

QEP Director

William Burgan

Table of Contents

I. Executive Summary3-4

[II. QEP Topic Selection 5](#_Toc397520174)

[Planning Committee 5](#_Toc397520175)

[Surveys and Interviews 5](#_Toc397520176)

[Potential QEP Topics 6-8](#_Toc397520177)

[Final Topic Selection and Data Analysis 8](#_Toc397520179)

[III. QEP Development 11](#_Toc397520180)

[Definition of the Topic 11](#_Toc397520181)

[Identifying Student Learning Outcomes 12](#_Toc397520182)

I[V. Review of Literature](#_Toc397520183) 13

V. [QEP Design 45](#_Toc397520184)

[Strategy 1: Implement Pre-Assessment for new students on computer literacy 45](#_Toc397520185)

[Strategy 2: Develop Remediation course for Introduction to Computers 46](#_Toc397520186)

[Strategy 3: Tutoring and Skills Lab 48](#_Toc397520187)

[Strategy 4: Implement a Student Learning Outcome for computer literacy in all programs at the institution. 48](#_Toc397520188)

[VI. Institutional Capability](#_Toc397520190) 49

[Budget and Resources 50](#_Toc397520181)

[Personnel Costs 50](#_Toc397520181)

[Instructional Software and Testing Supplies 50](#_Toc397520181)

[Marketing 51](#_Toc397520181)

[VII. Revised QEP Assessment 52](#_Toc397520191)

[Student Learning Outcomes 53](#_Toc397520192)

[Student Learning Outcomes Assessment by Levels 54](#_Toc397520192)

[Student Learning Outcomes Assessment Plan 54](#_Toc397520193)

[Goals, Stategies, Targets for Improvement 57](#_Toc397520193)

VIII[. Implementation Timeline](#_Toc397520194) 59

I[X. References 75](#_Toc397520195)

**Executive Summary**

As Columbus Technical College (CTC) worked through the process to identify a Quality Enhancement Plan (QEP) that targeted improved student learning and the environment in which student learning takes place, the faculty and staff learned a great deal more about the College than expected. Through broad based input from the college community stakeholders and analysis of institutional data, several potential topics were brought to the forefront. Following literature review and further data analysis, improvement in student learning within computer literacy emerged as the topic of choice. Therefore, **Computer Literacy is Critical Knowledge (CLICK)** became CTC’s QEP.

The goal of the QEP is to ensure that entering students develop or enhance their computer skills for academic success. **CLICK** supports the College’s mission to support the economic empowerment of its six county service region by focusing on teaching and learning and developing a globally competitive workforce. Four strategies to accomplish this goal were established: 1) Implement Pre-Assessment for new students on computer literacy, 2) Develop a Computer Remediation Course, 3) Create Tutoring and Skills Lab(s), and 4) Implement a Student Learning Outcome for computer literacy in all programs.

In support of the four strategies, the QEP Assessment Subcommittee identified three outcomes. Outcomes one and two specifically deal with the knowledge and use of computer technology. Outcome three gives students an opportunity to transfer the knowledge learned in outcomes one and two through application of their newly-acquired or enhanced skills.

The assessment plan is a vital component of the QEP which will evaluate student learning and the overall effectiveness of the plan. Through both formative and summative assessments, the QEP Director and the Institutional Effectiveness Office will continually evaluate outcome data to oversee the assessment process and implement strategies for improvement based upon actual results.

The pre-implementation stage has been completed and the College is entering into the initial stages of the first-year implementation plan (fall semester 2014). College-wide support is evident through the five-year implementation budget of $601,361.00 that has been identified by faculty and staff and approved by the President’s Office.

**QEP TOPIC SELECTION**

**Planning Committee**

In April 2013, the Vice President of Academic Affairs, Lynn Storey, appointed Karen DePineuil, Clinical Coordinator for Respiratory Care as chair and Kermelle Hensley, Dean of Curriculum as co-chair. They met, along with additional committee members, to determine which methods to use to generate broad based involvement from faculty, staff, students and other stakeholders. Due to divisional transfers, resignations and retirements, the committee was reconstituted May 2014 (See Appendix A). May 2014, the new Vice President of Academic Affairs, Dr. Melanie Thornton, appointed Will Burgan and April Hopson QEP Co-directors.

**Surveys and Interviews**

Planning team members explored barriers to student learning and potential educational improvements to the learning experience. Surveys were developed and launched to college stakeholders. The committee sought to find the most critical element that needed the most focus and attention. A survey was given to the students to develop a sense of what they felt was needed to improve the quality of their education. The following table illustrates the results of that survey.

|  |  |  |  |
| --- | --- | --- | --- |
| TABLE 1.5 | Student Survey Results Listed by Option | | |
| **Option** | | **Count** | **Percent** |
| Math | | 129 | (27.5%) |
| Study Skills | | 98 | (20.9%) |
| Computer/Technology Skills | | 89 | (19.0%) |
| Time Management | | 88 | (18.8%) |

(Columbus Technical College, 2014)

Faculty interviews were also conducted. The process of topic development is discussed in the table below.

|  |  |  |
| --- | --- | --- |
| **Item** | **Stakeholders** | **Results** |
| Survey: Faculty and staff were asked to identify barriers to student learning and recommend a solution for improvement. | Faculty and Staff | 73 Responses to 3 open ended questions |
| Interviews: Faculty were interviewed and asked to | Faculty | 73 Responses |
| Data Analysis: The planning team analyzed the qualitative data and organized the responses into common topics. | QEP Planning Committee | 9 potential topics emerged |

The yield from the surveys and interviews produced nine potential QEP topics. The QEP Planning Committee explored each potential topic and designated a description for each topic. The table below displays a summary of topics that emerged from surveys and interviews.

