

An Approach to Addressing the Needs for Microsoft Office Specialist Training in Technology Programs

Fanyu Frank Zeng
Indiana Wesleyan University

Abstract

The Microsoft Office Specialist Certification becomes the global standard of certification recognizing a high level of proficiency in office desktop computing skills. Microsoft Office Specialist Certification has been created to help employees and employment seekers to prove with confidence that they have achieved a high level of proficiency in using other Microsoft Office software tools which Microsoft endorses. It is the only office software certification that is recognized and endorsed by Microsoft and many employers worldwide.

This paper first addresses the importance and benefits to get Microsoft Office Specialist Certification today. It lists the major components of Microsoft Office Specialist Certification and analyzes the required technology skill sets for Microsoft Office Specialist Certification exam. It indicates that those skill sets can be broken into three major components, Microsoft Windows operating systems, Microsoft Office Suite software and Microsoft Office Suite software integration. After studying many Microsoft Office Specialist training programs offered by either traditional colleges or professional training centers it is clear that these three major components can be integrated into an existing academic program. The study presents a comprehensive approach to integrate these three components into an existing Computer Information Systems (CIS) program. The goal of curriculum improvement is to help students gain and improve their practical technical skills while they are still able to earn their academic credits.

Introduction

As the US industry globalization moves, industry and corporate infrastructure changes accordingly. Those changes redefine new higher standards for worker's technology skill sets. This study presents the impacts on US workers as a result of the changes and finds out that using computer software is an important tool for today's workers to prevail in this industry changes. It also finds that the changes have direct impacts on college students as well and they force many existing academic programs to make changes and upgrades accordingly.

To most of college students it has become clear that they are required to show prospective employers that they have the technical abilities and know how to become successful. One of interesting findings is that it is common to require everyone to maintain a certain level of skills on using PC and PC software, such as Microsoft Office

Suite software. Microsoft Office Suite software is one of most widely used office software tools by US industry to improve working efficiency. The Microsoft Office Special Certification is designed to prove the skill level of using Microsoft Office Suite software.

To have strong technology skills, particularly to be fluent in Microsoft Office Suite software products has become standard requirements for workers in IT industry. It also becomes common requirements across every industry. As a result more and more workers are seeking for a certification to not only learn Microsoft Office Suite software but also prove that they have met the industry requirements for such skills. Therefore, Microsoft Office Special Certification will definitely help students stand out from the crowd and can provide opportunities to students that might otherwise be missed.

It is essential to take a serious of specially designed courses to concentrate on learning Microsoft Office Suite software before taking Microsoft Office Special Certification exam. In an academic program it is also important to help students develop their knowledge and skills in Microsoft Office Suite software. One of most effective ways is to integrate the contents of Microsoft Office Specialist Certification into existing Computer Information Systems (CIS) courses. Students first build solid foundations on Microsoft Windows operating systems through Computer Processing Concepts and the Operating Systems courses. Then they will take a specially designed Microsoft Office core course to concentrate on Microsoft Office Suite software including Microsoft Word, Excel, Access, PowerPoint, Outlook and Project. After that they will have to revisit these contents in other courses so that they will be directed to some difficult topics in Microsoft Office Suite software. The program will provide students with a series of CIS courses to cover every aspect of Microsoft Office Suite software. Another key component in this program is to offer students the opportunities to learn how to integrate Microsoft Office Suite software to develop their technical skills to a higher level.

The ultimate goal of this enhanced CIS curriculum is to help college students reach a higher level of proficiency in Microsoft Office Suite software in order for them to prepare for Microsoft Office Specialist Certification exam to respond demands from the dynamic industry.

Microsoft Office Specialist Certification Exam

The Microsoft Office Specialist Certification is a globally recognized qualification for people who use the Microsoft Office suite in their daily work or are seeking to do so. The Microsoft Office Specialist Certification exam is the Microsoft-approved certification exam and is designed to measure and validate skills with the Microsoft Office suite of desktop productivity applications: Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Access, Microsoft Outlook, and Microsoft Project.

The Elements in Microsoft Office Specialist Certification

To earn the Microsoft Office Specialist Certification for Microsoft Office or Microsoft Project, one must pass one or more certification exams. The exams provide a valid and

reliable measure of technical proficiency and expertise by evaluating the overall comprehension of Microsoft Office or Microsoft Project applications, the ability to use the advanced features, and the ability to integrate them with other software applications. The exams are developed and validated by industry experts.

