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Student Success in Top 20 Courses of an Online Institution: Demographic Differences in a Multi-Semester Cross-Curricular Study

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STUDENT SUCCESS IN TOP 20 COURSES OF AN ONLINE INSTITUTION: DEMOGRAPHIC DIFFERENCES IN A MULTI-SEMESTER CROSS-CURRICULAR STUDY

By

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ABSTRACT

Student success is vitally important. Without academic achievement student self-efficacy is lost, persistence is blocked, and matriculation is unachievable. Exponential growth at online institutions necessitates the inquiry into factors that play a role in student success. In this study, approximately 15,000 cases from the Top 20 enrolled courses of undergraduate students at a large national fully online university were examined to determine if course Grade Point Average was related with student characteristics, e.g., student gender, ethnicity, age, and military status. Multiple semester sessions were analyzed across multiple curricular areas. Results and recommendations are discussed.

Keywords: Student Success, Academic Achievement, Online Learning, Higher Education, Undergraduate Students, Ethnic Membership, Gender, Minority, Age Status, Non-traditional Students, Military Status.

INTRODUCTION

Semester Cross-Curricular Study

One in three college students leave their institution after the first year (Barefoot, 2000; Kinzie, 2009) frustrating administrators who then attempt to ascertain the reasons for lack of persistence and low retention levels. Just under half of college seniors indicate attending multiple institutions for classes (Marklein, 2005). Graduation rates in the United States account for only slightly more than half of those enrolling in college (Center for the Study of College Student Retention, 2008). Institutions of higher learning (IHL) continue to struggle with issues related to student retention as it is difficult to obtain accurate data on why students leave an institution. Reasons for attrition are complex.

Serious issues and challenges to student success in higher education were report in the 1980s (Chickering & Gamson, 1987). During the 1980s and 1990s over 20 national study groups determined from research the need to put students first (Schroeder, 2003). Yet, attrition of students, especially in the first year of college, continued to rise. Institutional matriculation numbers provided evidence students were no longer graduating in the traditional four-year period but were on the five, six, or even seven year plan. Schools faced dilemmas over state funding and budget crises. State legislators began to question colleges that had declining retention rates while students did not seem to be learning.

In Leaving College (1993), Tinto indicated the problems in higher education are not just about the numbers and are not just attrition or retention issues, these problems are achievement issues based in learning and development. Additionally, Pascarella and Terenzini stated "Modern colleges and especially universities seem far better structured to process large numbers of students efficiently than to maximize student learning" (1991, p. 646).

Another reason cited in the literature for the increase in college student attrition, connected to learning and development, is lack of engagement both in and outside the classroom. Students who do not connect with their college environment through educationally purposeful activities, meaningful interactions with faculty members, or by fraternizing with other students in social and extra-curricular settings, are at a greater risk to disengage themselves from their academic purpose and, therefore, from the institution itself. When engaged, students are more likely to learn and achieve academic goals (Astin, 1993;

Kuh, 1995; Kuh, 2007; Pascarella & Terenzini, 1991, 2005; Tinto, 1993).

Most work on student achievement and student attrition focused on four-year institutions of higher education. Assessment tools measuring student engagement have been tailored to brick and mortar four-year institutions and have been implemented ineffectually or not at all at online and at community colleges. Only recently research focusing on student engagement at two-year community colleges has taken place and national assessment tools are providing rich data for analysis and decision making purposes ("Community College Retention", 2005; Ouimet, 2003). There is a massive gap in the literature concerning assessment of engagement, let alone student achievement in general, for online institutions.

Academic Preparation

Lack of academic preparation heavily adds to factors putting students at high-risk for attrition (Braxton, 2000, Chickering & Gamson, 1987, 1991; Kuh, 2007; McCabe, 2000; Marklein, 2005; Tinto 1993, 2004). Often a gap exists between what the student expects and what the institution expects (Gonyea, Kuh, Kinzie, Cruce, & Nelson Laird, 2006). Filling in the expectation gap can facilitate the student's better understanding and increase opportunities for academic goal setting (Young, Klemz, and Murphy, 2003). Yet, educators still search for other factors that may impact student academic success.

