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USING A COMPREHENSIVE ACADEMIC INTERVENTION PROGRAM IN THE RETENTION OF HIGH-RISK STUDENTS

The use of a comprehensive academic advising program in conjunction with a sustained academic orientation program through the freshman year has resulted in a 13.27 percent increase in the retention rate of high-risk students at a regional campus of a large public research university. In this article, the authors describe the components of CORE, the comprehensive advising/orientation program, and the success they've had with high-risk students in the program.

INTRODUCTION

One of the more striking realities on the Nation's campuses has been the increased underpreparedness of the American college student population. As national commissions, state boards, college administrators, and faculty call for more selective admission standards, legislators and the public are demanding answers to such questions as why so many underprepared students graduate from high school and are allowed to enter college (Boylan, 1984). Within this context, many colleges and universities are also experiencing a steady decline in the traditional college student cohort with a concomitant rise in the enrollment of adults, women, minorities, disabled persons, part-time students, and other nontraditional students. Lauridsen (1980) points out that in the quest for students, higher education will be competing with "non-collegiate educational resources such as industry, the military, recreational associations, and private organizations." For the immediate future many colleges and universities will experience real problems with enrollment, and the generally weak academic preparedness of their students will not improve. In essence, colleges and universities have been required to compete more rigorously in recruiting students, to enroll students (especially nontraditional students) who are academically underprepared, and to engage in retention efforts with students currently enrolled in their respective institutions.

Lenning, Beal, and Sauer (1980) indicate that approximately 50 percent of an entering freshman class at a four-year college will remain by the end of the fourth year. These authors further note that students of a distinctly disadvantaged status are at increased risk and are

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more prone to attrition. Other researchers have found that academically underprepared students have inadequate study skills, deficiencies in basic academic skills (English, mathematics, reading), are often vague or unsure of long-term career goals, and have often chosen majors that are inappropriate for their interests **and/or** abilities (Astin, 1976; Pantages & Creedon, 1978; Everitt, 1979; Neal and Boel, 1980; Anderson, 1981; Rugg, 1982). Since colleges and universities are admitting academically underprepared students, then an implicit obligation exists to provide academic intervention programs for them.

Academic intervention programs have included the provision of remediation courses, study skills and reading comprehension courses, academic learning centers, orientation programs, academic advising, and personal counseling. Several researchers indicate that academic assistance programs containing all or some of these components impair student motivation and are not the most productive means to help underprepared students gain the necessary academic skills and knowledge to "survive" in college (Roueche & Kirk, 1973; Roueche & Pitman, 1972). Other researchers contend that academic intervention programs are successful and lead to increased student persistence (Beal & Noel, 1980; Pantages & Creedon, 1978). Kramer, Moss, Taylor, & Hendrix (1985) call for the creation of a learning environment that promotes the development of academic and career skills, an understanding of the institution, and the provision of quality student services. With approximately 46 percent of its student body identified as academically underprepared, a small regional campus of a large public research university instituted a comprehensive academic intervention program for its **high-risk**, baccalaureate-degree-seeking students. This article hopes to offer a format by which other small campuses (less than 1,000 students) may create a comprehensive academic orientation and advising program throughout the freshman year. It also provides results of a study of program effectiveness after two full years of operation.

CORE Advising Program

In 1984, approximately 46 percent of the student body was academically underprepared in English **and/or** mathematics, as identified through the **Freshman** Testing, Counseling, and Advising Program (FTCAP). The FTCAP program is a university-wide program in which new freshmen and provisional students are given placement examinations in English, mathematics, and chemistry to determine entry level for introductory courses in these areas. The goal is to provide assistance in the evaluation of educational plans before initial registration.

