Course Title: CSC/IST102 Introduction to Information Technology

Course Leader: Trudy Gift

Expected Learning Outcomes for Course

- Compare, contrast and select appropriate technology to enhance personal and professional tasks
- Critically evaluate data through technology resources
- Process and communicate information through technology resources

Assessment

All IST instructors follow the same grading, rubrics and content format. It is imperative that all instructors complete the Myitlab training. This fall all instructors completed the training prior to teaching the course. There were no problems with the software as compared with the Spring 2015 when instructors (2) tried to use the software without the proper training. It was horrible for the students when the instructors could not answer their questions or solve their problems. It became even worse when the instructors blamed everything (the computers, software, textbook, publisher) but themselves for the lack of preparedness.

In the Fall 2015, we continued to use Myitlab. Students tested their knowledge by using critical thinking projects rather than multiple choice for the applications part of the course. The software gathers data on skills that relate to student outcomes for this course. The students complete a training, project and exam for each chapter covered on Word (3 chapters), Excel (2 chapters), PowerPoint (2). In addition hands on activities (either directed in class or assigned as homework) include an additional project on Word, Excel, PowerPoint from the textbook which are scored by the instructors using a rubric.

Applications:

Training modules: Each chapter covered in Word, Excel, PowerPoint, Access had a corresponding training module which would walk students through how to accomplish a task. If they encountered a problem, there were three methods they could use to find the answer: 1) their textbook with the corresponding chapter; 2) using the video that corresponded with just that specific task; or 3) step by step interactive, show-me where the student had to watch then do. They were given 5 attempts per instruction and could do the training until they go the grade they wanted (93.2 as compared to the 98% went for 100% for the previous semester).

Grader Projects:

Students were required to complete a project either creating a new file or updating an existing one. This gave the student an unlimited number of times they could adjust the file prior to submitting. Once the file was submitted, the student had the opportunity to make correction and resubmit the file a total of 3 times. This allows the student to: 1) select the grade they want to receive; 2) an opportunity to figure how to complete the task; 3) repetition will allow them to remember for the future. The average percentage was 84.3 for all tasks. One of the reason for the lower percentage, students had to manually complete/redo the project. The majority of the students 79% only completed the assignment one time.

Exams:

There is one exam for each application. Specific skills were tested and could be tracked as to how the student completed the skills, how long they worked on it, level of success. A change from the previous semester: students were given one attempt to complete the work.

Concepts:

More hands-on projects were assigned to this section of the course. Instead of just reading about how to purchase a computer, there were 10 Help Desk Assistant projects that students completed. This gave the student the opportunity of applying what they read/learned to a real life scenario where they had to answer questions. They were given multiple attempts (3) to achieve the score they wanted. This is similar to questions that would appear on the IC3 certification.

There were four key projects required to be completed by all instructors. This included a report from effective Internet research by with a Computer Security Report, OneDrive (cloud computing), OneNote, Discussion Board. Instructors had the option of adding four assignments of their choice.

The exams (which have always been generated from a test bank) have remained multiple choice. However, the test bank has been edited extensively to remove questions not covered, redundant questions, or awkward working. In addition, the exams are referenced as Research exams. Students are permitted to take the exams at home, with a time limit of 75 minutes, with access to notes, textbook, Internet, PowerPoint presentations. If students have not used the textbook prior to the exam, it is not much help since multiple chapters are being covered. When the student accesses the Internet for questions, they are presented with information overload. Instructors felt it was more important that students be able to research the answer rather than memorize.

We see fewer students taking this course since it is no longer a General Education requirements Fall 2015 we offered 10 sections. (10 sections to 8 sections for the Spring 2015)

Validation

(What methods are used to validate your assessment?)

The textbook we are using is approved courseware by Certiport for the IC3 (Internet and Computing Core certification) national certification exam for computer literacy. All exams questions can be mapped to a question or section on the IC3 exam.

The IST Advisory committee (comprised of area business representatives) continues to approve the content, coverage, and presentation of this course.

Results

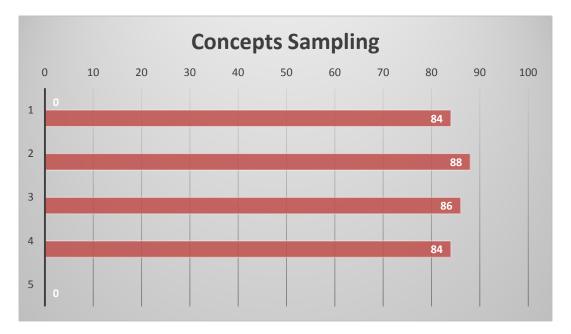
According to the data gathered via Myitlab, 134 students participated in the course management software. If you take into account there were a total of 51 activities that would be gathered to validate course outcomes, the average completion score was 61.9%. (that would be including all earned Fs and walk-away Fs). Since there is no easy way to valid Fs versus walk-away Fs through data collection, an error factor of 20% was used bring the completion score up to 86.5%. While this seems high, students are allowed to take all but 9 projects over multiple times (for example, trainings can be done 5 times) until the student masters the concept, is satisfied or just wants to move on to the next assignment.

Prepared by: Trudy Gift

Course Outcomes Fall 2015

Concept exams average was 78.95% which was lower. This can be attributed to the students have access to the textbook, notes, PowerPoint, Internet but are limited on time (90 minutes).

A random sampling was used to create a worksheet to show the average. This shows that approximately 85% of the students can use the concepts presented in this course. See Excel worksheet in Data Analysis folder for details.



Follow-up

(How have you used the data to improve student learning?)

The number of assignments was adjusted by eliminating Access (due to students having to purchase the software just for two chapters; the cost did not correlate the amount of time spent on the software.

There has been no decision on moving to Windows 8. The Advisory committee recommended waiting for Windows 10 release before making any major changes.

We should upgrade the computers to touch screen technology. This is going to be hard to convince the Administration since they are cutting back on IT equipment. If the numbers can just this change, it will be presented to Unit Planning (Fall 2015). At the Fall 2014 meeting, the President indicated he wanted students to purchase their own computers and use free/MOCCA textbooks. This is not possible for a technology course which required update software and textbooks. There are no 'free' textbook for Office 2013/Office 365. You can find textbooks for older versions.

Very few students are using e-books. This trend is continuing in our classes. The problem is a student needs to see the instructions in the book, make a change to the software. Trying to divide a laptop or tablet screen makes it very difficult for students to read. It has been observed in several classes (per comments from instructors), students using a laptop/tablet will use that device for their e-book and use the classroom's computers to complete the assignment.

Budget Justification

(What resources are necessary to improve student learning?)

New technology will be needed so it can be demonstrated in the classroom. Touchscreen monitors would enable students to utilize the full potential of Windows 8. Data will be gathered at the end of the Spring 2015 semester and included at that time.

e-books are available and included in the textbook order. However, most students are not purchasing them at this time. There continues to be a small increase in renting textbooks online. One problem is the management software we are using is linked to textbook. The software becomes very expensive if purchased separately.