Self-regulation, a core component in social cognitive theory, covers three cognitive processes, self-monitoring, self-judgment, and self-reaction, used by an individual trying to reach a goal (Bandura, 1986). Self-monitoring requires an individual's control over how many resources he or she uses to approach learning. Factors include time allotted for a task, environment used for studying, and how many faculty members are approached for assistance in learning (Garcia & Pintrich, 1994; Pintrich, Smith, Garcia, & McKeachie, 1991). Self-judgment covers how effective and ambitious a student is when it comes to adapting to courses with varying levels of difficulty. Learning to control and switch habits such as anxiety and motivation level can have a great impact on a student's performance in a course. Self-reaction utilizes study strategies that are chosen to improve academic performance and information that is retained after studying has been completed (Garcia & Pintrich, 1994; Pintrich, Smith, Garcia, & McKeachie, 1993).

Ethnicity

Post-secondary enrollment does not automatically lead to participation in college or matriculation. Increased numbers in enrollment, particularly for students of traditionally underserved populations and minority populations, are sought by IHLs, yet it is the persistence in college, through academic achievement, student satisfaction, and engagement, that leads to probable degree attainment.

Minority students still lag in academic achievement behind White students in the United States ("Minority College Enrollment", 2003). Research also indicates that at-risk student populations and historically underrepresented and underserved minority students are at even higher risks of dropping out of college (Braxton, 2000; Nelson Laird, Bridges, Holmes, Morelon, Williams, 2004). Information provided by the American Council on Education (2005) found that the rate of degree attainment within a five year period for students who started college in 1995 was reported as Asian Americans at 62% and White students at 58%. African American students without bachelor degrees but still participating in college after a five year period were listed at 26%. Additionally disappointing is that African Americans accounted for the leading racial group for students who left college without a degree at 30% ("ACE Releases", 2005).

The number of barriers students encounter on their road toward college is often more pronounced for minority students. As reported by Kuh, Cruce, Shoup, Kinzie, & Gonyea "the nature of the undergraduate experience of historically underserved students can differ markedly from that of majority White students in Predominantly White Institutions (PWIs)" (2008, p. 542). Underrepresented minority students have the lowest levels of college degree attainment in higher education (Astin & Oseguera, 2005).

Gender

The matter of the gender gap has been widely discussed both in the classroom and the workplace. A 2010 report

released by the American Council on Education has found that while this gap has mostly diminished, there are a few exceptions (Gender Gap Stops Growing, 2010). Currently, men comprise no more than 43% of recent enrollments and graduates, a figure that newly stirred up talk amongst some educational institutions about pursuing affirmative action for men.

Thirty-seven percent of Hispanic women ages 18 to 24 years old attend college compared to their male counterpart at 31%. African American women of the same age group participate in at a rate of 42% contrasted with 37% of African American males ("Minority College Enrollment", 2003). Additionally, in each ethnic group attending higher education, apart from Asian Americans, the gender of majority are female students (American Council on Education, 2004).

Age – Traditional and Non-traditional

The traditional college student demographic is quickly evolving away from the 18-22 year old classroom-attending student. Adults who passed on college during their youth are now finding that for professional success, education is necessary. Additionally, those who did attend postsecondary institutions right out of high school may now find the need to return for a second degree to change careers or to supplement their professional development. Women currently comprise two-thirds of undergraduates 25 years and older. African Americans and Native Americans in the 25 years and older category now exceed the number of undergraduates who are 24 years old and younger (Gender Gap Stops Growing, 2010).

Non-traditionally aged learners, also known as adult learners, tend to have more varied learning experiences than traditional aged students. Kolb (1984) contented that adult learners bring different experiences to the classroom than their younger counterparts. These rich experiences can be intertwined with curriculum, instruction, and discussion in the classroom that benefits all learners.

Military Students

Online education at postsecondary institutions is frequently pursued by both male and female members of the military as they work towards a degree of their choice while being based, deployed, active, or veteran. The Yellow Ribbon Program and the Post-9/11 GI Bill are two programs that make it possible for military members to cover expenses and have online classroom access from multiple locations (United States Department of Veteran Affairs, 2009). Unfortunately, there is very sparse research in the body of literature concerning active military and military affiliated students. Particularly, there is a void of research on military students and online learning.

