

Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 1998 Proceedings

Americas Conference on Information Systems
(AMCIS)

December 1998

MICAP-Just in Time Custom Education

William Haseman

University of Wisconsin-Milwaukee

Follow this and additional works at: <http://aisel.aisnet.org/amcis1998>

Recommended Citation

Haseman, William, "MICAP-Just in Time Custom Education" (1998). *AMCIS 1998 Proceedings*. 380.
<http://aisel.aisnet.org/amcis1998/380>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 1998 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

MICAP – Just in Time Custom Education

William D. Haseman
School of Business Administration
University of Wisconsin-Milwaukee

Abstract

The paper describes the development of a custom credit/non credit program designed to produce computer programmers from non-technical college graduates in just six months.

Introduction

The School of Business Administration at the University of Wisconsin was one of several Milwaukee area educational institutions contacted by M&I Data Services in December 1996. The request was simple – could the University quickly produce more skilled MIS professionals to meet their current and chronic shortages. The result was the MICAP I class graduating twelve months later, having completed a full time six-month program. Following graduation, they all became full time employees at M&I Data Services and had completed 50% of their master's degree. The following is a description of the process that led to this WIN-WIN-WIN (Company, University, Student) program, some of the lessons learned and the current progress of the MICAP II and MICAP III classes.

Company

M&I Data Services is a wholly owned subsidiary of Marshall & Ilsley Corporation. They are a leading provider of software and information management solutions for financial institutions around the world. They offer their clients the options of either complete outsourcing or purchasing software for the client's hardware.

Currently, the majority of their revenues come from their large IBM mainframe applications, sometimes referred to as "Legacy" systems. While they are developing and marketing Client-Server solutions (M&I Eastpoint), the majority of their revenue for several years will come from their mainframe products.

M&I Data Services is the fastest growing provider of financial software and services worldwide and has been growing at a rate of 20% a year for the last ten years. In December of 1996, they had 300 open positions for programmers. Their programming staff was primarily college graduates. Their shortages were in the areas of mainframe - specifically COBOL, JCL, CICS, DB2 and IMS. If M&I Data could have hired all the graduates from all the Universities in Wisconsin, they would still have had openings. Newly hired employees require a 6 to 8 weeks of paid training in mainframe technology.

School of Business

The School of Business Administration at the University of Wisconsin has one of the most technologically advanced educational facilities in the nation. The building offers 26 multimedia-equipped classrooms, each with a teaching console housing a PC, a VCR and touch screen that controls all of the multimedia aspects of the classroom. The building has 450 Pentium class IBM PC's which are networked and have T3 Internet access.

The MIS area offers a major in MIS at the undergraduate level (175 students), an MS in MIS (75 students) and a Ph.D. (20 students). In December 1996, there were 6 full time faculty members and several part time adjuncts. UWM was a leader in moving away from requiring COBOL toward teaching Client-Server technology in 1994. While COBOL was still offered, it was an elective.

Proposal

The original RFP from M&I Data Services asked for a program that was designed to train future employees in mainframe technology. It was based upon a program in North Carolina which provided students with a series of non-degree oriented undergraduate programming courses. While the program did lead to a job, the student gained limited transferable skills and no degree. It was primarily a Win for the company.

UWM responded to the RFP with a counter proposal, in which they offered a WIN - for the company, for the University and for the student. The proposal was as follows:

- Students would have to meet both M&I Data's employment requirements and demonstrate an aptitude for programming
- Students would have to hold a bachelors degree
- Students would have to be admitted to the MS program at UWM
- Curriculum would consist of non credit courses in mainframe technologies and masters level credit courses from the MS program

The original curriculum was designed to be 6 ½ months in duration and consisted of 4 quarters. During each quarter the students would take 5 courses, for a total of 20. This load turned out to be too heavy and was reduced to 4 courses a quarter, for a total of 16.

Operational Procedures

After going through a number of refinements, the program works as follows:

- M&I Data recruits the students with the assistance of UWM. Ads are placed in the newspaper, on the radio and informational meetings are held.
- The student fills out an M&I Data application and is given a job interview.
- MICAP I students took a programming aptitude test. This was replaced with reviewing the Quant. score on the GRE or GMAT exams.
- The student must have a minimum 2.75 GPA, takes the GRE or GMAT and applies to the MS program at UWM.
- M&I Data and UWM jointly decide which students to admit from those satisfying both organizations.
- Student borrows tuition (\$10,000) from M&I Bank as student loan.
- Student may also apply for student aid for living expenses.
- Student goes through the full time MICAP program without pay.
- Student receives 14 credits (with internship) towards the 30 credits required for MS program.
- If student has a B average upon completion, they are offered a job at M&I Data at prevailing salaries.
- Students have the necessary mainframe skills to eliminate the 6 to 8 week training program.
- Student pays back one half of their loan over the next three years.
- While working at M&I Data, student can complete their MS degree part time in the evenings while receiving tuition reimbursement from M&I.
- If the student stays at M&I for three years, the other half of their loan (plus interest) is forgiven.

The company Wins by quickly getting the required employees with mainframe skills. The student Wins by getting a job, potentially an MS degree and skills in both mainframe and client server. The University Wins by getting the initial program and future MS students.

Current Status

The first MICAP class had an enrollment of 34 students who were there for the first day of class. In December 1997, all 34 of these students graduated and all started to work at M& Data in January 1998. The second class of MICAP (started January 1998) had 47 students and the third class (starting June 1998) is currently being recruited. The biggest win for the program has been the PR received. The program has been written up in the Wall Street Journal, US News and World Report, has been discussed on local television stations, and has been featured in over twelve articles in local and state publications.

The Current curriculum is as follows:

- Q1 Intro to PC
Intro to Mainframe
COBOL 1
Business English
- Q2 System Design (Cr)
COBOL 2 and JCL
Logic & File Structures
Visual Basic
- Q3 C++ (Cr)
Batch IMS & CICS
Emerging Technology (Cr)
Database Management (Cr)
- Q4 COBOL III & Debug
Management of IS (Cr)
Online IMS & DBS
Project (Cr)

Growing Pains

This program required the University to change the way it develops and prices its products. A new pricing scheme was developed to deal with delivering a program with both credit and non-credit courses. The entire curriculum was designed and implemented in less than 5 months. The program also placed a great strain on University resources. The program represented a 50% increase in course offerings by the MIS faculty. This need was met initially with visiting faculty and part time adjunct faculty. MICAP I placed a heavy load on the existing computer resources. The solution was to buy laptops for the second class and wire the MICAP classroom for network connections. Mainframe textbooks were hard to find.

The intensity of the program required monitoring and daily interaction between the M&I Data and University program directors. This is truly a just in time custom education program.