The Microsoft Office Specialist Certification includes these software packages:

- **Word** is a powerful word-processing software package used as standard in most offices.
- **Excel** is the most common spreadsheet package used in offices for storing, calculating and analyzing numerical information
- **PowerPoint** is the leading software package for creating presentations that can be delivered electronically or by using slides.
- **Access** databases have replaced many of the traditional ways of storing and retrieving information, and this course covers all basic aspects of using Microsoft Access software.
- **Outlook** allows you to send e-mails, store appointments, meetings, contact details, and schedules.
- **Project** allows you set up project management information.

The Microsoft Office Specialist exams evaluate and qualify your overall comprehension of Microsoft Office or Microsoft Project applications, your ability to use their advanced features, and your ability to integrate them with other software applications. This qualification helps to set students apart in today's competitive job market, bringing employment opportunities, greater earning potential and career advancement, in addition to increased job satisfaction. Some research reveals:

- Up to 83% of employers feel their Microsoft Office Specialist certified employees are more productive.
- Up to 82% of employers believe Microsoft Office Specialist certification directly benefits an organization.

Microsoft Office Specialist Certification Test Format

All Microsoft Office Specialist Certification tests are live, performance-based tests. There are no multiple-choice, true/false, or short answer questions. Instructions are general: you are told the basic tasks to perform on the computer, but you aren't given any help in figuring out how to perform them. You are not permitted to use reference material other than the application's Help system.

Candidates for Microsoft Office Specialist Certification

Anyone who needs to develop their computer skills and have the desires to develop their technology skills would be candidates for the Microsoft Office Specialist Certification.

The Benefits of Microsoft Office Specialist Certification

Our study finds that there are a number of benefits for both students and workers to take the Microsoft Office Specialist Certification exam. One of significant benefits is that the Microsoft Office Specialist Certification is the globally recognized standard for validating expertise with the Microsoft Office suite of business productivity programs.

Microsoft Office Specialist-certified individuals report increased competence and productivity with Microsoft Office programs as well as increased credibility with their employers, co-workers, and clients. The certificate is a valuable credential recognized worldwide as proof that an individual has the desktop computing skills needed to work more productively and efficiently. Furthermore, Earning Microsoft Office Specialist Certification acknowledges you have the expertise to work with Microsoft Office programs.

Microsoft Office experts can create technical reports, build macros, produce relational databases, and more. Microsoft Office Specialist Certification gives both job applicants and employees the advantages of proven productivity in a competitive market for jobs and advancement. It sets those people apart in today's competitive job market, bringing employment opportunities, greater earning potential and career advancement, in addition to increased job satisfaction.

The Microsoft Office Specialist Certification is the globally recognized standard for skills with the Microsoft Office suite of business productivity applications. The benefits to individuals, corporations, academic institutions, staffing agencies, and information technology (IT) training centers are listed below.

- Benefits for Individuals
 1. Increased productivity at work
 2. Greater earning potential
 3. More opportunities in the job market
 4. Satisfaction of demonstrating your knowledge and skills
- Benefits for Corporations
 1. Increased employee productivity
 2. Improved company communication
 3. Higher employee retention
 4. Lower technical support costs
 5. A stronger bottom line
- Benefits for Academic Institutions
 1. More knowledgeable teachers and instructors
 2. Attract new students
 3. Provide valuable skills to students
 4. Improve working relationships with placement organizations
- Benefits for Staffing Agencies
 1. Increased client satisfaction with job candidates
 2. A better-prepared pool of job candidates
 3. The ability to validate testing and training costs
 4. Simplified hiring procedures

- 5. Higher employee retention
- Benefits for IT Training Centers
 1. New trainees attracted by certification offerings in a value-add program
 2. Improved trainer credibility through required certification
 3. The capability to provide comprehensive, recognized certification programs
 4. Provide corporations with high quality, more productive job candidates
 5. Develop relationships of trust with customers

ACM and IEEE Viewpoints on Microsoft Office Specialist Certification

ACM and IEEE do not define the Microsoft Office Specialist training courses in their IT related curricula. However we found that both organizations offer free training courses for Microsoft Office Suite software. It indicates that both organizations have recognized the importance to promote the training of those office software within the organizations.

Training Program Offered by Colleges and Universities

Many traditional colleges and universities, such as, University of Kansas and University of South Florida, offer specially one week long IT training courses for the Microsoft Office Specialist Certification. Furthermore at the Brookstone College there are series of courses offered for the Microsoft Office Specialist Certification.