The Yellow Ribbon GI Education Enhancement Program can be applied by degree-granting institutions in the U.S. to cover up to 50% of the highest, public, undergraduate tuition rate. The Program is part of the Post-9/11 Veterans Educational Assistance Act of 2008 and requires that the IHL agrees to five requirements. The dollar amount must be stated and the number of individuals to whom contributions are made in a given academic year needs to be stated. Also, contributions have to be provided to those who are eligible on a first-come first-serve basis and continued contributions through subsequent years are made given that the student meets standards for conduct, attendance, and progress. The IHL must also make contributions for the individual as a scholarship, grant, or other format (United States Department of Veteran Affairs, 2009). The Post-9/11GI Bill will cover up to the highest amount of in-state undergraduate tuition and fees. If the candidate intends to go out-of-state, pursue a graduate degree, or attend a private institution, fees may exceed that amount (United States Department of Veteran Affairs, 2009).

Engagement and self-efficacy may be factors in student academic achievement for active military students in online courses. One study, Artino (2009), found boredom and frustration were negative impacts on a military students' satisfaction and continuing motivation in an online course. Once again, there is very little research on military students in institutions of higher education, especially students in online courses, yet further investigation must be done for this growing population of online student soldiers.

Online Learning

Online learning in higher education is growing exponentially. More students are enrolling in online courses

at a higher rate than the total number of students enrolling in colleges and universities. A Sloan Consortium report, Learning on Demand: Online Education in the United States, 2009, discovered "over 4.6 million students were taking at least one online course during the fall 2008 term" an increase of over 17 percent from 2007 (para. 3). Additionally, it was determined that "more than one in four college and university students now take at least one course online" (para. 5).

At a time in history when Internet use and college degrees are becoming a necessity, trends in online education continue to reflect the surge in growth among the redefined traditional student who has turned to online classes for a variety of reasons. The majority of the 10 million jobs that are projected for creation in the coming decade will have mandatory skill requirements in their job descriptions. These expectations will surpass what a high school education can offer (Greer, 2010).

However, not all faculty are interested in teaching online. People are naturally opposed to change, and those who are used to the traditional classroom are not adapting their views so easily. According to Learning on Demand: Online Education in the United States in 2009, the seventh annual Sloan Survey of Online Learning report (Seaman & Seaman, 2009), less than one third of chief academic officers felt that their faculty viewed online education as possessing high value and being legitimate.

This is not a consensus, however. Another study from 2009, this time published by the Association of Public and Land-Grant Universities-Sloan Commission on Online Learning, (Udas, 2009) stated that one third of professors at public universities are, in fact, teaching online courses. Over 50% of professors suggested that students enroll in online courses. Annual figures from the 2008-2009 school year demonstrate that since 2007, there has been a 17% increase in the number of students in postsecondary institutions taking an online course. That figure equals over 4.6 million individuals, or 1 in every 4 students, who are opting to pursue higher education with the capacity of the Web (Greer, 2010).

According to Frank Mayadas, adviser to the Alfred Sloan Foundation's project, "The biggest challenge for institutions is that, when 1 student in 4 is taking classes online, you must step up and begin to think strategically about this" (Greer, 2010). According to a study from the U.S. Department of Education, full- and part-time students at online career colleges have higher retention rates than competitors. Of those who return for a second year, 72% are full time, and 57% return to public two-year institutions (Gonzalez, 2010). The percentage of students who graduate from two-year career colleges is 59% whereas the percentage at public two-year institutions is 23 % (Greer, 2010).

Between the tough economy and the demand for more and more jobs that require a college degree, the concept of higher education is more popular now than it has ever been. Of the institutions with online education programs, 50% have seen their institutional budgets drop, while 25% have observed that their budgets increased (Greer, 2010). The Sloan Consortium (2009) revealed that due to the recent economic downturn a considerable increase has occurred at a rate of 66% for new online courses and programs and 73% of colleges and universities saw "increased demand for existing online courses and programs" (para. 5).

The trend of online education shows no signs of slowing or moving in the reverse direction. Reasons for this choice vary by individual, income, demographic, cost, time savings, and professional need. As this viable option for the student population expands, educational institutions will embark on new studies and budget increases, and the various gaps will eventually be all but closed.

Statement of the Problem

Exponential growth has occurred in online learning and at online institutions nation-wide. Massive growth in enrollment at both non-profit and for-profit colleges offering distance learning has focused a spotlight on the practices of these categories of institutions, yet students at all institutional types can suffer and struggle academically. Research concerning retention and best practices at fully online institutions, specifically on academic achievement and particularly those with a large majority of non-traditional (i.e. adult) and active military learners, is greatly needed.