**Table: Potential QEP Topics**

|  |  |
| --- | --- |
| **Possible QEP Topic** | **Description** |
| **The Digital Divide** | This subtopic explored the *Digital Divide* that exists between students with access to technology and the Internet, and those students that do not. The socioeconomic divide between these two groups of students can impact student perceptions regarding the value of technology as well as personal motivation to learn and use technology. |
| **Faculty & Instructional Technology Usage in the Classroom** | This subtopic explored the use of instructional technology in the classroom; specifically the ease of use of implementing technology to enhance teaching pedagogy, and faculty’s ability to correctly and successfully utilize this technology. |
| **Information Literacy** | This subtopic explored the ability of students to find and retrieve information from a variety of sources to include the Internet, within a book, in a library, etc. Even though many students have access to libraries at their respective schools, finding information is difficult; referencing the source of this information is even more challenging for many students. |
| **Prior QEPs on Technology** | This subtopic explored prior QEPs that were written at other colleges and universities that addressed technology (either from a student or faculty perspective) in order to gain insight into the significance of the topic and available resources. |
| **High Impact Technology Practices** | This subtopic explored the use of high impact technology practices at colleges and universities that had both positive and negative influence on student success. Namely the use of online student orientations, 100% online academic programs, online advising, incorporation of online teaching tools to enhance the classroom experience, and digital portfolios |
| **College Readiness** | This subtopic explored College Readiness courses at other colleges and universities to determine how much rigor, as it is related to technology, was required in each to demonstrate “college readiness”. |
| **Modular Learning** | This subtopic explored the practice of modular learning and how this method of instruction was or was not an appropriate approach to use when teaching technology skills to students. |
| **Technology Support Labs** | This subtopic explored the requirements of technology support labs needed to support students at colleges and universities that require students to take a computer literacy course or complete technology requirements for classes. Specifically this subgroup was concerned with the expense of creating a technology support lab, technology resources needed, labor, hours of operation, etc. |
| **Future Technology Skills in the Workforce** | This subgroup explored future technology skills needed by individuals in the workforce. In order to gauge the technology skills needed by workers in the future, this will help to guide and develop a computer literacy/technology course for students to them obtain the technology skills needed for future success. |

## 

## Final Topic Selection and Data Analysis

The faculty and administration felt that the topic math did not encompass CTC as a collective unit. Computer literacy was a topic that affected all students attending, and the faculty, and incorporated everyone who is a part of Columbus Technical College, not just a few departments and courses. Furthermore, feedback from faculty and students, noted that students often failed or withdrew from courses because of not knowing how to use the technology, not because they could not learn course content. Computer literacy was a known area of weakness for both students and faculty.

Computer use is part of the daily routine when attending a Technical College System of Georgia institution. From the admissions process to graduation night, Columbus Technical College students will be challenged by the required use of technology, no matter what degree program they enter. From investigating the College webpage, the admissions process, applying for financial aid and a schedule warrant a need for computer literacy skills.

CTC requires instructors to utilize our learning management system for all classes, except for off campus, dual enrollment courses. One of the primary modes of communication between the college, faculty, and students is through email or the learning management system.

The QEP committee also looked to the goals, mission and standards held by the Technical College System of Georgia (TCSG), who establishes goals for all technical college systems in the state of Georgia. “One of TCSG’s main roles is education and training to enhance the state’s workforce and support economic development” (TCSG, 2014, p.11). As discussed previously, the mission of Columbus Technical College states thatthe College supports the economic empowerment of its six county service area by focusing on teaching, learning, and developing a globally competitive workforce. This aspect of computer literacy will be further addressed in the literature review chapter.

As an institution, there was a false assumption that students were learning the core computer literacy skills through the introductory computer course (COMP 1000). To make a determination about pursuing the topic of computer literacy, the QEP committee took an extensive look at how successful current and previous CTC students were. Obtained through the Columbus Technical College Office of Institutional Effectiveness, the analytics of the introductory computer course were reviewed to assess performance on competencies related to computer literacy.

The introductory computer course is a required course in most degree, diploma, and certificate programs at the college used to teach students the introductory computer literacy skills needed for academic success and work force training. However, an extensive look at the student success rate within the introductory computer course prompted a need for intervention.

The Office of Institutional Effectiveness provided statistical data on the pass and fail rates of the introductory computer course. The following table displays the results of the introductory computer course from the spring 2014 semester. The table illustrates the grade by course number, the percentage of the total students who obtained that grade and the withdrawal rate.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| TABLE 1.5 | | COMP1000 Completers by Grades Fall Semester 2013 | | | | | |
| CRN | A | B | C | D | F | WF | Total |
| 12598 | 8 | 13 | 2 | 2 | 13 | 1 | 39 |
| 12599 | 18 | 12 | 2 | 2 | 6 | - | 40 |
| 12600 | 3 | 12 | 8 | 2 | 12 | 2 | 39 |
| 12601 | 9 | 14 | 4 | 4 | 7 | - | 38 |
| 12602 | 15 | 10 | 2 | 3 | 9 | - | 39 |
| 12603 | 21 | 7 | - | - | 8 | - | 36 |
| 12604 | 6 | 16 | 6 | 2 | 8 | - | 38 |
| 12605 | 4 | 3 | 4 | - | 8 | - | 19 |
| 12606 | 6 | 15 | 6 | 1 | 3 | 3 | 34 |
| 12607 | 3 | 10 | 3 | 1 | 4 | 2 | 23 |
| 12609 | 1 | 3 | 2 | - | 8 | - | 14 |
| 12610 | 10 | 8 | 6 | 3 | 12 | - | 39 |
| 12611 | 1 | 6 | 6 | 4 | 16 | - | 33 |
| 12612 | 4 | 12 | 4 | 2 | 9 | - | 31 |
| 12613 | 5 | 11 | 4 | 2 | 10 | - | 32 |
| 12614 | 4 | 3 | 5 | 3 | 11 | - | 26 |
| 12615 | 3 | 3 | 4 | 3 | 14 | - | 27 |
| 12616 | 8 | 6 | 4 | 6 | 3 | 1 | 28 |
| 12617 | 2 | 3 | 2 | - | 6 | 3 | 16 |
| 12618 | 5 | 2 | 3 | - | 3 | 2 | 15 |
| 12619 | 1 | 3 | 1 | 2 | 2 | 1 | 10 |
| 12620 | 5 | 5 | 2 | - | 5 | - | 17 |
| 12679 | 4 | - | 3 | - | - | - | 7 |
| 12714 | 6 | 2 | - | - | - | - | 8 |
| 12751 | - | 5 | 1 | - | 6 | - | 12 |
| 12752 | 6 | 2 | 2 | - | 17 | - | 27 |
| 12790 | - | - | - | - | 1 | - | 1 |
| **Total** | *158* | *186* | *86* | *42* | *201* | *15* | *688* |
| **%Total** | 23.0% | 27.0% | 12.5% | 6.1% | 29.2% | 2.2% |  |

(Columbus Technical College, 2014)

Table 1.6 indicates that pass and fail rates from the years 2011-2013 and the percentage of the total number students.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TABLE 1.6 | | COMP1000 Grade Distribution Percentages - Fall-(11-13) | | | | | | | |
|  | **A** | | **B** | **C** | **D** | **F** | **EX** | **IP** | **WF** |
| 201412 | 23.0% | | 27.0% | 12.5% | 6.1% | 29.2% | - | - | 2.2% |
| 201312 | 22.1% | | 22.9% | 15.1% | 5.8% | 32.7% | 0.8% | - | 0.5% |
| 201212 | 23.6% | | 28.0% | 17.3% | 7.0% | 21.9% | - | 0.3% | 1.9% |
| AVG. | 22.9% | | 26.0% | 15.0% | 6.3% | 27.9% | 0.8% | 0.3% | 1.5% |

(Columbus Technical College, 2014)

From looking at the data, the average between fall 2011 and fall 2013 indicates about a 36% fail rate of the introductory computer course, with a grade D or lower. This indicated to the administration, faculty and the QEP Committee that for CTC students to be able to be successful not only in their coursework, but in the workforce, Columbus Technical College needed to focus the attention of the QEP towards the topic of computer literacy. With efforts to be advocates for student success, the College would like to provide intervention for computer literacy for students as early as being admitted to the college and through their entire academic program of study.

