

Factors Contributing to Student Discontinuation Rates in the
Associate of Arts in Information Technology Program at ABC College

(Student Name)

RES 600

(Month, Day, Year)

Dr. Michael J. Miller

Table of Contents

List of Tables	1
Introduction.....	2
Research Problem	2
Research Question	3
Independent Variable	3
Dependent Variable	3
Extraneous Variable	3
Importance and Benefits of the Research	3
Research Objectives	4
Preliminary Literature Review	4
Research Design	7
Data Collection Methodology	7
Survey Instrument	8
Reliability and Validity	9
Types of Data and Expected Results	10
Summary	11
References.....	12
Appendix A.....	13
Survey Questions	13
Appendix B	15
<i>Disclaimers and Instructions</i>	15

List of Tables

1. Research Design7

Introduction

ABC College is part of a private university system geared toward enrolling working adult students in online degree programs in various concentrations. ABC College prides itself on providing a quality education to students who do not fit the mold of a traditional learner. All the programs offered through ABC College are completed by the student following a course syllabus detailing assignments and projects along with the associated due dates. Students are also required to post into classroom forums for attendance and class participation. Other than the deadlines for assignments, the posting for attendance and for class participation, students are not required to be online during any specified times.

The interaction between student and instructor happens through an area of the classroom called an individual forum (IF). The IF allows students to type in questions or comments and to upload files to submit for assignments. Some instructors will also list office hours, and an e-mail address or a phone number for additional assistance to the student. Instructors are not required to post this additional information. Students enrolled in the online programs are made aware of the non-interactive format of the classroom in early discussions with enrollment counselors and most students state the format works out well as it is very flexible for their schedules.

Research Problem

One online degree program offered at ABC College is the Associate of Arts in Information Technology (AAIT). Enrollment rates in the AAIT program are increasing because of the popularity of technology-based degree programs. Recently, many students enrolled in the AAIT program are changing their degree programs or are dropping out of the college altogether after completing a few of the AAIT core courses. The discontinuation rate in the AAIT program is an

issue that needs to be evaluated and addressed to ensure longevity of the program and to increase or maintain student retention for the college.

Research Question

What are the factors contributing to student discontinuation or drop rates in the AAIT program at ABC College?

Independent Variable

The independent variables in this study are the factors contributing to the number of students dropping from the AAIT program.

Dependent Variable

The dependent variable in this study is the number of students who discontinue the program.

Extraneous Variable

No extraneous variables are anticipated in this study.

Importance and Benefits of the Research

As ABC College is part of a private university system, meaning it is a for-profit organization, steps must be taken to increase or maintain student retention to stay in business. The online format has worked well to attract non-traditional learners, the working adult, offering flexible degree programs for students who have potentially hectic life schedules. To stay on pace with other online degree programs, ABC College must continue to adapt and refine its offerings and curriculum. The addition of the AAIT program a few years ago has increased enrollment numbers significantly.

Unfortunately, the AAIT program has been showing very low student retention numbers and graduation rates. Annual reports are publicly available on the ABC College website that list

enrollment numbers and graduation rates. As graduation rates decrease student enrollments at the college also decrease. As enrollments decrease so do profits. The college is looking to keep profits up by keeping enrollment numbers and graduation rates up. As such, ABC College needs to determine if the AAIT program needs to be updated or modified to increase student retention and improve graduation rates in the program.

Research Objectives

The purpose of this study is to identify the factors that contribute to the discontinuation rates of the AAIT students. The study will gather data using a web-based survey from AAIT students who have changed programs (discontinued the AAIT program) or have stopped attending any of the programs at the college. By identifying the factors, administrators at ABC College are hopeful that they can make the necessary changes to keep students enrolled in the program, to improve retention, and to increase graduation rates.

Preliminary Literature Review

As technology is becoming more prevalent in the workplace, in homes, and in academic settings, the addition of the AAIT program has increased enrollment numbers for ABC College. ABC College utilizes an online format for all the degree programs offered. Many studies have been completed that have shown that computer usage does have a positive effect on student learning (Kahn, 2009). The results of the research indicate that computer usage in the classroom is increasing and those students who have access to computers outside the classroom reported they are more actively engaged in their learning and that they have increased interactions with others in the classroom (Kahn, 2009). In some cases then, it seems that using IT in the classroom has made students feel like they are more actively involved in the class and with others. The question that remains is whether a completely online classroom makes students feel

more or less involved. If students feel less engaged in the activities of the completely online format, this could be an indicator of why students are discontinuing the AAIT program.