Purpose of the Study

Examination of information obtained from the internal data

collection of a fully online university provides rich details. Such information can assist in determining the relationship between end of course Grade Point Average (GPA) with any specific student demographic characteristics. The investigation of such data may allow for researchers, institutions, and policy makers to better understand the impact of student characteristics on student achievement and success. As the institution from which the data was obtained includes a very large majority of non-traditional as well as active military learners, investigation into the data may provide information yet to be fully reported in the literature and assist educational leaders in decision making.

The purpose of the study was to determine if end of course Grade Point Average (GPA) was related with student demographic characteristics in the top 20 enrolled courses of undergraduate students at a large national fully online university.

Research Questions

- What is the relationship of end of course GPA to gender in the top 20 enrolled undergraduate courses at a large national fully online university?
- What is the relationship of end of course GPA to ethnicity in the top 20 enrolled undergraduate courses at a large national fully online university?
- What is the relationship of end of course GPA to age in the top 20 enrolled undergraduate courses at a large national fully online university?
- What is the relationship of end of course GPA to military status in the top 20 enrolled undergraduate courses at a large national fully online university?

Method

Participants

Data from six months of end of course grades for undergraduates in the top 20 enrolled courses for 2009 were obtained for this study. Total cases selected for the study included 14,987 undergraduate students. The population included fully online learners at a large national for-profit online institution of higher education. The institution as a whole serves military, military affiliated, and civilian students with over 90% of students over the age of 24. Conversely from most colleges in the U.S., males constitute a majority of students enrolled at the university ("Ace Releases", 2005; Braxton, 2000; Nelson Laird et al., 2004).

Instructional Setting

American Public University System (APUS), founded in 1991, is an online, for-profit university. First created as American Military University (AMU) a second virtual university, American Public University, was added in 2002. Fully accredited under the Higher Learning Commission of the North Central Association, APUS serves the needs of military students, those in public service, and civilians alike. As of mid 2010, APUS serves over 70,000 students, offers nearly 80 degrees and experiences an annual student enrollment growth rate of approximately 30%. Students in 109 countries participate in courses that commence at the beginning of each month as either eight or 16 week courses. APUS offers certificates, Associate degrees, Bachelor degrees, and Master degrees.

Instrumentation and Procedures

Archival data were acquired from the APUS Office of Institutional Assessment through a request for data. Information requested was provided to the researchers through an excel file for end of course grade and student demographic variables of gender, ethnicity, age, and military status. The courses represent a set of cross-curricular classes consisting of the top 20 enrolled undergraduate courses at APUS for the 2009 year.

Data were analyzed through multivariate regression using forward entry. Multivariate regression was used as the analysis that provides outcomes "predicted by a linear combination of two or more predictor variables" (Field, 2005, p. 738) and that the degrees of freedom are adjusted to reflect the number of explanatory variables included in the model. Within the data set were dummy variables so to cause the general class of ANOVAs to break down with respect to heteroscedasticity. As regression analysis utilizes the assumption of equal variance, heteroscedasticity within this data is predicted as it is the variance of dependent variables across the data (Field, 2005).

Results

To ascertain whether relationships in end of course grade and student demographic variables were present, multivariate regressions were conducted. From the initial run of an ANOVA, the P-value for the F test statistic is less than 0.05, providing strong evidence against the null hypothesis. A one-way analysis of variance (ANOVA) was calculated on the relationship of student demographics to end of course GPA. The analysis was significant, $F(19, 20303) = 67.16$, $p < .05$.

Overall the variables were significant predictors. However, ANOVA offers only limited insight as the test only shows significant relationship but does not illuminate the variances in the variables. For this purpose, regression modeling was used. Using multiple regression, an adjusted R Square of .058 was found, which indicates that even though the equation is significant the independent variables (student demographic characteristics) account for only 5.8% of the dependent variables (GPA).