# QEP DEVELOPMENT

## Definition of the Topic

For this quality enhancement plan, we define computer literacy as a basic skill set in computer operations inclusive of. web-browsers, electronic communication, applications, and understanding the concepts, terminology, and operations that relate to computer use. Moreover, it references the comfort level one has with using computer programs and other applications that are relevant to their academic program of study or chosen profession.

## Identifying Student Learning Outcomes

Based on the course work in the introductory computer course, students need to be competent in databases, spreadsheets, basic concepts, presentations, word processing, file management, information, and communication. Word processing is important. “Today, the skill of typing (now known as word processing) is essential for anyone who accesses a computer. Students who have grown up navigating computers may have basic typing skills, but they often lack proficiency in technique, speed, and accuracy” (Dymond, Neeper, &Fones, 2010, p. 33).”The Quality Enhancement Program (QEP) seeks to improve students’ computer knowledge campus wide and facilitate a higher pass rate in the introductory computer course. The SLOs for the QEP have also been expanded to reflect a broader range of knowledge that will be beneficial to students.

|  |  |
| --- | --- |
| TABLE 2.1 | QEP SLOs |
| 1. **The student will understand the basic functions of computer usage** | |
| 1. Student has defined and identified basic parts of the computer (hardware components, keyboard, mouse, and monitor). | |
| 1. Student has operated a mouse (right click – left click functions). | |
| 1. Student has saved documents, uploaded and downloaded files, sent documents electronically, etc… | |
| 1. Student has explored ways to navigate between different computer applications. | |
| 1. **The student will demonstrate a basic understanding of Microsoft Office Suite** | |
| 1. Student has demonstrated basic competency in the Microsoft PowerPoint application. | |
| 1. Student has demonstrated basic competency in the Microsoft Excel spreadsheet application. | |
| 1. Student has demonstrated basic competency in the Microsoft Word application. | |
| 1. **The student will demonstrate an understanding of how to use the learning management system** | |
| 1. Student has logged into LMS course shell successfully. | |
| 1. Student has checked, read, and replied to outlook email or course management (LMS) communication. | |
| 1. Student has clicked, viewed, and uploaded assignments to drop box within LMS. | |
| 1. Student has completed electronic assessments and participated in online discussion forums within the LMS. | |
| 1. Student has viewed grades, syllabi, and course announcements within the LMS. | |
| 1. Student has navigated effectively in a virtual library for research based projects through the LMS. | |

(N. Jackson, personal communication, August 21, 2014)

**REVIEW OF LITERATURE**

Columbus Technical College determined that there was an approximate 36% student fail rate of the introductory computer course. If our students do not possess the basic computer skills, it will not only impede their academic success but they will not be able to meet and exceed the skills required when they enter their profession, if they can even make it that far. The research uncovered by the Literature Review Committee also indicates that graduates with computer skills would be more valuable and could demand higher compensation. The correlation with statistical data obtained from the Office of Institutional Effectiveness and the literature are validated within the review.

The United States Department of Commerce recognizes that digital or computer literacy is necessary for today’s jobs:

Ninety-six percent of working Americans use new communications technologies as part of their daily life, while sixty-two percent of working Americans use the Internet as an integral part of their jobs. High-speed Internet access and online skills are not only necessary for seeking, applying for, and getting today’s jobs, but also to take advantage of the growing educational, civic, and health care advances spurred by broadband. For example, an increasing amount of activities – such as taking college classes, monitoring chronic medical conditions, renewing your driver’s license, tracking your child’s school assignments – are now commonly conducted online. (United States Department of Commerce, 2011)

The United States Department of Commerce also notes that training is needed. In *Digital Nation: Expanding Internet Usage*, it was reported that 28 percent of Americans do not use the Internet at all. Nearly one-third or 32 percent of U.S. households do not have broadband service. The two most common reasons cited are expense at 25 percent, and that it is perceived as not needed at 46 percent. This paper also reports that “There are notable disparities between demographic groups: people with low incomes, disabilities, seniors, minorities, the less-educated, non-family households, and the non-employed tend to lag behind other groups in home broadband use.” (NTIA, 2011).

The U.S. Department of Commerce states that while there is no single solution, increasing digital literacy training among non–users is the key to opening doors to opportunity for job seekers (United States Department of Commerce, 2011). Also citing The U.S. Department of Commerce, while there is no single solution, increasing digital literacy training among non–users is the key to opening doors to opportunity for job seekers (United States Department of Commerce, 2011).

The QEP literature review also found literature that indicates graduates with computer skills would be considered more valuable, as they have a higher skill set, and could demand higher compensation. In a study done by Gang Peng and Rangamohan V. Eunni at Youngstown State University, it was found that:

Employees possessing higher and broader sets of computer skills would be more valuable and productive, and therefore would be compensated more for these skills. This result also confirms the SBTC (skills-biased technological change) argument that increased investment in IT equipment at workplace due to exogenous computer price decline, coupled with organizational redesign and changes in products and services, has shifted the demand to more skilled and educated employees, particularly those commanding relevant computer skills. As a result, IT-skilled employees are compensated higher in the labor market. (2011)

Joann Goode, professor in Education Studies at the University of Oregon, writes in her article that the faculty and staff of colleges in her study presume, often inaccurately, that the student who is entering the college will have the necessary technology and computer skills required to navigate through this process (Goode, 2010).

In this study, 33 percent of low-income students ranked in the lower quartile of technology performance. These students took over twice as long to complete assignments and stated they avoided courses with technology (Goode, 2010). The Intersegmental Committee of the Academic Senates of the California Community Colleges and the California State University and the University of California, found that 54 percent of faculty recommend or require students to evaluate Web sources. Additionally, Goode points out that enrolling in classes, managing a virtual course, and applying for financial aid all require a certain degree of computer sophistication (2010).

The use of technology in higher education has increased due to lower costs, greater availability, and the belief that students with various learning styles will have higher rates of participation, learn more effectively, and enjoy learning more (Regalado, 2010).