This type of Microsoft Office Specialist training programs are not part of any academic program. The format of courses is similar to training courses offered by the professional training centers, such as Thompson/Prometric. The training courses usually last from one to five days and could be an up to 8-week, full-time, intensive program that provides in-depth training in Microsoft Windows, Word, Excel, PowerPoint, Access and Outlook. Usually instructors lead training with 5 self study days built into the schedule in order to provide more practice. Upon completion of the training program, students may elect to make use of the Work Placement option in order to gain hands on experience in your field of study.

This type of training courses offered by either colleges or professional training centers focus on a rapid path to prepare students to be able to pass the certification exam. It has no connection to any academic program because they are not integrated into a traditional academic program. Hence students usually do not get a through training in every aspect. They are not capable of keeping the skills for a long period of time or learning new technology by themselves when they need to learn new technology because they usually do not get the training to build their technical foundations through this type of program. Instead those programs only focus on the contents of the certification exam.

The Enhanced Computer Information Systems Program at IWU

At IWU we realize that Microsoft Office Specialist Certification is a publicly recognized certification for students to show their credibility and expertise to work with Microsoft

Office programs to businesses, academic institutions, staffing agencies, government organizations, and particularly, information technology (IT) industry.

The Computer Information Systems at Indiana Wesleyan University is like many other traditional computer technology programs offers a variety of technology courses. It concentrates on developing students technical practical skills to sets them apart from their peers in the competitive job market after their graduation.

We emphasize to our students that most of professionals generally begin their careers by completing a university program in their chosen field, such as computer, medicine, engineering, or law. Then they may choose to pursue other important field, for example, certification in order to get additional recognized credential. Students should understand that certifications are commonly considered to be a tool to most of professions to show their credential in addition to their academic degree.

Offering CIS courses for Microsoft Office Specialist Certification to our students provides an opportunity for them to achieve a portable, globally recognized credential that proves their abilities as productive Microsoft Office users. Students will appreciate the opportunity to gain better employment and become more efficient employees. Implementing Microsoft Office Specialist within our program can improve students learning productivity and efficiency by ensuring skills standardization. Additionally, our program can improve its images as students recognize the quality of learning our CIS program provides.

The Computer Information Systems program at Indiana Wesleyan University offers courses to help student to achieve their academic goals while students can also build their technical foundations. It also offers students many hands-on training. To include the Microsoft Office Specialist Certification was originally out of the student recruitment research. It finds that many graduates will work in the IT fields, like IT technical support, PC technician, help desk, and other IT support roles after their graduation. This indicates that learning and maintaining a high level of Microsoft Office software is critical to most of our graduates in today's competitive job market. There is a need to further develop student's technical skills in this area.

The Three Step Study Plan in IWU CIS Program

Because students need to use a test preparation course to prepare to complete the test successfully, the step by step course program is designed to prepare students for building their Microsoft Office technical foundations first. Then they will develop their core-level knowledge in every Microsoft Office application. Later they will go through the integrated projects to learn how to integrate Microsoft Office Suite software together to complete a project. By the end of this course students will have a strong knowledge of all exam topics and will be able to do some additional review and practice on their own. Most of students will feel confident in their ability to pass the appropriate exam.

Three Phases are integrated into the existing CIS curriculum for the whole study process. Besides offering traditional CIS courses like many traditional programs one Microsoft Office Specialist core course is added into the curriculum to enhance student's learning in Microsoft Office Specialist. The contents of preparation for certification and integration project are blended into some existing courses. The courses are designed in a three step format to help students to prepare for the Microsoft Office Specialist certification exam:

- The first step is for preparation on Microsoft Windows operating systems.
- The second step is the main phase of this three step study plan. It focuses on the Microsoft Office Suite.
- The last step is to have additional training on some difficult topics or software, such as Access, integrations.

The Preparation Courses in Computer Information Systems Program

Because Microsoft Office Specialist program requires computer program literacy, measures proficiency, and identifies opportunities for skills enhancement, successful candidates should have a basic knowledge in state of the art personal computer (PC) and its operating systems apart from Microsoft Office Suite software. In order to be successful in getting Microsoft Office Specialist Certification students need to learn the basic concepts and have basic knowledge of Microsoft Windows operating systems first.

One of important characteristics of this course is that this course is not going to be isolated from other courses. This course helps build students a comprehensive understanding of Microsoft Widows operating systems. Students will become familiar with the Microsoft Windows environment.