Another study of interest examined the comfort level and proficiency levels of students using technology in classrooms (Cauley, Aiken & Whitney, 2009). The researchers were looking to determine a Computer Comfort Scale (CCS) and computer proficiency (CP) level for students who use technology (Cauley et al., 2009). The results reflected that the female students had lower self-reported CCS levels than the male students even though the female students showed no reduced CP levels as compared to the male students (Cauley et al., 2009). In the study for ABC College the data will be analyzed to see if significant differences appear between the drop rates of male students as compared to female students. This insight might help administrators modify the program to cater toward certain attributes of the student population.

In an article written about the evolution of the online curriculum, the authors (Dykman & Davis, 2008) point out several issues with the perceptions of faculty and students in regard to course content. On the side of the instructor, the authors state “there is a real tendency to overload the students with work to make sure that an online course, which is potentially visible to other faculty and administrators, has a level of content and rigor equivalent to a comparable conventional course” (Dykman & Davis, 2008, p. 159). When concerning the student, it seems that student perceptions and motivations can lead to the student putting in more effort than is needed for any assignment thus spending more time and effort than the instructor ever intended (Dykman & Davis, 2008). The authors Dykman and Davis (2008) also state “Perfectly good students can ‘burn out’ and be lost this way” (p. 159). This point is very important in exploring the AAIT program as the amount of interaction between instructor and student is minimal. If the student does not fully understand an assignment (because of lack of IT experience, misguided

perception about the assignment or because of unclear instructions) the student may spend proportionately more time on the assignment than was needed. If this happens regularly, the student could feel overwhelmed and that the coursework is too rigorous. These feelings could also lead to the high drop rates of the AAIT students.

In another study, a survey was developed to help identify “changes in IT program makeup over time and to keep track of preferences in this rapidly changing field” (Quarstein & Ramakrishna, 1994, Methodology, para. 1). The study points out that because of the rapid pace of changes in IT, it is important to conduct assessments of curriculum in MBA programs regularly (Quarstein & Ramakrishna, 1994). If assessments are needed regularly in an MBA program in regard to IT, then it follows that this same process would apply to an IT degree program as well. ABC College had conducted a study prior to January 1, 2009 that led them to make modifications to the AAIT program. Because these modifications did not result in a significant change in the number of students dropping from the program, ABC College is looking to conduct another study to keep pace with IT changes and to be sure to deliver course curriculums that students can complete successfully.

Research Design

Table 1 summarizes the research design proposed for this study.

Table 1

Research Design

Extent to which the question has been formed—Exploratory	This study will seek to discover what factors influence drop-out rates in the AAIT program over the past year at ABC College.
Data collection method—Interrogation/communication	A survey link will be e-mailed to students who have chosen to drop from the AAIT program.
Control of variables—Ex post facto	The variables of interest will not be under the direct control of the researcher.
Purpose of study—Descriptive	The study will seek to describe the factors influencing dropout rates in the AAIT program.
Time dimension—Cross-sectional	Data will be collected over a one month period from participants who have dropped from the AAIT program in the last year.
Topical scope—Case study	An in-depth analysis of possible factors contributing to the drop-out rates will be conducted.
Research environment—Field	Each participant will be e-mailed a link to the survey that will be available from any accessible Internet connection.
Participant perceptions	Participants will be fully aware that the study is taking place. This is not expected to influence results.

Data Collection Methodology

The relevant population for the study will be a census of all students of ABC College who have dropped from the AAIT program since January 1, 2009. ABC College will provide a list of student demographic information including student e-mail addresses. As the AAIT program did undergo changes just over a year ago, the goal of the study is to see what factors are contributing to the drop-out rates after the program changes were introduced. Some non-response bias is expected as many students change e-mail addresses regularly and may never open the e-mail containing the survey link. Another limitation or potential issue with the study

would be that some students may be disgruntled and may not wish to spend any time completing a survey for a program they have discontinued.