The NMC (New Media Consortium) Horizon Report: 2012 Higher Education Edition listed the key drivers of educational technology adoptions for the period 2012 through 2017:

* People expect to be able to work, learn, and study whenever and wherever they want to
* The technologies we use are increasingly cloud-based, and our notions of IT support are decentralized
* The world of work is increasingly collaborative, driving changes in the way student projects are structured
* The abundance of resources and relationships made easily accessible via the Internet is increasingly challenging us to revisit our roles as educators
* Education paradigms are shifting to include online learning, hybrid learning and collaborative models

**Columbus Technical College and Demographics**

The QEP Committee deemed it necessary to explore the demographic composition of the student body as it could provide evidentiary explanations to the College’s high fail rate of the introductory computer course and how to best address it from the literature available. In this area, the QEP Committee has incorporated comparisons to illustrate a correlation on how the literature available on computer literacy, especially in terms of demographics, is essential to note because it can be directly compared to the composition of the Columbus Technical College student body.

Columbus Technical College would like to challenge students in the classroom by using active learning techniques that motivate students to become more engaged. Computer Technology is a tool that can be used for such efforts and is a driving force in the design of curriculum in higher education. Additionally, computer technology has advantages which include having access to large amounts of educational information outside of the institution and the ability to serve students outside of the direct service area.

Referring again to Maria Relgado’s doctoral dissertation, she reported that students in her study who have had access to technology are able to take advantage of these resources, but the students with lower socioeconomic status are entering college without the learning experiences associated with technology . The difference in having access to technology and the resulting lack of skills has created digital divisions upon entering students (Regalado, 2010).

Regalado found that the two year institutions that were part of her study, that had demographics of a higher percentage of female students, students of color, low-income students, first-generation college students, immigrant students, and employed students who attend college on a part-time basis, reported a greater disparity in the digital divide.

This study should be considered, and is relevant, because the demographics that Regalado reports are very similar to the demographics of Columbus Technical College. The following data was provided by the Columbus Technical College Office of Institutional Effectiveness.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| TABLE 3.1 | Student Demographics at Columbus Technical College | | | | | |
| **Definition** | | **Demographic** | **AY2012** | **AY2013** | **AY2014** | **AVG.** |
| Recvd. needs-based Fin. Aid. | | Econ. Disadv. | 3947 | 4072 | 3508 | 3842.3 |
| Enrolled in Remedial Courses | | Acad. Disadv. | 1705 | 1708 | 1558 | 1657.0 |
| Cntys <600/mi.2 Pop. Density | | Rural Cntys | 1250 | 1231 | 1114 | 1198.3 |
| Not White | | Minority | 3475 | 3700 | 3237 | 3470.7 |
| <12 yrs. or GED | | Low Ed. Lvl. | 1067 | 1246 | 1136 | 1149.7 |
|  | | TOTAL | *5928* | *6295* | *5438* | *5887.0* |
|  | | Econ. Disadv. % | 66.6% | 64.7% | 64.5% | 65.3% |
|  | | Acad. Disadv. % | 28.8% | 27.1% | 28.7% | 28.2% |
|  | | Rural Cntys % | 21.1% | 19.6% | 20.5% | 20.4% |
|  | | Minority % | 58.6% | 58.8% | 59.5% | 59.0% |
|  | | Low Ed. Lvl. % | 18.0% | 19.8% | 20.9% | 19.6% |

(K. Peoples, personal communication, August 21, 2014)

This information displayed above shows that a majority of the student body comes from economically disadvantaged backgrounds and that they are minorities. Additionally, over 47% of students enrolled as of 2014 are first-generation students (Columbus Technical College, 2014), which may also suggest limited computer literacy.

The K-12 standards for technology that have been accepted globally were established by the International Society for Technology in Education (ISTE). The ISTE standards (formally known as NETS) include a standard where students should master technology operations and concepts (ISTE Standards Students, 2007). Under this standard, students should demonstrate a sound understanding of technology concepts, systems, and operations:

* Understand and use technology systems
* Select and use applications effectively and productively
* Troubleshoot systems and applications
* Transfer current knowledge to learning

Both the Georgia Department of Education and the Alabama Department of Education have adopted these standards for their respective state school system (NETS-S Performance Tests, 2013), (Morton, 2008). Of the total number of students admitted to Columbus Technical College in fiscal year 2014, over 28% are recent high school graduates, ages 21 and younger (Columbus Technical College, 2014) The CTC student body come from the five county service areas (Chattahoochee, Harris, Talbot, Stewart- Quitman and Muscogee) and from the bordering counties in Alabama.

However, while these standards are adopted by the area secondary schools, where a percentage of the CTC student body comes from, there is still a problem with the technology skills of students entering post-secondary institutions. As the results shown previously, our entering students do not have the necessary computer literacy skills that would allow them to pass the basic introductory computer course.

Many of the younger students who have been considered “digital natives,” which is defined as someone who is considered to have always been immersed in technology (smart phones, computers, tablet computers, etc.), still do not possess the necessary computer skills to be called a digital native. The Pew Research Center has documented that 93% of high school students throughout the country have access to a computer in their home. One in four students considers themselves “cellphone only,” meaning they use their cell phone as their primary way of connecting to the internet rather than using a laptop or desktop computer, even if they have access to one. Therefore students know how and are connecting to the internet but that does not mean they are computer literate (Pew Research Center, 2013). Connecting to the internet is useful but not necessarily an essential skill that will make a student academically successful in postsecondary education or in the professional work environment.

According to the Bill and Melinda Gates Foundation statistics, only 25% of high school graduates have the necessary skills needed to be academically successful in college (Bill and Melinda Gates Foundation, 2014). The National Center for Education Statistics (NCES) shows that in secondary public schools, there is a 3:1, students to computer ratio, which means that across the country, students are sharing a computer for instructional purposes (National Center for Education Statistics, 2008). In addition, of the 15,162 instructional computers with internet access within the public school system nation-wide, only 35% of them are in secondary school education. Of the 2,663 instructional rooms in the public school system nationwide, 887 of them are in secondary schools, which are also approximately 35% (National Center for Education Statistics, 2008). Lastly, the NCES indicates that schools with a higher percentage of students who depend on reduced or free school lunches, the fewer the amount of computers connected to internet and access to computer instruction rooms (National Center for Education Statistics, 2008.)

According to the American Association of Community Colleges’ (AACC) 2014 Community College Fact Sheet, the average age of a student attending a community college is 28 (American Association of Community Colleges, 2014). In addition, the 2014 Fact Sheet, 57% of students are between the ages 22-39 and 14% are over the age of 40 (American Association of Community Colleges, 2014). Therefore, many of the students who are attending a community college are older adults, not recent high school graduates. Not all older adults who attend a postsecondary school can be considered a “digital native” either and this group of students’ requires further consideration as well.