To further illustrate issues related to significant and variance accounted for by independent variables, the regression model was rerun using the forward entry method. Forward entry is informative in that it reveals 14 independent variables that are significant in the regression equation that cumulatively accounts for the aforementioned adjusted R Square of .058. However, three of these variables account for 3.9% of the variance with the remaining 11 independent variables only accounting for 1.9% of the variance. The three variables that can be seen as meaningful predictors are: Black, Non-Hispanic; 20 to 21 year old IPEDS age band, and 22 to 24 year old IPEDS age band. Significantly, all three of these variables have a negative standardized coefficient beta. However, it is important to note that given the extremely low degrees of variance accounted for and the corresponding relative weakness of the standardized coefficient betas, this analysis is at best inconclusive. Results from the Forward Entry Regression analysis are presented in Table 1.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.140[a]	.020	.020	1.00397	.020	408.278	1	20321	.000
2	.169[b]	.029	.029	.99938	.009	188.006	1	20320	.000
3	.197[c]	.039	.039	.99413	.010	216.436	1	20319	.000
4	.210[d]	.044	.044	.99157	.005	106.007	1	20318	.000
5	.220[e]	.049	.048	.98918	.005	99.298	1	20317	.000
6	.230[f]	.053	.053	.98694	.004	93.190	1	20316	.000
7	.235[g]	.055	.055	.98575	.002	50.145	1	20315	.000
8	.237[h]	.056	.056	.98537	.001	16.455	1	20314	.000
9	.238[i]	.057	.056	.98511	.001	11.980	1	20313	.001
10	.239[j]	.057	.057	.98487	.001	10.861	1	20312	.001
11	.240[k]	.057	.057	.98467	.000	9.069	1	20311	.003
12	.240[l]	.058	.057	.98456	.000	5.788	1	20310	.016
13	.241[m]	.058	.057	.98446	.000	4.906	1	20309	.027
14	.242[n]	.059	.058	.98407	.001	17.251	1	20308	.000

a. Predictors: (Constant), BlackNonHispanic
b. Predictors: (Constant), BlackNonHispanic, 20 to 21
c. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24
d. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29
e. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic
f. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19
g. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19, 30 to 34
h. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19, 30 to 34, Military
l. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19, 30 to 34, Military, Under 18
j. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19, 30 to 34, Military, Under 18, Female
k. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19, 30 to 34, Military, Under 18, Female, 35 to 39
l. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19, 30 to 34, Military, Under 18, Female, 35 to 39, NativeAlaskan
m. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19, 30 to 34, Military, Under 18, Female, 35 to 39, NativeAlaskan, WhiteNonHispanic
n. Predictors: (Constant), BlackNonHispanic, 20 to 21, 22 to 24, 25 to 29, Hispanic, 18 to 19, 30 to 34, Military, Under 18, Female, 35 to 39, NativeAlaskan, WhiteNonHispanic, Male
o. Dependent Variable: GPA

Table 1. Forward Model Regression Summary

Discussion

Analyses of the data showed significance in the relationship between student demographics and end of course GPA in all areas tested. All variables, gender, ethnicity, age, and military status, were significant. However, the relevance of significance is limited since only 5.8% of the variance in the criterion variable was accounted for by the predictor variables

Even though significance was found through analysis of the data, though with a very small amount of variance accounted for in the independent variables (student demographic characteristics), a theme that is so pervasive in the general literature is not significant in this study. Review of the literature has shown that student demographics are a factor in a students' academic success. Engagement,

satisfaction, and academic achievement, including persistence and matriculation, have been tied to certain student demographics, especially age, gender, and ethnicity (Astin, 1993; Gonyea et al., 2006; Kuh, 1995; Kuh, 2007; Kuh et al., 2008, McCabe, 2000; Pascarella & Terenzini, 1991, 2005; Tinto, 1993). The preponderance of the literature stems from research on traditional brick and mortar institutions. Further, the research on military students and student academic achievement is very inadequate and though there was no significance for the military variable in this study, there is no comparison to other research within the body of literature.

Whereas other colleges and universities, both two-year and four-year, will report a difference in end of course GPA with some set of student demographic variables, this particular institution has no significance. This, in itself, is very significant. No demographic variable, within a large sample, was found to have relationship to end of course grade in a top 20 enrollment undergraduate class.

Implications and Recommendation

Further research is warranted to investigate these findings. Though the data were derived from a large sample and taken from the results of classes across curricula, recommendations for a repeat of the study may be beneficial. Once another six months or years' worth of data is available for analysis, such a repeated study may be possible.