The Core Course for Microsoft Office Specialist Certification

- Course Objectives

Upon completion of this course, students will:

1. have a further understandings of operating systems and specifically connection between Microsoft operating system Windows XP and Microsoft® Office Suite software
2. learn basic features of Microsoft® Office Suite: Word, such as, create, edit and format Word documents
3. learn advanced features of Microsoft® Office Suite: Word, such as, connect Word document with Internet, Outlines, Tables, Styles and Sections
4. learn features of Microsoft® Office Suite: Excel, such as, format a spreadsheet, graphs and charts, web application and business decision making
5. learn basic features of Microsoft® Office Suite: Access, such as, analyze and group data, create a database, a table and a form, generate a query and report.
6. learn basic features of Microsoft® Office Suite: PowerPoint to make a presentation document.
7. learn basic features of Microsoft® Office Suite: Outlook to process emails.

8. learn basic technique to integrate Microsoft Word, Excel, Access, Outlook, PowerPoint documents and combine some of them into one application document

- Course Description

This course is designed to build students a firm foundation in current Microsoft desktop application software. Specific attention will be directed at software utilizing word processing, spreadsheet, database, presentation, and email capabilities. It also teaches students how to combine Microsoft® Office software products to create a new type of document. This course will give students a firm foundation to pursue a Microsoft® Office Specialist Certification.

- Course Overview

This course is designed for computer information systems students and assumes certain practical knowledge of Microsoft® Windows operating systems. It includes a workshop (Workshop Zero) for those who have no or little knowledge in Microsoft® Windows operating systems to become familiar with how Microsoft® Windows operating systems and Office Suite works together. This course provides insights of major Microsoft® Office software to students. It not only teaches basic features of Microsoft® Office Suite, such as, Word, Excel, Access, Outlook and PowerPoint but also focuses on the advanced features. Some exercises also teach students how to use a number of software to develop complicated documents. It is designed to help students to build the foundations for their preparation on their Microsoft Office Specialist Certifications in the future.

- Course Contents

1. This course first reviews the important roles and functions of Microsoft® Windows operating systems software. Then it looks at specific features of PC operating systems that will be useful in this course.
2. This course introduces basic features of Microsoft® Office Suite: Word, Excel, Access, Outlook and PowerPoint. It focuses on advanced features of Microsoft® Office software and combines several software from Microsoft® Office Suite to develop complicated documents by using many exercises inside and outside classroom. It finalizes with a project by using a combination of these Microsoft® Office software.
3. The Components of Microsoft Office Specialist Courses
 - **Microsoft Office Word 2003**
 - a. Microsoft Word : What Will Word Processing Do for me?
 - b. Gaining Proficiency : Editing and Formatting
 - c. Enhancing a Document : The Web and Other Resources

- d. Advanced Features : Outlines, Tables, Styles and Sections
- **Microsoft Office Excel 2003**
 - a. Introduction to Excel: What Is a Spreadsheet?
 - b. Gaining Proficiency: The Web and Business Application
 - c. Graphs and Charts: Delivering a Message
- **Microsoft Office Access 2003**
 - a. Introduction to Access: What Is a Database?
 - b. Tables and Forms: Design, Properties, Views, and Wizards
 - c. Information from the Database: Reports and Queries
- **Microsoft Office PowerPoint 2003**
 - a. Introduction to PowerPoint: Presentations Made Easy
 - b. Gaining Proficiency: Slide Show Tools and Digital Photography
- **Microsoft Office Outlook 2003**
 - a. A Desktop Information Manager
 - b. Mail Management
- **The Internet And The World Wide Web**
 - a. The Internet And The World Wide Web
- **Microsoft Office Suite Soft Integration Project**
 - a. Mail merger project in Word
 - b. Word and Excel project
 - c. PowerPoint, Excel and Work project

The Integration Courses in Computer Information Systems Program

By encouraging students to develop advanced skills with Microsoft business desktop software, an integration project is added as the third step in the three step program enhancement in order to help students become qualified, knowledgeable, technology advanced people in the workplace.

Apart from the well designed core-level courses, this program also offers courses to improve student's ability to use an application knowledgeably and without assistance in a day-to-day work environment. Through this advanced course study students will be able to produce high quality documentation using packages from the Microsoft Office Suite. They will be competent in the use of Windows and the Internet. They will be able to assist colleagues in using advanced techniques within the Microsoft Office Suite. Furthermore expert-level integration projects will help students demonstrate that they have a thorough knowledge of the Microsoft Office applications and can effectively apply all or most of the features of the applications to solve problems and complete tasks found in business.