**Common Best Practices**

**Student Skill Sets for Computer Literacy**

Before determining the best practices for a remedial course, it must be determined what basic student skill sets are desired for our student population. Listed below are the course standards as set by the Technical College System of Georgia (TCSG) and currently used at Columbus Technical College.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TABLE 3.2 | | Learning Outcomes via TCSG | | |
| **Computer Terminology** | | | | |
| **Order** | **Description** | | **Learning Domain** | **Level of Learning** |
| 1 | Identify the many uses of computers. | | Cognitive | Knowledge |
| 2 | Describe the purpose of an operating system. | | Cognitive | Knowledge |
| 3 | Describe the three basic elements of data processing (i.e. input, process, output). | | Cognitive | Knowledge |
| ﻿4 | Identify the functional units of a computer system (i.e. the processor, input devices, output devices, | | Cognitive | Knowledge |
| **Introduction to the Windows Environment** | | | | |
| **Order** | **Description** | | **Learning Domain** | **Level of Learning** |
| 1 | Use the Windows interface. | | Cognitive | Application |
| 2 | Demonstrate the ability to access a variety of software applications using the graphical user Demonstrate the ability to access a variety of software applications using the graphical user interface (GUI) features (i.e. the ability to have multiple applications open at any given time and switch from application to application). | | Psychomotor | Guided Response |
| 3 | Demonstrate the ability to use file management skills. | | Psychomotor | Guided Response |
| **Introduction to Internet and Email** | | | | |
| **Order** | **Description** | | **Learning Domain** | **Level of Learning** |
| 1 | Describe the purpose of computer networking. | | Cognitive | Knowledge |
| 2 | Demonstrate ability to access and use the Internet. | | Psychomotor | Guided Response |
| 3 | Access and demonstrate email. | | Psychomotor | Guided Response |
| 4 | Access and demonstrate online learning management systems. | | Psychomotor | Guided Response |
| **Introduction to Word Processing Software** | | | | |
| **Order** | **Description** | | **Learning Domain** | **Level of Learning** |
| 1 | Describe the purpose of word processing software. | | Cognitive | Knowledge |
| 2 | List the typical functions performed by word processing software. | | Cognitive | Knowledge |
| 3 | Demonstrate how to create, use, and save a document. | | Psychomotor | Guided Response |
| 4 | Demonstrate formatting options (i.e., typeface, font and point size, setting margins and tabs, line spacing, and justification). | | Psychomotor | Guided Response |
| 5 | Demonstrate how to modify and print a document. | | Psychomotor | Guided Response |
| 6 | Demonstrate the spell check feature. | | Psychomotor | Guided Response |
| **Introduction to Database Software** | | | | |
| **Order** | **Description** | | **Learning Domain** | **Level of Learning** |
| 1 | Describe the purpose of database software. | | Cognitive | Knowledge |
| 2 | List typical functions performed by database software. | | Cognitive | Knowledge |
| 3 | Demonstrate how to use a database. | | Psychomotor | Guided Response |
| **Introduction to Spreadsheet Software** | | | | |
| **Order** | **Description** | | **Learning Domain** | **Level of Learning** |
| 1 | Describe the purpose of spreadsheet software. | | Cognitive | Knowledge |
| 2 | List typical functions performed by spreadsheet software. | | Cognitive | Knowledge |
| 3 | Demonstrate how to create and save a spreadsheet. | | Psychomotor | Guided Response |
| 4 | Demonstrate how to modify and print a spreadsheet. | | Psychomotor | Guided Response |
| 5 | Demonstrate the graphical feature of the spreadsheet software. | | Psychomotor | Guided Response |
| **Introduction to Presentation Software** | | | | |
| **Order** | **Description** | | **Learning Domain** | **Level of Learning** |
| 1 | Describe the purpose of presentation software. | | Cognitive | Knowledge |
| 2 | Demonstrate how to create, modify, and format a presentation. | | Psychomotor | Guided Response |
| 3 | Demonstrate how to modify a presentation using custom animation techniques. | | Psychomotor | Guided Response |

(S. Conway, personal communication, August 25, 2014)

Because the requirements for the introductory computer course are determined by the Technical College System of Georgia, the SLOs will remain the same.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TABLE 3.4 | | Intro. To Computing Grade Distribution Percentages - Fall-(11-13) | | | | | | | |
|  | **A** | | **B** | **C** | **D** | **F** | **EX** | **IP** | **WF** |
| 201412 | 23.0% | | 27.0% | 12.5% | 6.1% | 29.2% | - | - | 2.2% |
| 201312 | 22.1% | | 22.9% | 15.1% | 5.8% | 32.7% | 0.8% | - | 0.5% |
| 201212 | 23.6% | | 28.0% | 17.3% | 7.0% | 21.9% | - | 0.3% | 1.9% |
| **AVG.** | 22.9% | | 26.0% | 15.0% | 6.3% | 27.9% | 0.8% | 0.3% | 1.5% |

(K. Peoples, personal communication, August 20, 2014)

Based on the above graphic, between the fall of 201l and the fall of 2013, only 63.8% of the students in the course make a C or better in the introductory computer course. This suggests that approximately a third of the students need extra learning assistance to prepare for the introductory computer course. Currently, the course is not required for a student’s first semester, but through the academic advisement process within the institution, students are normally scheduled for the introductory computer course (COMP 1000) their first semester along with other core classes because said course does not have a prerequisite requirement. Additionally, many incoming students are not prepared for the rigors of college work (Hodges et al., 2012, p. 266). Currently, there are no methods or strategies in place to assess whether entry level students are having difficulty with technology. The college has a part-time computer lab in place designed to help students with computer literacy skills. However, the limited hours of availability (4-5 hours per day) along with limited staff members make it difficult to service the 48-50 students a day that come to the lab for help.