Over the course of the 1984 FTCAP program, staff and faculty advisors noted an increase in the number of academically underprepared students whose aptitudes and academic abilities did not match their intended majors or career interests, or who were uncertain about the majors or careers they had chosen because of academic or personal concerns. Staff and faculty provided anecdotal evidence which suggested that those students who were both academically underprepared and undecided as to choice of major were not persisting when compared with other baccalaureate-degree-seeking students, who were more academically prepared and reasonably certain of educational plans. The campus community believed that the traditional faculty advising system could not meet the needs of these **high-risk** students since faculty advisors often advise only those students interested in their disciplines. Faculty advisors on campus felt they would be in a better position to assist **high-risk** students if additional training in academic advising and information **on** majors outside their discipline were provided.

During the 1984-85 academic year, an academic advising team (CORE) was created consisting of the director of Academic Affairs, two professional counselors and six faculty members selected by their peers for their **advising** competence. This advising team accepted the challenge to provide **high-risk** students with intensified academic counseling during their critical freshman

year experiences. The professional counseling staff provided training for the CORE advisors with emphasis on developmental academic advising and career counseling techniques. Information pertaining to specific majors, general degree requirements, and relevant academic policies were extensively reviewed. Presentations by Financial Aid, Admissions, Health Services, and the Learning Center were also included.

The CORE advisors decided that the traditional two-day orientation held prior to the fall semester was inadequate in the provision of a general orientation to university life both in an academic and social sense. The team believed that the use of a freshman experience course in conjunction with intensive academic advising would provide a more suitable orientation to university life for high-risk students. Course content focused on career and educational planning, study skill improvement, decision making, information on academic policies, and personal adjustment to college life.

Students selected for the program were identified through the summer FTCAP program. If a student was deficient in English **and/or** mathematics, exhibited career indecision as evidenced by the selection of a major inappropriate to aptitudes and academic abilities, was uncertain about educational plans, or had other significant academic or personal concerns, that student was high-risk and asked to participate in the CORE program.

Students participating in the CORE program were each assigned a specific advisor who met with them every other week during their freshman year. CORE advisors worked with program participants in assessing career interests through the use of the DISCOVER computerized career guidance program, the scheduling of classes, clarification of educational plans, and the monitoring of academic progress. Program participants enrolled in basic skills courses in mathematics **and/or** English as recommended by placement scores on tests given at FTCAP. Students were also placed in the freshman experience course during the fall **1985** semester.

Evaluation of the CORE Advising Program

Method

An evaluation of the **1985-86** CORE Advising Program investigated the impact the program had on student retention at the campus. The **88** students participating in the CORE program were compared to the remaining **115** baccalaureate-degree-seeking students (NON-CORE) of the **1985** entering freshman class on the following dimensions: verbal SAT scores, math SAT scores, total SAT scores, high school GPA, predicted GPA for non-science majors, predicted GPA for science majors, cumulative GPA, and retention rate at the end of the second and fourth semesters.

Results

As Table **1** indicates, there were differences between CORE students and NON-CORE students on the following dimensions: verbal SAT scores, math SAT scores, total SAT scores, high school GPA, predicted GPA for non-science majors, and predicted GPA for science majors. These results demonstrate that CORE students were less academically prepared than NON-CORE students.

Table 1

Comparison of CORE Advisees and NON-CORE Advisees on Verbal SAT, Math SAT, High School GPA, Predicted GPA, and Cumulative GPA.

	CORE Advisees	NON-CORE Advisees
Mean Verbal SAT	402	423
Mean Math SAT	459	485
Mean High School GPA	2.40	3.02
Predicted GPA-Non-Science ^a	2.40	2.59
Predicted GPA-Science ^b	2.27	2.45
Cumulative GPA Non-Science-Oriented Majors ^c	2.35	2.62
Cumulative GPA Science-Oriented Majors ^c	2.44	2.41

^a Derived through a regression equation utilizing High School Average, Verbal SAT, and Math SAT scores as variables. The standard error of estimate was **0.516**. This equation estimates the predicted GPA of a student at the end of the second semester.

