EVALUATION OF FIRST YEAR EXPERIENCE PROGRAM AT GEORGIA SOUTHERN UNIVERSITY

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ABSTRACT

To increase the retention rate, Georgia Southern University launched the First-Year Experience (FYE) program which introduced two mandatory courses in 2008 (FYE 1220: First-Year Seminar, and FYE 1410: Global Citizens). This study evaluates the impact of these courses on academic performance of students majoring in information technology (IT). The result indicates that the mandatory courses are more associated with grade point average (GPA) or academic success than other courses.

INTRODUCTION

At Georgia Southern University, about 20% of freshmen left school at the end of the first year, and less than half eventually graduate. The financial costs of college dropout to individuals, states, and the federal government are tremendous (Grumke, 2011). The intangible costs to the students' lives are immeasurable (Damast, 2012). Universities worldwide invested tremendous amount of effort in implementing prevention programs, such as peer mentoring (Terrion & Leonard, 2007), curriculum development (Taylor, 2005), one-on-one counseling (Kadar, 2001), intrusive advising (Erwin, 1997), workshops or seminars (Raymondo, 2003).

INTEGRATION THEORY ON RETENTION RATE

Researchers claim that retention rate is determined by how well students integrated into school environment socially and academically (Wolniak, Mayhew, & Engberg, 2012; Tinto & Cullen, 1973, Pascarella & Terenzini, 1983). Figure 1 is Tinto's integration model. Many empirical studies supported the integration theory (Pascarella & Terenzini, 1983; Caison, 2007).

THEORITICAL FRAMEWORK OF THIS RESEARCH

Our theoretical framework is based on Tinto's integration theory. This study proposes that two mandatory courses facilitate social and academic integration of students into school and community, and ultimately deliver positively impact on academic performance. Figure 2 illustrates the proposed framework.

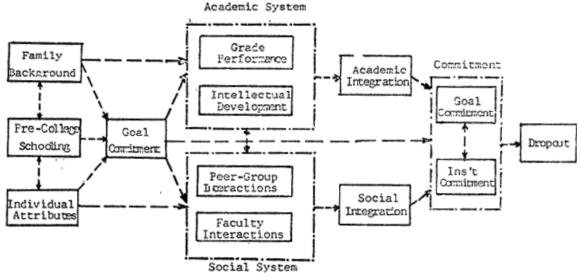


Figure 1: A Conceptual Schema of the College Dropout Process

Source: Tinto & Cullen, 1973:42.

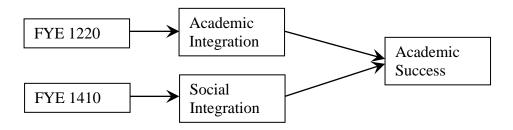


Figure 2: Proposed Theoretical Framework

TWO COURSES FOCUSE ON INTEGRATION

In an effort to increase the retention rate, Georgia Southern University launched FYE program which includes two mandatory courses (FYE 1220: First-Year Seminar, and FYE 1410: Global Citizens), conversations with professors, early alert/midterm grades, intrusive academic advising, and limited number of withdrawals. This study focuses on two mandatory courses. FYE 1220 is designed to facilitate academic integration, that is, to help students integrated into the university environment. FYE 1410 is designed for social integration which helps students socially engaged in local and global communities. According to Tinto's integration theory, these two courses should provide positive impact on academic success through facilitating social and academic integration.

FYE 1220 First-Year Seminar is a two-credit-hour seminar that serves as an academic, theme-based introduction to college-level inquiry and extends the orientation process into a student's first semester at Georgia Southern.

Catalog Description:

Thematic seminar designed to promote information literacy skills and support students' cognitive and affective integration into the university community. Required during the first semester for all students new to the university (except for transfer students with 30 hours or more); students may not withdraw.

FYE 1410 Global Citizens is a one-credit hour course and is recommended to be taken in second semester after taking FYE 1220. Students will identify major themes across diverse societies in their historical and cultural contexts and will apply this knowledge through engagement in local and global communities.