As stated previously in this document, student learning outcomes in the introductory computer course indicate students need to be competent in spreadsheets, basic concepts, presentations, word processing, file management, information, and communication as well as skills in the use of our learning management system.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TABLE 3.6 | Duplicated Enrollment by Course Location/Delivery Method | | | | | | | | |
| Term | | **201212** | **201214** | **201216** | **201312** | **201314** | **201316** | **201412** | **201414** |
| Online Courses | | 81 | 69 | 71 | 88 | 84 | 88 | 90 | 85 |
| Dup. Online Enroll. | | 1657 | 1728 | 1547 | 2257 | 2237 | 1969 | 2043 | 1879 |
| Hybrid Courses | | 45 | 69 | 87 | 73 | 92 | 132 | 135 | 126 |
| Dup. Hybrid Enroll. | | 801 | 1183 | 1383 | 1435 | 1916 | 2158 | 2402 | 2108 |
| Lecture Courses | | 622 | 548 | 396 | 553 | 524 | 352 | 460 | 434 |
| Dup. Lecture Enroll. | | 8506 | 8055 | 4463 | 9051 | 8330 | 3857 | 7169 | 6465 |
| TOTAL On-Campus Courses | | *748* | *686* | *554* | *714* | *700* | *572* | *685* | *645* |
| TOTAL Dup. On-Campus Enroll. | | *10964* | *10966* | *7393* | *12743* | *12483* | *7984* | *11614* | *10452* |
| Off-Campus Courses | | 2 | 6 | 0 | 11 | 34 | 0 | 35 | 38 |
| Dup. Off-Campus Enroll. | | 10 | 139 | 0 | 170 | 416 | 0 | 397 | 410 |
| TOTAL Courses | | *750* | *692* | *554* | *725* | *734* | *572* | *720* | *683* |
| TOTAL Dup. Enroll. | | *10974* | *11105* | *7393* | *12913* | *12899* | *7984* | *12011* | *10862* |
| % Online Courses | | 10.8% | 10.0% | 12.8% | 12.1% | 11.4% | 15.4% | 12.5% | 12.4% |
| % Dup. Online Enroll. | | 15.1% | 15.6% | 20.9% | 17.5% | 17.3% | 24.7% | 17.0% | 17.3% |
| % Hybrid Courses | | 6.0% | 10.0% | 15.7% | 10.1% | 12.5% | 23.1% | 18.8% | 18.4% |
| % Dup. Hybrid Enroll. | | 7.3% | 10.7% | 18.7% | 11.1% | 14.9% | 27.0% | 20.0% | 19.4% |
| % Lecture Courses | | 82.9% | 79.2% | 71.5% | 76.3% | 71.4% | 61.5% | 63.9% | 63.5% |
| % Dup. Lecture Enroll. | | 77.5% | 72.5% | 60.4% | 70.1% | 64.6% | 48.3% | 59.7% | 59.5% |
| TOTAL % On-Campus Courses | | *99.7%* | *99.1%* | *100.0%* | *98.5%* | *95.4%* | *100.0%* | *95.1%* | *94.4%* |
| TOTAL % Dup. On-Campus Enroll. | | *99.9%* | *98.7%* | *100.0%* | *98.7%* | *96.8%* | *100.0%* | *96.7%* | *96.2%* |
| % Off-Campus Courses | | 0.3% | 0.9% | 0.0% | 1.5% | 4.6% | 0.0% | 4.9% | 5.6% |
| % Dup. Off-Campus Enroll. | | 0.1% | 1.3% | 0.0% | 1.3% | 3.2% | 0.0% | 3.3% | 3.8% |

(K. Peoples, personal communication, August 22, 2014)

According to the graphic above, about 30.85% of courses in the fall 2014 were hybrid or online courses available through the learning management system. Furthermore, all of the courses taught at the college are at least web enhanced with a learning management system component. This information shows that knowing how to use and navigate the learning management system will be pertinent for approximately 95% of the classes taught at the college. “Orientation and training should be held for [all] […] students to provide them with the necessary skills for mastering CMS tools” (McGee, Carmean, & Jafari, 2005, p. 139). Students without the skills to navigate and utilize the learning management system will be working at a disadvantage. “Students will be less motivated to use [a] CMS if they perceive that CMS is difficult to use” (Korchmaros& Gump, 2009, p. 161-162).

To help implement the QEP, the following will take place:

* The creation of a remedial course tied to the introductory computer course
* An assessment test for entry level students to gauge their level of computer proficiency. This test will also be used as placement into a remedial course if a student scores less than 60%
* The expansion of an existing computer lab, transforming it into a dedicated computer lab to help students learn computer knowledge

**Best Practice on Creating Computer Remedial Course**

Since approximately one third of the students are not performing well in the introductory computer course, the college will launch interventions such as pre-assessment for new students entering the college and providing remediation for students to improve the pass rate in the introductory computer course. The following technical or community colleges have also implemented a supplemental course in basic computing:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| TABLE 3.7 | | Community College Survey | | | | |
| **College** | **Course** | | **Type** | **Credit Hrs** | **Method** | **Notes** |
| Brookhaven College | Introduction to Computing | | Developmental | 3 | Placement | Uses Accuplacer |
| Kellogg Community College | Basic Computer Literacy | | Developmental | 3 | Optional | Pre and posttest for assessment |
| Mid-South Community College | Computer Keyboarding  Introduction to Computers | | Developmental | 1 | Optional | COMPASS typing  Survey/Consultation |

Regarding the implementation of a remedial course, one best practice is to intervene early. “The earlier the intervention, the greater the likelihood the student can be helped and retained” (Reginald, 2009, p. 17). Currently, there are no early detection measures in place to detect students with computer skill deficiencies. “[In] [s]ynthesis studies of the last 15 years […], nearly all of the reviews agree that mandatory assessment and placement of students into developmental education programs helps improve students’ success” (Zachry&Schneider, 2010, p. 3). This assessment should take place “upon students’ entry into college” (Zachry& Schneider, 2010, p. 8).

It is recommended that Columbus Technical College implement early intervention with an assessment test that will be mandatory for newly enrolled students. If students fail to meet expectations of this assessment, they will be placed in the remedial course to help them gain competency. Additional information on assessment given to entry level students can be found in another section of this document.

Designing an effective remedial course is very important to the overall success of the student body. Multiple studies have found “developmental education students’ performance at a national scale […] few students complete their developmental education sequence, move on to credit-bearing courses, or graduate with a degree or certificate” (Zachry & Schneider, 2010, p. 9). Some methods of reversing that trend are available. These promising models need to be considered for Columbus Technical College’s remedial program. One possibility according to one study suggests “establish[ing] a personalized remedial learning system to assist learners in remedial learning after an online assessment” (Tung-Cheng, Ming-Che, & Chien-Yuan, 2013, p. 32). Another research paper suggests the following best practices:

1. Interventions aimed at helping students avoid developmental education
2. Interventions designed to accelerate students’ progress through developmental education
3. Programs that provided contextualized learning opportunities
4. Programs and services to further support developmental learners’ educational advancement.

(Zachry & Schneider, 2010, p. 11-12).

Additional best practices include early intervention, selective remediation in only the areas students are lacking ability, not assuming the level knowledge students have, giving the same test before and after remediation to demonstrate learning improvement, and experimenting with student groups called “learning communities” (Stuart, 2009, p. 17). Learning communities are a group of students that stay together throughout their early course work to foster a sense of community and support (Stuart, 2009, p. 17).

