DEMONSTRATION OF LEARNING: What assignments or projects demonstrate student learning outcomes are achieved?
[Note: evidence of learning contained in Assessment methods and Findings sections.]

Program outcomes are practiced and assessed through a series of integrated and developmental assignments and projects building to the internship and capstone projects. The faculty are currently reviewing and developing new program level learning outcomes.

1) Microsoft Office Specialist (MOS) Vendor Certificates for:
   - MIC 120 Access
   - MIC 160W Supporting Word
   - MIC 160 E Supporting Excel
   - MIC 160 P Supporting PowerPoint
   - New class for this year. Help Desk Procedures and operations.
     (MIC 160 with any IBS section are the IBest classes.)

Certiport platform is used for the certification exams that are produced by Microsoft but administered by this independent company.

2) CIS 197 is a student internship that is required for the certificate and degree. Both student and employer complete assessment during CIS 197 internship.

3) ITC 285 is a capstone course that is required for the degree. This course includes a final student presentation of learning that is assessed.

EXTERNAL EVIDENCE? Alumni, employer, Curriculum Review, Technical Advisory Committee feedback?

- The Technical Advisory Committee meets quarterly meetings. The committee provides includes feedback on curriculum from industry representatives. Two years ago, the committee wrote a white paper on the 5-year trends in IT.
- The Northwest Center for Emerging Technologies and the Washington State Board’s IT Center for Excellence provide data for industry and employment trends.
- A number of part-time faculty are employed in industry or have their own consulting businesses and they provide feedback to the program about changes in industry.
- The Curriculum Review Committee reviewed IT Programs collectively in Fall 2007.
FINDINGS: What have you learned from your outcomes assessment activities?

The Technical Advisory Committee’s White Paper on Trends in IT led the program faculty to revise course outlines. IT trends data suggest that Applications support should be taught with an interdisciplinary business curriculum to teach IT in context of the business setting.

The Curriculum Review Committee found that the curriculum is frequently updated to reflect changes in the standard hardware and software. Faculty regularly evaluate the structure of the courses and the programs in general to ensure that students are learning what they need to learn. The program faculty noted that basic courses are relatively stable, but the more advanced topics change with greater frequency. MS Office 2007 and SQL Server have introduced major changes recently.

The faculty also noted the value of connecting coursework with vendor certification. The curriculum is “mapped” to certifications that many IT jobs require. This puts the program at an advantage over programs at other schools that make it more difficult for students to match courses with the certifications they want or need. ESL Students struggle with the tests, the passing rate is about 40%. Among native speakers the rate is over 85%.

The majority of the students in Microsoft Office Specialist (MOS) Vendor Certificates are ESL students in the ESL I-Best Program. for MIC 160W, MIC 160E, MIC 160P, MIC 120. Certiport platform is used for the certification exams that are produced by Microsoft but administered by this independent company. The faculty further found that the collaboration with the Microsoft IT Academy is valuable for the certificate/degree program.

The program has recently shifted its course requirements include projects that better simulate real workplace challenges. Students must solve problems or complete projects based on criteria defined in the project, and they create a documented deliverable in the process. Such changes are examples of how the IT program regularly reviews and revises its curriculum in order to improve student learning.

ACTIONS TAKEN: What program changes have you made in the last three years? -- WHAT WAS THE IMPETUS FOR CHANGE?

The Technical Advisory Committee had direct impact on revising the MIC 160 and MIC 120 so that students can use the courses to prepare for Vendor Certificates. As a result of the IT White Paper, a large number of other courses were revised; the CRC course establishment committee is currently reviewing them.

In 2005 the other IT programs were moved to a new division (BITCA) to create a closer link between the MIC courses and the Application Support certificate/degree. IT created new coordinator position for certificate/degree program.

In 2006, Microsoft IT Academy was implemented. Prior to that, the program subscribed to Microsoft Developer Network Academic Alliance (MSDNAA), which is just a portion of what MS IT Academy offers.
### ACTIONS PLANNED: What program changes or new assessment activities are you planning for next year?

1. New helpdesk course developed through the TAC that will be a semi-capstone for the certificate/degree program
2. New MS Outlook course in collaboration with IT programs
3. Flicker Assessment Surveys
4. Portfolio assessment/development in each class
Program Name: Applications Support – AAS Degree & Certificate

Theme(s): Expertise in software applications, customer or employee service, problem solving and communication.

Program Role: Prepare students to work in business, public sector and IT environments troubleshooting, providing technology support and analysis.

Prerequisites
- COMPASS test
- ENG 101 eligibility
- MAT 098 eligibility
- ITC 102 or experience
- ENG 106
- MIC 101 or alternate
- Workforce Advising

Courses
- Certificate only:
  - ACC 210 or NET 120
  - BUS 140, ITC 140, ITC 134
  - MAT 119, MIC 151, MIC 110
- MIC 123, MIC 160P, MIC160E
- MIC 160 W, CIS 197
- AAS Degree - in addition to the above:
  - IT electives (10 credits)
  - Social Science electives (9 credits)
  - ENG101, HUM 105
  - Mat 107 or MAT 116
  - ITC 285

Assessment Tasks
- Vendor Certification: MIC 120, MIC 160P
- MIC160E, MIC 160W
- ENG 106
- ITC 285 Presentations (AAS-T degree only)
- CIS197 Employer Evaluations (Certificate Program only)
- Co-op Internship – employer feedback
- Graduation Application – advising review
- IT Academy MSDNA Certificate I portfolio?