The study proposes to e-mail the link to a survey to the students so the costs will be far less than if the surveys were printed and mailed with return postage provided. The costs associated with the study will be from creating the web-based survey, hosting the survey on a server, and data collection and storage.

Survey Instrument

A web-based survey instrument will be modified from a previous study conducted by ABC College over a year ago when they were working toward making changes to the AAIT program. The questions for this study are shown in Appendix A. The survey includes 14 questions with nominal, ordinal, and interval data, and has been designed to be completed in five minutes or less by each participant. After completing the survey a submit button will transfer the data to the online data storage platform. Then the data will be reviewed and analyzed.

As an incentive to complete the survey, ABC College is offering a 10% discount off the resource fees for any class at ABC College. A unique code will be displayed to the respondent after the survey has been submitted that can be redeemed for the discount.

The survey will be emailed as a link to all students who have dropped out of the AAIT program since January 1, 2009. Once the email is received, the respondent will click on the link that will bring them to an instruction and disclaimer page that is shown in Appendix B.

The first question on the survey asks if the respondent is male or female. Other questions on the survey will be answered as *Yes* or *No* to determine the following:

- Is respondent is currently attending ABC College?
- If not, are they attending any other institution for higher learning?
- Would respondent have used tutoring assistance for IT classes if it had been available?

- Would respondent have participated in online interactive lectures at set times each week for IT classes?
- Would respondent have listened to or viewed previous online lectures for IT classes that they could access at any time?

The survey will have one question that asks the respondent to rank in priority order the reasons for leaving the program. The listed reasons will include financial issues, time management concerns, lack of support or resources from ABC College, the online format of the classes, content of curriculum, problems with instructors, and the value of the program to the cost of tuition.

Another section of the survey will include questions to identify the background or history of the student as it pertains to information technology (IT) experience and the student's perceptions on whether or not IT experience would be helpful to students who are trying to complete the program. For the purposes of the study IT experience will be defined as someone having strong technology skills from previous work or life experience other than just being able to use email messaging, word processing, and the Internet. These questions will be answered using a Likert-type scale (1=*strongly agree* to 5=*strongly disagree*). The survey will conclude with an area for open responses for respondents to type in any additional comments about why they discontinued the AAIT program.

Reliability and Validity

Internal consistency will be used to measure reliability of the survey. A previous study was conducted prior to January 2009 that used a survey instrument that will be modified for this study. Because the original study was shown to be reliable and valid, a modification of some of the previous survey questions will increase the face validity and construct validity of the instrument for this study.

In the original study, the ranking question in which respondents had to rank in priority order the issues they had with the program, only four items were on the list: time management concerns, the online format of the classes, problems with instructors, and the value of the program to the cost of tuition. For the purposes of this study, based on the comments made in the open response area of the previous study, several more items were added to the list: financial issues, lack of support or resources from ABC College, and the content of curriculum.

Additional questions were also added to the current study to help ascertain if IT experience should be considered for future students being enrolled in the AAIT program.

Types of Data and Expected Results

As mentioned in the discussion of the survey instrument, the data for the study will be nominal, ordinal, and interval and will include a section for open responses in a free-form format in which respondents can type in comments or additional information. The study will present descriptive statistics of calculating mode for nominal data, calculating median for ordinal data and calculating mean for interval data. The variance and standard deviation will also be calculated for the interval data using the descriptive formula.

The results of the study are expected to show what factors are influencing student drop rates from the AAIT program. The results should also indicate if previous AAIT students feel that prior IT experience would help students successfully complete the program or not. In addition, the results should help administrators determine which of the IT classes is considered the breaking point at which most students drop out of the program. ABC College is expecting also to find if further resources should be deployed in the program such as tutoring or live or pre-recorded lectures for students.

Summary

In an effort to help ABC College determine why students are not completing the AAIT program, a study has been developed to determine the factors that are influencing student drop rates for the program. The study will incorporate a survey that will be e-mailed as a link to students who have dropped out of the program since January 1, 2009. As ABC College is finding many AAIT students dropping out of the AAIT program prior to graduation, retention and graduation numbers are decreasing, which could mean potential profit loss for the school. If ABC College can understand what is happening for students who drop out of the program, changes can be made to help increase retention numbers, increase graduation rates, and increase profits.

