Table of Contents

MONITORING STUDENT FLOW .............................................................. 2
DESIGNING STUDENT TRACKING SYSTEMS ....................................... 3
STUDENT CHARACTERISTICS ............................................................... 3
STUDENT PROGRESS ........................................................................ 4
STUDENT FOLLOW-UP ........................................................................ 4
CHALLENGES .................................................................................... 5
CONCLUSION ..................................................................................... 5
REFERENCES ..................................................................................... 6

ERIC Identifier: ED310833
Publication Date: 1989-09-00
Author: Quimbita, Grace
Source: ERIC Clearinghouse for Junior Colleges Los Angeles CA.

Student Tracking Systems in Community Colleges. ERIC Digest, September 1989.
Student tracking systems enable increasing numbers of community colleges to respond to external demands for accountability with tangible measurements of student progress and institutional outcomes. Several recent trends have prompted interest in monitoring student progress throughout college and into their professional lives. Bers (1989) argues that increasing emphasis on marketing, accountability, communication with students, and internal competition for students all serve as catalysts for the development of tracking systems.

**MONITORING STUDENT FLOW**

Bers identifies six stages in the student flow process that should be monitored by a student tracking system.

**Awareness**--In this stage, the prospective student learns about the college for the first time. Mass mailings to homes or businesses, advertisements in the media, and public information sessions are useful in making potential students aware of the college.

**Inquiry**--Mechanisms for maintaining personalized contact with prospective students should go into effect as soon as the individual makes the first inquiry about the college. The individual's name, social security number, and program interests should now be on record.

**Entry**--This stage involves formal application, admission, first-time registration and enrollment, and increasingly, assessment tests, orientations, and advisement.

**Experience**--Most tracking efforts currently concentrate on this stage, gathering information on students as they take courses, fulfill prerequisites, pass, fail, or withdraw from courses, take advantage of support services, and work toward their goals.

**Completion**--At this stage, students leave the college with or without achieving their educational goals.

**Follow-Up**--Because community college students commonly stop in and out, alumni can also be considered an important pool of prospective students. Maintaining contact with alumni after they have left the college is important in evaluating educational outcomes in terms of employment or transfer experiences, and attracting former students back to the college.

Tracking systems can be developed for practically any stage in the student flow process. Cochise College in Arizona has a tracking system within its admissions office that monitors the awareness, inquiry and entry stages (Barrett, 1989). The Los Angeles Community College District in California and Arapahoe Community College in Colorado...
each have tracking systems which focus on basic skills assessment and monitor the entry, experience, and completion stages (Voorhees and Hart, 1989). Additionally, tracking designs are possible for underprepared students (Smittle, LaVallee, and Carman, 1989) and other special groups, such as displaced homemakers, single parents, learning disabled, and hearing impaired (Gay and Boukouvalas, 1989).

**DESIGNING STUDENT TRACKING SYSTEMS**

A well designed tracking system will collect the information needed by the college, store it in a way that facilitates retrieval, and disseminate the information to the individuals that need it in the most useful format. Decisions must be made about the purposes the system is to serve and the way the database is to be organized, analyzed, and used. Moreover, from the seemingly endless array of data that are routinely collected on each student, the designers of the tracking system must select the relatively small number of variables that deal with student persistence and outcomes. The AACJC's Student Tracking Model requires the following variables (Palmer, 1989):

**STUDENT CHARACTERISTICS**

These data are typically collected at the entry stage, as part of the admissions and registration processes:

Name

Social Security Number (or other ID#)

Date of birth

Ethnic identification

Address

ESL status

Last school or college attended

Highest level of schooling attained

Primary reason for attending this college at this time

Degree goal at this institution

Student major

Reading, writing, and math placement scores
STUDENT PROGRESS

These data are verified or collected on a term-by-term basis throughout the experience stage:
Regularly updated information on Name, Address, Degree Goal,
Reason for Attending, and Declared Major
Number of college-level credits attempted and completed
Number of cumulative credits earned to date
Grade point average for term
Cumulative GPA
Number of remedial credits attempted and earned

STUDENT FOLLOW-UP

These data are collected after the student leaves the college:
Student’s perspective on whether his/her primary educational objective was attained
Current employment status
Relationship of job to college studies
Salary
Hours per week employed
Current college enrollment
Current institution
New major
Number of credit hours lost in the transfer process
GPA at new institution

Additional data may be collected; however, care must be taken to eliminate extraneous or unnecessary items. The costs of data entry and analysis, as well as the requirements
of producing a manageable and usable database, dictate constraints on the number of data elements, and recognition that many outcomes will not be determined.

The minimum requirements for a computerized system to manage and analyze the data include the ability to extract and download data elements already available in college records; ease of modification and expansion; the ability to draw random samples for special analysis; and the preservation of student confidentiality (Bragg, 1989).

**CHALLENGES**

Palmer (1989) advises colleges of several potential difficulties in the establishment of student tracking systems.

Data Collection--Many institutional research offices will need to refocus their efforts from cross-sectional data to longitudinal data. Databases developed to fulfill state and federal reporting requirements will need to be expanded or modified. This expansion can begin by gathering existing, but widely dispersed, longitudinal data from student applications, registration forms, transcripts, follow-up surveys and other sources.

Amount of Data--Many policy makers do not understand the relationship between the information desired and the effort needed to collect it. Many community colleges have no established institutional research office; others have a very small staff, making them ill-equipped to take on the task of tracking.

Follow-Up Information--Obtaining information after students have left the college is much more difficult than obtaining information during their enrollment. Survey response rates of less than 50% of the sample of alumni are common and detract from the credibility of findings.

Use of Information--The involvement of the entire college is necessary in the interpretation of data. Coffey and Palmer (1989, p.35) remark that "unless student goals, performance, and follow-up information can be linked back to the major or program in which the student is or was enrolled, community college faculty and program staff cannot use the tracking information to improve their particular programs or address specific problems."

**CONCLUSION**

Legislation and national educational reform efforts have spurred many community colleges to initiate or expand student tracking systems. However, obstacles exist at institutional and state levels that hamper their more widespread development and use. Regardless of these difficulties, proponents argue that the issue of student tracking systems is destined to become an integral component of community college management.
REFERENCES


The other articles cited appeared in USING STUDENT TRACKING SYSTEMS EFFECTIVELY. New Directions for Community Colleges, Number 66, edited by Trudy H. Bers. The following were cited:


"Computerized Tracking System for Underprepared Students," by Pat Smittle, Michael R. LaVallee, Jr., and William E. Carman.


"Tracking and Monitoring Students in Special Groups," by Melvin L. Gay and Costas S. Boukouvalas.

"A Tracking Scheme for Basic Skills Intake Assessment," by Richard A. Voorhees and Sharon Hart.


"Trends and Issues: Student Tracking Systems at Community Colleges," by Jim Palmer. The Clearinghouse operates under OERI Contract No. RI-88-06-2002. The opinions expressed in this publication do not necessarily reflect the position or policy of OERI and no official endorsement by OERI should be inferred.

Title: Student Tracking Systems in Community Colleges. ERIC Digest, September 1989.
Document Type: Viewpoints (120); Information Analyses---ERIC Information Analysis
Products (IAPs) (071); Information Analyses---ERIC Digests (Selected) in Full Text (073);

**Target Audience:** Practitioners

**Descriptors:** Accountability, Community Colleges, Data Collection, Evaluation Criteria, Followup Studies, Institutional Administration, Management Information Systems, Outcomes of Education, Program Development, Research Design, Student Placement, Two Year Colleges

**Identifiers:** Student Flow, Student Information Systems

###

[Return to ERIC Digest Search Page]