Catalog Description:

Graduates in all fields face many challenges in today's world that require the ability to think and engage globally. Doing so requires recognizing that different cultural perspectives influence the understanding of world issues. In this seminar, students explain factors that contribute to their cultural perspective, apply multiple cultural perspectives to global issues, and then apply this knowledge through engagement with local communities or problems. Faculty from across the university design courses drawing on examples from their disciplines, and students are encouraged to select sections offered by faculty in their fields or potential fields. In preparation for subsequent coursework as upper-class students, first-year students enroll in this course in their second semester. Prerequisite(s): FYE 1220

OBJECTIVE OF THE STUDY

This study is to evaluate the impact of two mandatory courses on academic success of students majoring in information technology. Academic success is measured by GPA. The level of impact is measured by degree of correlation between course performance and GPA. The hypotheses of this research are:

- The correlation between FYE 1220 grade with GPA is higher than the correlations of other course grades with GPA.
- The correlation between FYE 1410 grade with GPA is higher than the correlations of other course grades with GPA.

DESCRIPTIONS OF OTHER FOUR FIRST-YEAR COURSES

Four first-year courses are selected to make the comparison. ENGL 1101 and MATH 1111 are general study courses. IT1130 and IT1430 are freshmen level IT courses.

ENGL 1101 Composition I:

A composition course focusing on skills required for effective writing in a variety of contexts, with emphasis on exposition, analysis, and argumentation, and also including introductory use of a variety of research skills.

MATH 1111College Algebra

A functional approach to algebra that incorporates mathematical modeling of real data, business applications and use of appropriate technology. Emphasis will be placed on the study of linear, quadratic, piece-wise defined, rational, polynomial, exponential and logarithmic functions. Credit cannot be earned toward graduation for MATH 1101 if credit is earned for MATH 1111. Prerequisite(s): Two years of high school algebra or equivalent.

IT 1130 Introduction to Information Technology

An introduction to IT as an academic discipline and the structure of the BS IT degree at Georgia Southern. It also provides students with an introduction to the range of applications of Information Technology, partly through an introduction to the second disciplines available to them. Finally, it introduces students to some of the techniques that they will need for later courses, in particular databases and SQL. Prerequisite(s): Familiarity with productivity tools.

IT 1430 Web Page Development

A thorough introduction to the languages used to create web pages. Throughout it stresses the importance of good coding style. The course also introduces students to the principles of good human computer interface design, including design for people with disabilities. Finally, the course introduces students to object-oriented design. Prerequisite(s): Familiarity with productivity tools.

DATA COLLECTION

A query similar to the example below is executed for each course with difference course= condition in WHERE clause. Two mandatory courses (FYE 1220 and FYE 1410) were launched in fall 2008, thus term >=200808 is specified in WHERE clause. Total 6 courses with 6 sets of data were extracted from the university data warehouse.

SELECT gpa, courseGrade FROM main WHERE major='IT' and course = 'FYE 1220' AND term >=200808

DATA ANALYSIS

This study uses Pearson correlation to test dependency between course grade and GPA. The correlations of six courses are listed in Table 1.

Tuble 1: Confedential between Course Grade and G171:		
Course	Correlation with GPA	Sample Size
FYE1410	0.84	108
FYE1220	0.69	392
IT1430	0.63	411
IT1130	0.62	512
ENGLISH 1101	0.58	468
MATH 1111	0.58	455

Table 1: Correlation between Course Grade and GPA

DISCUSSION

FYE1410 and FYE1220 have higher correlations with GPA than other four courses. The statistic results confirmed the hypotheses of this study. It indicates that FYE program is successful by introducing two mandatory courses. This study further validated Tinto's integration theory, that is, academic integration effect of FYE 1220 and social integration effect of FYE 1410 leads to higher academic performance.

Two IT courses have higher correlations with GPA than general study courses do. Although introduction courses are important for freshmen to stick with a program, a large percentage of undergraduate instructions uses graduate teaching assistants to teach lower level introduction courses. Moreover, the graduate teaching assistants often receive little preparation before going solo (Parrett, 1987). To increase retention rate, the effort may have to focus on training graduation teaching assistants.

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