state audit of SUR systems. They identify key lessons learned about creation and use of these systems, as well as barriers to and suggestions for strengthening the use of SUR data. In a rich exhibit, they suggest narrative story lines and research questions that illustrate how SUR data can be used to explore questions of priority to a state.

David Stevens's chapter brings a new dimension to understanding student tracking. He describes the Federal Employment Data Exchange System (FEDES), which permits determining a current or former student's status as a federal employee, and three new Census Bureau tools that deliver user-defined insights about geographic, demographic, and economic target markets. The FEDES supplements UI wage records, which do not contain data on federal employment. The first of the Census Bureau tools is the Quarterly Workforce Indicators Online, which includes eight employment indicators such as new hires, average hire earnings, and job creation, with each available for substate regions, age, gender, and North American Industry Classification System (NAICS) code. The second is the Industry Focus Tool, which ranks data on a variety of variables such as number of new hires or average hire earnings, again by user-defined subgroups such as age or sub-

state regions. The third tool is On the Map, which depicts employment location for area residents or, conversely, employment within an area by residence of the employee. The chapter includes exhibits that illustrate results using the three tools.

In my concluding chapter, I offer observations about the current state of student tracking in community colleges.

Trudy H. Bers
Editor

TRUDY H. BERS is executive director of research, curriculum, and planning at Oakton Community College.