

### **Problem Statement**

Marshall University's first-year to second-year retention rate has remained somewhat constant for the last few years hovering around 70% (Marshall University, 2011). The rate falls in line with other four-year public schools in West Virginia (West Virginia Higher Education Policy Commission Data Portal, n. d.) but is a few percentage points lower than the national mean for traditional, four-year public institutions offering bachelor's, master's and doctoral degrees. The national mean in 2011 was 73.6% and was as high as 74% in 2010 (ACT, n. d.).

With reductions in higher education funding, many schools see retention as "the only reasonable course of action left to insure their survival" (Tinto, 1993, p. 2). **Yet, many colleges and universities have failed in developing specific institutional retention plans based on specific institutional research.** As a result, educational institutions continue to implement multiple transition programs without significant increases in retention levels. "What is needed and what is not yet available is a model of institutional action that provides guidelines for the development of effective policies and programs that institutions can reasonably employ to enhance the persistence of all their students" (Tinto, 2006-2007, p. 6-7).

### **Purpose Statement**

In an effort to increase the retention rate, Marshall University implemented multiple new retention efforts in Fall 2010. Each effort will need to be independently researched to determine effectiveness in the development of an institutional strategic retention plan. One of those efforts was the implementation of UNI 100 Freshman First Class, a one-hour, elective first-year seminar course. As one of the largest retention efforts, the purpose of this proposed study will be to

investigate the effectiveness of the UNI 100 Freshmen First Class seminar course currently offered at Marshall University. Effectiveness will be measured in terms of first-year to second-year retention and academic performance as defined by first-year college grade point average.

### **Tentative Method**

It is the researcher's intent to base this study on existing Marshall University data; therefore, a survey instrument is not being used. Data collection will involve three entering freshmen class cohorts at the Marshall University main Huntington campus: Fall 2010, Fall 2011 and Fall 2012. Depending on the length of time needed to obtain permission to access data and to implement the research, it is possible that additional class cohorts could be added.

The researcher will request permission from the Office of Academic Affairs at Marshall University to gain access to desired data from the student data base. The Institutional Review Board (IRB) will be notified of the research, but it is understood that collected data will not be attached to any student name or identification number and, due to the subject anonymity, will not require IRB approval (Marshall University Office of Research Integrity, 2012).

Data collected will include enrollment status for UNI 100 in the first enrollment semester, continued enrollment in the subsequent fall semester and grade point average for college courses taken during the previous year. Grades for college courses taken under dual-credit or early entry admission prior to entering freshman term will not be included in the grade calculation.

The dependent variables will be persistence to subsequent fall enrollment and college grade point average for each respective cohort. There will be three levels of the independent variable which will include enrollment and successful completion of the UNI 100 course, enrollment and failure to pass the UNI 100 course, failure to enroll in the UNI 100 course.

Descriptive statistics will be employed to analyze the cohort samples individually and collectively.

The levels of the independent variable are categorical and will require that nonparametric statistical methods be employed for this study. Chi-square can be utilized to determine whether or not the number of students included in each of the three levels of the independent variable is possible by chance. Due to enrollment procedures for the course, this is highly unlikely but it is anticipated that will be confirmed by the resulting statistic. The chi-square result for each cohort can be evaluated.

Correlations (Pearson Multiple  $r$ ) can determine if a relationship exists between retention and academic performance dependent variables for each level of the independent variable. Effect sizes can then be determined and predictions can be made using linear regression. The Friedman two-way analysis of variance can be used to compare the three levels of the independent variable with the two dependent variables. The results from each cohort will be compared for statistical differences due to the different delivery methods of the course.

It is important to acknowledge that successful completion of a first-year experience course does not provide the only influence on persistence and academic performance. There are external influences which affect student decisions to return or leave college as well as affect their academic performance. Available data that could be used for statistical controls would include residency status, ethnicity, age, parents' educational background, high school grade point average, standardized test scores and the need for developmental coursework. These data are available and may be evaluated for possible relationships affecting the dependent variables.

Goodman and Pascarella note that you can control for pre-college characteristics by matching groups, using statistical methods or by implementing a true experimental design by randomly assigning students to enroll or not enroll in the first-year experience course (2006). The most likely method of controlling this sample will be utilizing statistical methods because Marshall University recommends that all students enroll in the UNI 100 course. The means would not be available to implement matching groups for random assignment for enrollment or non-enrollment and it involves prior year data where enrollment in the course cannot be manipulated.

### **Tentative Population**

In order to investigate the research questions, data will be collected on all entering Marshall University freshmen in Fall 2010, Fall 2011 and Fall 2012 attending the main Huntington Campus and evaluated based on enrollment in UNI 100 and successful or not successful completion of the course. Data beyond 2012 will be collected if available when the research study begins. Student cohorts determined by entry semester will be analyzed separately and collectively based on the methodology described above.

As previously discussed in this proposal, some assumptions may be generalized to all entering freshmen at institutions similar to Marshall University; however, specific institutional data will yield the most applicable results for those institutions.

## References

- ACT, Inc. (n. d.). *National Collegiate Retention and Persistence to Degree Rates*. Iowa City, IA. Retrieved from <https://www.noellevitz.com/papers-research-higher-education/student-retention-white-papers-and-trend-reports/act-collegiate-retention-persistence-rates>.
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- Tinto, V. (2006-2007). Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1), 1-19.
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