Research on the CIS Program

This program is a new program and it launched in summer 2004. Presently there are 60 students enrolled in this program. They have just completed the first two CIS related courses at the time of writing this paper.

Surveys are conducted almost every three months to make sure goals of this program are set clear and new teaching elements and methods are executed accordingly. Some statistics methods will be utilized to analyze survey data stored in a database. So far there is no data to show how effective this new program is because there is no graduate from this program. A plan has been set up to evaluate how effectively graduates of this program benefit from this newly designed CIS program model after their graduation by comparing these results with another similar program. The findings will be published at ASEE conference in the future.

One interesting finding is the students who do not have any knowledge using computers before benefit more from this program. They quickly learn Microsoft Word, Excel and PowerPoint and use them in other courses. Most of them do feel confident to use computers several months after they enter into this program.

About 25% students have set up their plans to take the Microsoft Office Specialist Certification test after they complete this program. Rest of them has not determined whether or not to take the test in the near future.

Remaining Issues and Improvements in The Future

Because of the nature of this program it is important to update contents of this enhanced curriculum. Adding new contents and removing unnecessary contents will be conducted frequently based upon the needs of job market and the certifications demanded by industry.

Several critical steps for updating purpose are recommended in ACM and IEEE general curriculum guidelines:

- Closely watching Microsoft Office Specialist Certifications and other certifications
- Keeping close eye on IT industry trend
- Improving faculty training
- Evaluation, assessment and program upgrade.

Conclusion

This three-step enhanced program will help students not only get an academic degree but also help them get the in-depth trainings in Microsoft Office Specialist Certification. This new method requires us to efficiently use all the resources and frequently apply them into our program as well. To accomplish that, it is very important to combine our academic

teaching strength with specialties of training specialists and facilities. It is also important to constantly update program contents to meet the industry needs.

Bibliography

1. IEEE, "Distance Learning Campus", 2004.
<http://bell.computer.org/distancelearning/free/free_catalog.jsp?Category=Microsoft%20Office>
2. ACM, "ACM Professional Development Centre", 2004.
<http://pd.acm.org/full_listing2.cfm?pre=ITMCDT&trk=703>
3. IEEE, "Certification Road Map: The Journey and the Destination".
<http://www.computer.org/certification/cert_for_you.htm>.
4. Microsoft. "Microsoft Learning" < <http://www.microsoft.com/learning/training/default.asp>>
5. University of Kansas, "Academic Computing Service Training".
<<http://www.ku.edu/acs/training/>>.
6. University of Southern Florida, "Microsoft Office Specialist (MOS) Training". <
<http://www.outreach.usf.edu/conted/cma3.html>>.
7. Colorado Mountain College, "Microsoft Office Specialist Certificate"..
<<http://www.coloradomtn.edu/programs/mous/home.html>>.
8. West Cheshire College, "Microsoft Office Specialist". < <http://www.west-cheshire.ac.uk/microsoft/mos.htm>>.
9. Thompson/Prometric "Microsoft Certified Professional", 2004. <
<http://www.netg.co.uk/Catalogue/Certification/microsoft/>>.
10. Thompson/Prometric "Microsoft Office Specialist Certification", 2004. <
<http://www.netg.co.uk/Catalogue/Certification/microsoft/officespecialist.asp>>.
11. Glendale Community College, "Microsoft Office Specialist (MOS) Preparation Certificate". <
<http://www.glendale.cc.ca.us/degrees/certificate/mos.htm>>.
12. Gateshead College, "Microsoft Office Specialist".
<<http://www.gateshead.ac.uk/page.asp?id=1217>>.
13. Brookstone College, "Microsoft Office Specialist Program". <
<http://www.brookstone.edu/mous.htm>>.
14. Fanyu F. Zeng "A New Approach to Integrate Computer Technology Certifications into Computer Information System Programs",. ASEE 2004 Annual Conference and Exposition, Salt Lake City, Utah, 2004.
15. College of Adults and Professional Studies/Indiana Wesleyan University, "Proposal for New Associate of Science Degree Program in Computer Information Systems (ASCIS)", 2003.

FANYU FRANK ZENG is an Assistant Professor in Computer Information Systems at Indiana Wesleyan University (IWU) while still working in IT industry as an independent IT consultant.