Another consideration in review of the results of the study is that within this particular institution there will be no relationship, even in repeated validation studies, between student demographics and end of course GPA. If that hypothesis was determined to be true, questions concerning other factors would need to be examined. Curriculum and instruction, specifically the construct of the course and pedagogical and andrologocal methods employed, may be a factor in either evening out the student demographics or may factor into student achievement. The overwhelming majority of non-traditional students may also be an aspect of the institution worth investigating. Could it be possible there is a different culture of learning at a school with over 90% non-traditional age students? Similar to age, could a large number of military and military affiliated students have an effect on the learning environment. Little is known in the body of literature on this topic. Also to be further explored is the overall effect of the online university. As little has been researched about fully online institutions of higher education, for-profit and non-profit alike, it is possible that traditional measurements and instruments may not even apply.

Limitations

As with all single institution studies, the findings may not be generalizable to other populations. Duplication of this study at other institutions is needed to validate this study. Likewise, multi-institutional comparison of factors related to success would provide insight into differences that may be present among various student demographics. Finally, this study examined only the top 20 enrollment courses at APUS. A deeper analysis is needed in which success in all courses is needed to determine if differences exist by program type or level.

Conclusion

Components of successful programs include increasing student-to-student interaction, increasing faculty-to-student interaction, increasing student involvement, linking the curriculum and the co-curriculum, increasing academic expectations and levels of academic engagement, and assisting students who have insufficient academic preparation for college (Barefoot, 2000). Review of the literature indicates the need for additional study of factors that determine student success outcomes.

Through engagement, satisfaction, and achievement, students can obtain success in college. Understanding the factors that increase student academic achievement and the issues that prevent student persistence and matriculation is imperative for institutions to survive. Continually striving to serve the student, from research and then application of best practices through policies and initiatives, is the goal for every educator.

References

[1]. American Council on Education, Center for Advancement of Racial and Ethnic Equity, (2004, July). *Reflections on 20 years on minorities in higher education*

and the ACE annual status report. Retrieved from the American Council on Education Web site: http:// www.acenet.edu/Content/NavirgationMenu/ProgramsServices/CAREE/2004_reflections_msr.pdf

[2]. Artino, A. R. (2009). Think, feel, act: Motivational and emotional influences on military students' online academic success. *Journal of Computing in Higher Education, 21*(2), 146-166. doi: 10.1007/s12528-009-9020-9

[3]. Astin, A. (1993). What matters in college: *Four critical years revisited.* San Francisco: Jossey Bass.

[4]. Astin, A. W., & Oseguera, L. (2005). *Degree attainment rates at American colleges and universities: Revised edition.* Report from the Higher Education Research Institute University of California, Los Angeles.

[5]. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood cliffs, NJ: Prentice Hall.

[6]. Barefoot, B. O. (2000). The first-year experience. *About Campus, 4*(6), 12-18.

[7]. Braxton, J. M. (2000). Reworking the student departure puzzle. In J. M. Braxton (Ed.), *Reworking the student departure puzzle.* Nashville, TN: Vanderbilt University.

[8]. Chickering, A. W., & Gamson Z. F. (1987). Seven principles for good practice in undergraduate education. *American Association Higher Education Bulletin, 39*(7), 3-7.

[9]. Chickering, A. W., & Gamson, Z. F. (1991). Applying the seven principles for good practice in undergraduate education. *New Directions for Teaching and Learning.* Vol. 47. San Francisco: Jossey-Bass Inc., Publishers.

[10]. Field, A. (2005). *Discovering statistics using SPSS:* Introducing statistical methods series (2nd ed). London: SAGE Publications Ltd.

[11]. Garcia, T., & Pintrich, P. R. (1994). Regulating motivation and cognition in the classroom: The role of self-schemas and self-regulatory strategies. In D. H. Schunk & B. J. Zimmerman, (Eds.), *Self-regulation of learning and performance: Issues and educational applications* (127-154). Hillsdale, NJ: Erlbaum.