Columbus Technical College will consider best practices when forming the remediation course-COMP 0099. A summary of additional best practices recommended by studies in Zachry & Schneider are surmised in the following chart (Zachry & Schneider, 2010, p. 5-6).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TABLE 3.8 | | Findings Summary | | | | | | | |
|  | | **Roueche and Roueche (1993)** | | **Boylan, Bonham and Bliss (1997)** | **McCabe and Day (1998)** | **Boylan (2002) What Works** | **Schwartz and Jenkins (2007)** | **Center for Student Success (2007)- CA Basic Skills Initiative** | **Sperling (2009)--MA Community College** |
| **MANAGEMENT AND ADMINISTRATION** | | | | | | | | | |
| College makes a stated commitment to developmental education | x | |  | | x | x | x | x | x |
| Mission statement for developmental education | x | |  | | x | x | x | x |  |
| Developmental education should be centralized into one department or highly coordinated | x | | x | | x | x |  | x | x |
| Policies should require enrollment in and completion of developmental education early in college career |  | |  | |  |  |  |  |  |
| Developmental education required before enrollment college-level courses | x | |  | |  |  |  |  |  |
| Collaboration between support services staff and faculty/academics |  | |  | |  | x |  | x | x |
| Ongoing evaluations conducted of programs and policies; programs and policies revised as needed | x | | x | | x | x | x | x | x |
| **ASSESSMENT AND PLACEMENT** | | | | | | | | | |
| Provide preparation or orientation to placement tests |  | |  | |  | x | x |  | x |
| Mandatory assessment upon entry into college | x | | x | | x | x |  | x |  |
| Mandatory placement into developmental education | x | | x | | x | x |  |  |  |
| Colleges should manage faculty and/or students' expectations |  | |  | |  | x | x | x | x |
| **FACULTY** | | | | | | | | | |
| Sufficient proportion of courses are taught by full-time faculty |  | |  | |  | x |  | x | x |
| Enthusiastic and knowledgeable faculty hired | x | |  | |  | x | x | x |  |
| Adjunct faculty are integrated within the college community and dev ed practice |  | |  | |  | x | x |  | x |
| Collaboration among faculty | x | |  | |  | x | x | x | x |
| Professional development provided to faculty | x | |  | |  | x | x | x | x |
| Orientation should be provided for new dev ed faculty |  | |  | |  | x |  | x | x |
| **PEDAGOGY/CURRICULUM FOR INSTRUCTION** | | | | | | | | | |
| Curriculum and teaching tailored for adult learning |  | |  | |  |  | x |  |  |
| Active learning strategies employed, including collaborative learning | x | |  | |  | x | x |  |  |
| Peer review/coaching |  | |  | |  | x | x |  | x |
| Problem-based learning |  | |  | |  | x | x | x | x |
| Contextualized/real-world instruction | x | |  | |  |  | x | x | x |
| Culturally responsive teaching |  | |  | |  | x | x | x |  |
| Higher order/critical thinking skills |  | |  | |  | x | x | x | x |
| Self-directed learning/self-monitoring/teaching study skills | x | |  | |  | x | x | x | x |
| Learning communities |  | |  | |  | x | x | x | x |
| Computer-assisted teaching | x | |  | | x | x | x |  | x |
| Alignment between and among dev ed and college level courses | x | |  | |  | x | x | x | x |
| Use Mastery Learning | x | |  | |  | x | x | x |  |
| Employ varied instructional methods to accommodate diverse learning styles | x | |  | | x | x |  | x |  |
| **STUDENT SERVICES** | | | | | | | | | |
| Comprehensive support services offered which are tailored to students' needs and generally linked to dev ed program |  | |  | | x | x | x | x | x |
| Attention is paid to the social, emotional, and cognitive development of the student (holistic approach) |  | |  | | x | x | x | x |  |
| Proactive and frequent counseling/advising provided |  | | x | | x | x | x | x | x |
| Tutoring or external labs provided for extra support |  | | x | | x | x |  |  |  |
| Training provided to tutors |  | | x | | x | x |  |  |  |

(Zachry & Schneider, 2010, p. 5-6)

**Peer Monitored Computer Labs**

The literature regarding peer-to-peer learning programs, such as a peer monitored computer lab is mixed. However, the literature does show that a well-planned, well trained and thoughtfully executed peer monitored computer lab could be an excellent way to contribute to the computer literacy education that Columbus Technical College wants to implement.

In one instance, a survey was conducted at Cornell University’s College of Agriculture and Life Sciences which questioned 3,084 students. The students were asked to rate the effectiveness of different learning methods regarding computer literacy (Davis, 1999). Cornell created several micro computing labs were that were designed for drop-in use by students. The goal of opening these labs were to offer assistance to students to increase their computer literacy skills. The labs were staffed with student assistants, not full time faculty and were open daily from 8 AM to midnight with limited hours on weekends (Davis, 1999).

The results of the survey indicated that students found these labs very helpful for basic computer assistance. However, students reported that the labs were not helpful in learning computer skills and the computer labs were ranked last in effectiveness of for learning computer literacy (Davis, 1999).

On the other hand, LaGuardia Community College (LCC) has developed a very successful peer-to-peer computer literacy learning system. LCC designed and implemented a program which was named the Student Technology Mentor (STM) for their new [at the time] Center for Teaching and Learning (CTL). Since its creation, it has blossomed into not only serving faculty and staff but has also provided numerous benefits to the student participants which include:

1. Job experience
2. Technology skills
3. Connections to peers and the college community

(Corse and Devine, 2013)

Other benefits that came from the development of the program, were that the STMs were documented as achieving higher measures of success in graduating, transfer, retention and grades (Corse and Devine, 2013).

One aspect that made this program so successful was that the LaGuardia STM program rewarded STMs who demonstrated strong technology skills, interpersonal and leadership skills, and gave them advancement opportunities through promotions and higher pay (Corse and Devine, 2013). It provided more incentive for students to achieve more than the minimum of what was required and also engendered a sense of accomplishment.

Another aspect was that the LaGuardia STM program established very clear goals in the beginning, which are still the goals today. These goals are:

1. To Provide instructional support for faculty, staff and students;
2. To provide LaGuardia Community College students recruited as STMs with the necessary technology skills and;
3. To provide LCC students with work experience and internship opportunities.

(Corse and Devine, 2013)

The STMs are trained intensively for two semesters where they learned all the technologies that the college has made available, including those offered in the library such as training in database searching and effective searching of the catalog. They are also trained in the Microsoft Office Suite, web creation and design, using scanners, video and digital cameras and photo editing. After their first semester of training, the STM is assigned to various technology-based projects in departments across campus. During the second semester of training, STMs receive more advanced training in Web design and Web 2.0 technologies (Corse and Devine, 2013).

LaGuardia’s STMs are also of great assistance to the teaching librarians. STMs are embedded in the librarian’s classes to assist students during the instruction who begin to fall behind during the class. Students find the STMs beneficial because the students feel less intimidated asking their peer for assistance, rather than disrupting the class to ask for additional help from the librarian (Corse and Devine, 2013). This illustrates that not only are the STMs very helpful, for students in the lab, but also in many areas of campus. LaGuardia Community College considers them a valuable asset for the services they provide.

**Assessment**

From the day a student walks on campus, the first stop is usually the assessment center. Currently at Columbus Technical College, the COMPASS test is used as a measure of assessment which attempts to determine a student’s proficiency in math, reading and writing skills. From there they are sorted into their respective class levels and all students must take an introductory computer course offered. According to Columbus Technical College statistics only a little over 62.5 % of the students who took the course in 2014 passed with a C or better (Columbus Technical College, 2014), suggesting a developmental class is needed to help bring students up to a college level expectation.

