Predictors for Adult Basic Education Drop-Outs

(CORRELATIONAL - PREDICTIVE)
Numerous studies concerning the advantages and disadvantages of using computer-based instruction in universities and colleges have been published in the professional literature. For example, Kozma (1991) stated that one advantage of computer-based instruction is that "novice learners benefit from structured experiences of progressive complexity that help them build and elaborate their mental models" (p. 199). However, Hopmeier (cited in Gueulette, 1982) concluded, "CAI (computer assisted instruction) programs may favor those learners who have the ability to quietly concentrate, pay attention to details, memorize facts, and stay on a single task until its completion" (p.1). And, Dille and Mezack (1991) have developed a profile of students who are most likely to drop out of telecourses.

Statement of the Problem

All of the literature cited above concerns students in colleges and universities; however, there is comparatively little research concerning students enrolled in adult basic education (ABE) classes. In fact, Dahl (1989) maintains that the professional literature "represents only about one-third of the total adult education enrollments nationally, and
generalizations about adult education programs based on sources from this unrepresentative sample would be misleading" (p. 156).

In spite of this limited availability of research, R. S. Pugsley, Division of Adult Education and Literacy, in a presentation to the Georgia Literacy Association (February 24, 1994), said that the U.S. Department of Education has issued a "new paradigm for adult education" which, in part, calls for "using technology to accelerate the learning process."

The problem is that, while the U.S. Department of Education is encouraging educators of adults to use computer-based instruction (CBI), there is little research to show whether all adults in ABE classes will accept and benefit from CBI.

Purpose of the Study

The primary purpose of this study is to identify predictors for students who will drop out of ABE classes that use CBI. A secondary purpose is to determine whether these predictors are the same as those that have been identified for college students who drop out of CBI classes.

Significance of the Study

Economists predict that, in the near future,
three-fourths of all jobs will require education or training beyond the high school level. However, according to some estimates, approximately 23 million adults in the United States are functionally illiterate (Eitzen & Zinn, 1989). In the state of Alabama alone, more than 300,000 people age 25 and older have less than a 9th grade education; an additional 500,000 people age 25 and older have some high school education, but have not graduated. In 1993, approximately 50,000 people were enrolled in ABE programs in Alabama (Alabama State Department of Education, 1994). But no one in the Alabama State Department of Education knows how many of these students are in CBI classes (H. R. Horne, personal communication, May 12, 1994).

If no one knows how many students are enrolled in CBI classes, no one could possibly know how well the programs are working. This means that, of the 50,000 students currently enrolled, some may not complete the program or obtain a high school equivalency certificate (GED) because of the medium being used.

As with college class instructors, ABE class instructors should be able to identify students who have difficulty using computers to learn; and they
should provide counseling, or direct such students to a
class that is not computer-based. The models and
profiles which have been established to identify
college students who may drop out of CBI classes may
provide the information needed, but additional research
must be conducted with students in ABE classes to
determine whether the same variables apply.

The results of this study should provide a profile
of potential ABE CBI drop-outs in Montgomery County,
Alabama, thereby benefiting the students, the
instructors, and taxpayers. Students could be placed in
the learning environment where they would be most
likely to succeed. Instructors could devote their time
and resources to students who were most likely to
complete the program, rather than to students who could
not. In addition, taxpayers would benefit in two ways:
(a) operations of the ABE classes would be more
cost-effective and (b) fewer students would drop out,
and they would be more likely to be hired.

Limitations of the Study

There are several limitations on implementing this
study and interpreting the results.

1. Because of the large number of adults in the
ABE classes in the United States, this research will
not include students outside the state of Alabama. Since Alabama State officials do not know which facilities offer only CBI for students in ABE classes, the time required to identify these locations would be prohibitive; therefore, this study will be limited to ABE students living in Montgomery County, Alabama, and the results will be applicable to only Montgomery County residents.

2. This study will only correlate learning styles and various demographic data with students who drop out of the ABE program before completing requirements for a GED. Other variables (such as personality type and self-efficacy) will not be tested, although they have been found to be factors in college students' dropping out of CBI classes; nor will there be any attempt to identify students' personal or family reasons for dropping out.

3. History may be a factor; individuals in the ABE classes may be involved in other classes or other activities at work or in leisure time which would have an impact on their scores and completion of the program.

4. Maturity may be a factor; students enrolled in adult basic education classes in Montgomery County
today range in age from 17 years (at the Adult Learning Center) to over 60 years (at the Federal Prison Camp).

5. Although random sampling will be used, students selected may not choose to participate. If the number of participants is too small, the results may be applicable only to the sample.

Definitions of Terms

Computer-based instruction (CBI) is defined as "the use of computers in the development, delivery, and management of instruction; and includes computer-assisted and computer-managed instruction" (Jones, 1992, p. 4).

Dunn (cited in Fourquarean, Meisgeier, & Swank, 1990) defines learning style as "the way individuals concentrate on, absorb, and retain new or difficult information or skills" (p. 226).

Methodology

The sample to be used for this correlational study will be randomly selected by computer from all ABE CBI classes in Montgomery County, Alabama. This sample will be equal to one-third of the ABE CBI population, and it will be proportionally representative of the institutions that offer ABE CBI classes.

All students will have been given a standardized
achieved test and the Test of Adult Basic Education (TABE) at the time of their enrollment.

Students selected to participate in this study will be asked to complete two forms:

1. A short survey instrument to collect the following demographic data: age, gender, marital status, highest level completed in school, and number of years previously used computers in their work and/or school.

2. The Canfield Learning Style Inventory (CLSI). Coggins (1988) describes the CLSI as follows:

A 30-item assessment using a 4-point rank order procedure for each item. The instrument generates a total of twenty-one subscale variables grouped into four major areas: preferred conditions, content, modes, and expectancy (performance). Conditions variables include a preference for the following: peer affiliation and instructor affiliation, organization and detailed structure, independence and setting one's own goals, and authority and competition. Content variables include preferences for numerics, language (writing and discussion), objects (working with things versus people), and people (interviewing
and counseling). Mode variables are comprised of preferences for listening, reading, ionics (audiovisuals), and direct, hands-on experience. The remaining five variables are additive and generate a single expected performance (class grade) score. (p.29-30)

According to instructors at the Maxwell Air Force Base Federal Prison Camp, students require 3 to 6 months to complete the program (R. Farner, personal communication. April 12, 1994); therefore, data will be compiled on the following variables for students who dropped out during a 6-month period following administration of the study instruments: (a) gender, (b) marital status, (c) grade-level completed prior to enrollment, (d) number of years previously used computers in work and/or school, (e) scores on the 21 subscale variables on the CLSI, (f) number of correct items on the achievement test, and (g) number of correct items on the TABE.

Multiple regression techniques will be used to analyze the data collected. The data will be randomly divided in half, and regression equations will be developed for each half. The first half of the data will be used to cross-validate the accuracy of the
equation developed from the second half of the data; similarly, the second half will be used to validate the equation developed with the first half. If any discrepancies are noted, they will be used to correct the coefficients in each equation (Renckly, 1992).

Correlations which are derived from this study will be compared with those in studies of college students who drop out of CBI classes. If there is a similarity in the results, there is valid reason to replicate the studies in other ABE environments.

A subsequent study of Montgomery County students in ABE classes should be made to determine whether students who drop out of the traditional classroom or private tutoring environments exhibit the same characteristics as those who drop out of the CBI environment. If not, the predictors developed in this study would be more valid.
References


You should also include your personal communications here as references too.