^b Derived through a regression equation utilizing High School Average, Verbal SAT, and Math SAT scores as variables. The standard error of estimate was **0.496**. This equation estimates the predicted GPA of a student at the end of the second semester.

^c Cumulative GPA tabulated at the end of the second semester.

When comparing the mean predicted GPA and mean cumulative GPA of CORE and NON-CORE students aspiring towards science majors, CORE students had a higher mean cumulative grade-point average than their mean predicted grade-point average. When comparing the predicted mean GPA with the mean cumulative GPA of CORE and NON-CORE students aspiring towards non-science majors, mean cumulative GPAs differed by $+ .05$. These results indicate that CORE students were maintaining cumulative GPAs that were at or slightly above the mean predicted GPA.

The retention rate for the **1985-86** academic year for CORE advisees was higher as contrasted to NON-CORE advisees. CORE advisees were retained at a rate **9.52** percent higher than NON-CORE advisees, despite having lowered academic credentials when compared to NON-CORE students (see Table 2).

A close examination of the retention rate shows approximately **60** percent of each group remained at DuBois Campus after their freshman year. However, more CORE students transferred to another campus within the University as compared to NON-CORE students. This suggests that the CORE program may be influential in advising students to transfer to other campuses of the University with academic programs more suited to their career interests, while students who are provided traditional academic advising may not be exposed to the same academic information and counsel.

Table 2

Comparison of the Retention Rate of CORE Advisees and NON-CORE Advisees for the 1985-86 Academic Year

	CORE Advisees	NON-CORE Advisees
Remained on campus	63.86%	60.04%
Transferred to another University campus	21.36%	15.66%
Withdrew from the University	14.78%	24.30%
Retention rate after end of freshman year	85.22%	75.70%
Retention rate after end of sophomore year	82.71%	69.44%

In a follow-up of the first year participants of the CORE program, CORE students persisted at a rate of **13.27** percent better than NON-CORE students by the end of their sophomore year. Accordingly, these results indicate that intensive academic advising, in conjunction with an extended orientation program, may have maximum effect on students in their sophomore year. Though causality cannot be ascertained, we maintain that the coordinated attention on educational planning, development of study skills, personal adjustment to college life, and reversal of basic skills deficiencies in English **and/or** mathematics with high-risk students have contributed to the success of the CORE program.

Summary and Discussion

Faced with the prospect of a student population predominantly academically underprepared, a coordinated effort by staff and faculty emerged in order to meet the challenges posed by high-risk students. Aside from the need for sound educational planning, adequate study skills, and the reduction of basic skills deficiencies, attention had to be given to other issues that had an impact on the educational experience of high-risk students. These issues included the enhancement of self-image, procurement of day care, transportation to campus, nutrition, health concerns, familial conflicts, and financial aid, among others. Though CORE advisors were not expected to deal with issues that were out of the realm of academic advising, the inclusion of two professional counselors on the advising team served as immediate contacts for the coordination **and/or** delivery of services for affected students.

The development of the CORE Advising Program has had a ripple effect within the campus community. Faculty have become more aware of the services provided by the professional staff in terms of personal counseling, health services, career placement, and financial aid. Consequently, there has been an increased willingness on the part of the faculty to refer students to appropriate staff. Professional staff members have become more sensitive to the daily realities of the classroom environment that academically underprepared students must face. This has allowed for the development of student service programs (study skills workshops, math anxiety support groups, returning adult student task force) that reflect this heightened sensitivity. Finally, students appear to have a renewed confidence that their individual concerns are being addressed. This is evidenced by the steady increase, over the past two academic years, in the use of student services.

By becoming "learner friendly," this campus, through the development of the CORE Advising Program, has been able to address successfully the concerns of academically underprepared students and to increase their survivability. For campuses of similar size, a coordinated academic advising approach in conjunction with an extended orientation program may serve as a viable alternative to traditional academic advising with academically underprepared students.

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