Intended Outcomes
1. Use IT operations to support business management
2. Manage applications support operations such as documentation and routine maintenance
3. Use knowledge of current computer technology trends to carry out tasks/projects such as computer
4. Create and use relational databases
5. Install and configure hardware and software in a Windows environment
6. Install, configure and use Internet browser software
7. Design, create and modify spreadsheets to create associated charts and graphs, and to create and use macros
8. Apply spreadsheet principles to business problems

What must students understand to demonstrate the intended outcome?

What skills must students master to demonstrate the intended outcome?

What will students do in here to demonstrate evidence of the outcome?

What do students need to be able to DO “out there” that we’re responsible for “in here”?

Adapted from POG by Ruth Stiehl
Program: Applications Support – AAS Degree & Certificate
Snapshot on: 12 December 2007

ENTRY REQUIREMENTS:
- COMPASS
- ENG 101 eligibility
- MAT 098 eligibility

PATHWAYS:
- I-BEST
- Running Start
- High School Graduate
- GED
- International Programs

INTENDED ROLES
- Troubleshooter
- Tech Support
- Help Desk Support or Analyst
- Computer Support or Analyst
- Customer Support or Analyst

Intended Learning Outcomes:
1. Use IT operations to support business management
2. Manage applications support operations such as documentation and routine maintenance
3. Use knowledge of current computer technology trends to carry out tasks/projects such as computer system upgrade and purchase decisions
4. Create and use relational databases
5. Install and configure hardware and software in a Windows environment
6. Install, configure and use Internet browser software
7. Design, create, and modify spreadsheets to create associated charts and graphs, and to create and use macros
8. Apply spreadsheet principles to business problems
Program Assessment Inventory

Program: Applications Support – AAS Degree and Certificate

Assessment methods used to determine that students are prepared to succeed and that they have achieved the program learning outcomes when they complete degrees or certificates.

<table>
<thead>
<tr>
<th>Students are prepared to learn (prerequisites)</th>
<th>Early program</th>
<th>Mid program</th>
<th>End of program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSET test scores</td>
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<tr>
<td>COMPASS test scores</td>
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<tr>
<td>SLEP test scores</td>
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<tr>
<td>Other? – pre-requisite courses,</td>
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<tr>
<td>ITC 102, ENG 106, MIC 101</td>
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<thead>
<tr>
<th>Students are assessed as they move through the program</th>
<th>Early program</th>
<th>Mid program</th>
<th>End of program</th>
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</thead>
<tbody>
<tr>
<td>Competencies assessment</td>
<td>MOS Vendor certificates: MIC 120, MIC 160P, MIC 160E, MIC 160W</td>
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<tr>
<td>Internship feedback</td>
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<td>CIS 197</td>
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<td>Pre-Mid-Post assessment</td>
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<tr>
<td>Service Learning experience feedback</td>
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<tr>
<td>Student course evaluations</td>
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<td>x</td>
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<tr>
<td>Student focus groups</td>
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<tr>
<td>Student grades</td>
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<td>Student interviews</td>
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<tr>
<td>Student self assessment</td>
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<td>- certificate prep software</td>
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<td>Student surveys</td>
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<thead>
<tr>
<th>Students are assessed as they complete the program</th>
<th>Early program</th>
<th>Mid program</th>
<th>End of program</th>
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<tbody>
<tr>
<td>Completion statistics</td>
<td>by college</td>
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<tr>
<td>Capstone projects</td>
<td>ITC 285</td>
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<tr>
<td>Graduation statistics</td>
<td>by college</td>
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<td>Portfolios</td>
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<td>ITC 285</td>
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<td>Presentations</td>
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<tr>
<th>External assessment data is collected</th>
<th>Early program</th>
<th>Mid program</th>
<th>End of program</th>
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<tbody>
<tr>
<td>Transfer rates</td>
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<td>Employer surveys</td>
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<td>Technical Advisory Committee</td>
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<td>License certification success rates</td>
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<td>Performance in 4 year programs</td>
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<td>Employment rates</td>
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<td>Salary statistics</td>
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<tr>
<td>Survey of former students</td>
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<tr>
<td>Other?</td>
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Applications Support (AAS-T) – Learning Outcomes

1. Demonstrate an understanding of how information technology fits into the operations and management of business and into society.

2. Demonstrate an understanding of the issues affecting computer system upgrade/purchase decisions.

3. Recognize current computer technology trends and utilize knowledge in making decisions and in carrying out tasks/projects.

4. Create and use relational databases, including developing queries, customizing forms and reports, and using macros, creating charts and working with graphics.

5. Install and configure hardware and software in a Windows environment and employ various techniques to troubleshoot problems with software and hardware installation/configuration.

6. Install, configure and use Internet browser software.

7. Design, create and modify spreadsheets to create associated charts and graphs, and to create and use macros.

8. Apply spreadsheet principles to business problems.

9. Operate in a Windows environment, including organizing files and programs and using Windows functions accessories.

10. Create compound documents such as newsletters with drawings and objects from multiple software applications, such as embedded spreadsheets.

11. Demonstrate the broad based knowledge and skills embedded for all Associate in Applied Science candidates from Seattle Central Community college.

Intended Learning Outcomes: Draft Winter 2008

1. Use IT operations to support business management

2. Manage applications support operations such as documentation and routine maintenance

3. Use knowledge of current computer technology trends to carry out tasks/projects such as computer system upgrade and purchase decisions

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