References

- Cauley, F., Aiken, K., & Whitney, L. (2009). Technologies across our curriculum: a study of technology integration in the classroom. *Journal of Education for Business*, 85(2), 114-118. Retrieved from Education Research Complete database.
- Dykman, C., & Davis, C. (2008). Online education forum: part two - teaching online versus teaching conventionally. *Journal of Information Systems Education*, 19(2), 157-164. Retrieved from Business Source Complete database.
- Khan, M. (2009). Effects of information technology usage on student learning - an empirical study in the United States. *International Journal of Management*, 26(3), 354-364. Retrieved from Business Source Complete database.
- Quarstein, V., & Ramakrishna, H. (1994). Information technology knowledge and skills for MBAs: non-MIS faculty's perspective. *Journal of Education for Business*, 69(4), 204. Retrieved from MasterFILE Premier database.

Appendix A

Survey Questions

Question 1: Are you Male or Female?	Male Female
Question 2: Are you currently attending ABC College?	Yes No
Question 3: If yes, please select the current degree program are you enrolled in?	AAIT AAFB AAACC AACJ AAPSY
Question 4: If you are not currently attending ABC College, are you attending another institution for higher learning (local community college, university, technical school, etc)?	Yes No
Question 5: Mark All That Apply: At the point that you discontinued the AAIT program, which classes did you attempt (posted for 2 or more weeks of attendance) or complete?	IT/205 IT/210 IT/220 IT/230 IT/240 IT/250
Question 6: Rank each item in priority order as to why you discontinued the program <i>1=biggest issue to 7=smallest issue</i>	<ul style="list-style-type: none"> • financial issues • time management concerns • lack of support or resources from ABC College • online format of the classes • content of IT class curriculum • problems with instructors • the value of the program to the cost of tuition
Question 7: I would have used tutoring assistance for my IT classes if it had been available.	Yes No
Question 8: I would have participated in online-interactive lectures scheduled on a set date and time each week for my IT classes.	Yes No
Question 9: I would have listened to and/or viewed previous online lectures for my IT classes that I could access at any time at my convenience.	Yes No
Question 10: I would have preferred using a pre-recorded lecture of class that I could access at any time as compared to a live-interactive lecture set for a specific date and time.	Yes- prefer pre-recorded No- prefer interactive with set time N/A- not applicable

<p>Question 11: I had previous IT experience prior to starting the AAIT program. <i>IT experience = strong technology skills from previous work or life experience other than just being able to use email, word processing, and the Internet.</i></p>	<p>1=Strongly agree 2=Agree 3=Neither agree nor disagree 4=Disagree 5=Strongly disagree</p>
<p>Question 12: I would have been better prepared for the AAIT program if I had prior IT experience.</p>	<p>1=Strongly agree 2=Agree 3=Neither agree nor disagree 4=Disagree 5=Strongly disagree</p>
<p>Question 13: I think students enrolling in the AAIT program should be required to have IT experience prior to starting the program.</p>	<p>1=Strongly agree 2=Agree 3=Neither agree nor disagree 4=Disagree 5=Strongly disagree</p>
<p>Please type in any additional information or comments about why you stopped attending the AAIT program at ABC College.</p>	

Appendix B

Disclaimers and Instructions

Dear valued past AAIT student,

Thank you for taking the time to complete this survey. We appreciate your input! In an effort to improve our AAIT program and its offerings please answer the survey questions to the best of your ability. Select your responses by clicking on the circle or circles that best match your answer to the question being asked. Some questions will be answered using the following scale: *1= strongly agree to 5 = strongly disagree*. One question will ask you to rank your answers from a list in priority order from *1= biggest reason to 7=smallest reason*. All responses will remain strictly confidential and anonymous and will not be released to any other party.

To show our appreciation, once you submit the survey, you will receive a unique code that will entitle you to 10% off your next online resource fee for any of our classes. If you have any questions about the survey you may call our customer service line at 1-800-555-1212. If we can help you to continue with your education in any way, please do not hesitate to call us.

Thank you,

ABC College