[12]. Gender gap stops growing. (2010, January 26). *Inside Higher Ed.* Retrieved from http://www.insidehighered.com/news/2010/01/26/gender

[13]. Gonyea, R. M., Kuh, G. D., Kinzie, J., Cruce, T., & Nelson Laird, T. (2006, November). *The influence of high school engagement and pre-college expectations on first-year student engagement and self-reporting learning outcomes at liberal arts institutions.* Presented at the meeting of the Association for the Study of Higher Education, Anaheim, CA. Retrieved from http://nsse.iub.edu/pdf/conference_presentations/2006/Expectations%20and%20Engagement%20ASHE%202006%20Gonyea%20Kuh%20Kinzie.pdf

[14]. Gonzalez, J. (2010, January 27). Study points to academic success of students attending for-profit colleges. *The Chronicle of Higher Education.* Retrieved from http://chronicle.com/article/Study-Points-to-Academic/63760/?sid=cc&utm_source=cc&utm_medium=en

[15]. Greer, J. (2010, January 26). Study: Online education continues its meteoric growth. *U.S. News and World Report.* Retrieved from http://www.usnews.com/education/online-education/articles/2010/01/26/study-online-education-continues-its-meteoric-growth.html

[16]. Kinzie, J. (2009, June). *Using NSSE results to foster collaboration on assessment and retention.* Presented at the meeting of the NASPA IARC, New Orleans, LA. http://cpr.iub.edu/uploads/NASPA%20IARC%202009%20Using%20NSSE%20Partnerships%20handouts.pdf

[17]. Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice Hall Inc.

[18]. Kuh, G. D. (1995). The other curriculum: Out-of-class experiences associated with student learning and personal development. *Journal of Higher Education, 66*(2),123-155

[19]. Kuh, G. D. (2007). What student engagement data tell us about college readiness. *Peer Review, 9*(1), 4-8.

[20]. Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education, 79*(5).

[21]. Marklein, M. B. (2005, November 7). College 'swirling' muddies quality. *USA Today,* p. 6D.

[23]. McCabe, R. (2000). *Under prepared students. Measuring up 2000: The state by state report card for higher education.* Retrieved from http:// measuringup. higher education. org/2000/ articles/ Under prepared Students.cf

[24]. Minority college enrollment surges over the past two decades; Students of color still lag behind whites in college participation. (2003). Retrieved from http://www.acenet.edu/AM/Template.cfm?Section=Search&template=/CM/HTMLdisplay.cfm&ContentID=3719

[25]. Nelson Laird, T. F., Bridges, B. K., Holmes, M. S., Morelon, C. L., & Williams, J. M. (2004, November). *African American and Hispanic student engagement at minority serving and predominantly White institutions.* Presented at the meeting of the Association for the Study of Higher Education, Kansas City, MO.

[26]. Ouimet, J. A. (2003). Community college strategies. *Assessment Update, 15*(1), 8-20.

[27]. Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research.* San Francisco: Jossey-Bass.

[28]. Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research.* San Francisco: Jossey-Bass.

[29]. Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1991). *A manual for the use of the motivated strategies for learning questionnaire (MSLQ) 3.* Ann Arbor, MI: University of Michigan.

[30]. Schroeder, C. (2003). How are we doing at engaging students? *About Campus, 8*(1), 9-16.

[31]. Seaman, I. E. A., & Seaman, J. (2009). *Learning on demand: Online education in the United States 2009. Sloan Survey of Online Learning.* Retrieved from http://www.sloan-c.org/publications/survey/pdf/learning on demand.pdf

[32]. Sloan Consortium. (2009). *Learning on demand: Online education in the United States, 2009.* Retrieved from http://www.aln.org/publications/survey/learning_on_demand_sr2010

[33]. Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed). Chicago: The University of Chicago Press.

[34]. Tinto, V. (July 2004). *Student retention and graduation: Facing the truth, living with the consequences.* Retrieved from The Pell Institute http://www. pellinstitute.org/tinto/ TintoOccasionalPaperRetention.pdf

[35]. Udas, K. (2009). *Sloan study of online learning, chaired by UMass President Jack Wilson, gains key faculty insights.* Retrieved from http://www.sloanconsortium.org/node/834

[36]. United States Department of Veteran Affairs. (2009, November 6). *What is the yellow ribbon program?* Retrieved from http://www.gibill.va.gov/ gi_ bill_ info / ch 33 / yellow_ ribbon.htm

[40]. What is blended learning? Retrieved from http://weblearning.psu.edu/blended-learning-initiative / what_is_blended_learning

[41]. Young, M. R., Klemz, B. R., & Murphy, J. W. (2003). Enhancing learning outcomes: The effects of instructional technology, learning styles, instructional methods, and student behavior. *Journal of Marketing Education, 25*(2), 130–142.

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