**Defining Assessment**

Assessment and evaluation are integral components of collegiate instruction. Assessment provides evidence of student achievement, strengths, and weakness that faculty and administration can and should be used. “The instruments and techniques used should be theory-based, reliable, valid and authentic, representing the tasks students must tackle. Moreover it is important that instructors use multiple data sources across multiple contexts rather than just one instrument or measure” (Hodges, Simpson, & Stahl, 2011).

The National Council on Measurement in Education defines assessment as, “A tool or method of obtaining information from tests or other sources about the achievement or abilities of individuals (National Council on Measurement in Education, 2014).” Ohlemacher and Davis say that assessment is a critical component of higher institution learning. It is more than a mere test given to students to determine their competencies in a particular area. It is an ongoing process that focuses on understanding, evaluating and improving student learning (Ohlemacher & Davis, 2014)

The American Association of Higher Education also outlines the principle goals of assessment as:

* The assessment of student learning begins with educational values.
* Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.
* Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes
* Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.
* Assessment works best when it is ongoing, not episodic.
* Assessment fosters wider improvement when representatives from across the educational community are involved.
* Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.
* Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.
* Through assessment, educators meet responsibilities to students and to the public.

(Casper College, 2006)

There are several elements that require assessment regarding a student’s computer literacy. One is providing a measure that will quantify the students’ current abilities. Another is assessing the validity of the results of the assessment and asking how accurate the measure is at placing the student in the appropriate level class. Lastly, an assessment of the effectiveness of placing students in an introductory computer course or a learning support class designed to teach the students and raise their knowledge of technology to the college level is needed.

Two-year institutions have been open-door institutions and have struggled with the practice of having to educate entering students who are unprepared for college-level coursework (Hughes, 2011). Despite often being a stepping stone to a four year institution, community colleges still must have some level of standards to maintain their academic legitimacy and integrity (Hughes, 2011).

As stated previously, a significant population of the Columbus Technical College Student Body comes from an economically disadvantaged backgrounds. The Pew Research Institute found that students who come from economically and academically challenged areas were less likely to access internet in any capacity. It is important to note that internet access is only one element of computer literacy.

Most community colleges have some method of assessment that is usually a test that students are required to take prior to their first semester to place them either in a college level computer course or a learning support computer class. Katherine Hughes and Judith Scott-Clayton state that 92 percent of 2-year institutions use these results [of an assessment test] for placement into a learning support class (Hughes, 2011). They also continue to state that more than half of community college students will eventually enroll in at least one remedial course (Hughes, 2011).

When looking at introducing a learning development course for those who cannot pass a placement exam, Hughes and Scott-Clayton write that many students that are placed into a learning support class tend to not enroll because of the notion that no one wants to be put into a lower level class. They also state however, that when students have an explanation of why they are being tested, what effect this will have on their collegiate path and how to prepare for the test, they are more likely to enroll and have a better understanding of the format of taking the test (Hughes, 2011).

Assessment is not only important in placing the student into the appropriate course level but it is also important to assess the process of student placement to ensure that students are reaching the college level of computer literacy. If the assessment proves that there is not an increase in the computer literacy of the student body, then additional student support may be needed to help students achieve successful results (Casper College, 2006).

Additionally, it is important to assess students’ computer literacy skills as they enter Columbus Technical College and before they graduate for several reasons. One is that it illustrates whether or not intentional or unintentional learning outcomes are being met. This will also show if initiatives should be continued or looked at again to ensure future student success. It also shows college administrators and faculty members relevant issues that could impact student learning (Casper College, 2006).

**Northstar vs. Accuplacer**

In a July 2014 QEP Committee meeting, the college explored two assessment products as a valid and reliable pre-assessment measure for new students entering the institution. Research was conducted to determine the best placement assessment that would suit the needs of the College in determining computer literacy skills for students. This research included, contacting the representatives of various assessment products used, reading testimonials, contacting other schools who used the measures, and the capabilities of the assessment products. The QEP Assessment committee also wanted to select the assessment tool that would be the most beneficial to the students’ in guiding their education through Columbus Technical College to achieve their highest possible success level.

According to Nicole Jackson, the Dean of the School of Business at Columbus Technical College, who also served on the QEP subcommittee, Northstar and Accuplacer were the assessment tool finalists (Columbus Technical College, 2014).

Northstar, a non-profit organization, started development in 2010 by the St. Paul Public Library and St. Paul Literacy Consortium to assess and quantify digital and computer literacy. They received funding to develop, pilot and initiate testing modules for many computer applications. In 2012, other modules were added such as social media applications and one for Microsoft Excel. Test takers can receive a certificate upon completion of a module when the test is taken on their sponsored website (Northstar, 2014).

In addition, use of Northstar is free of charge, which is a huge benefit and a reason why it was seriously considered for use at CTC. It also solely focuses on testing computer and digital literacy. One shortfall of the tool is that it fails to provide any tools that would be helpful in analysis and assessment, such as comparison to other colleges of similar size, demographic and degrees awarded.

Accuplacer, is a commercial web-based placement test service. The service is able to assess students in math, reading, writing, and computer skills. Accuplacer tests millions of students yearly among 1,500 institutions, both two and four year. The test is student propelled meaning that when a question is answered correctly the test will assign a more difficult one for the next question. The next question will be less challenging if the student answers the question incorrectly. Accuplacer provides detailed reports that the administrators can use to identify the correct placement of the student and what element of computer literacy excels or needs more work in. Students will also receive an immediate score upon completion of the test (Accuplacer, 2014).

The literature of using Accuplacer is limited and there are no studies completed with the use of Northstar, which is one main reason why it was not selected as our assessment method. The literature relating to Accuplacer as an assessment tool shows that overall it is very good in predicting student success and whether or not they will likely succeed in their college career (Hughes, 2011). However many of the studies of Accuplacer only compare the validity of the results with English and math and do not have any data on the accuracy and validity of the test scores for computer skills. In addition, data shows that the Accuplacer exam is most accurate when there is an overall student failure rate of 25% or less (Hughes, 2011).

Currently, at Columbus Technical College, the pass rate of the introductory computer course varies from 56-60% each semester (Columbus Technical College, 2014), leaving approximately 36-40% of the student body who are not able to pass the basic computer skills course. Therefore careful assessment of not only the validity of the assessment needs to be established but also a look at the pass and fail rates of the introductory computer course and the learning support (remedial) class.

**Improving the Assessment Process**

As the plan moves forward, College finds results that indicates that pre-assessment strategies are ineffective Community College Research Center (CCRC) provides very useful suggestions. They identify the following points to look at:

1. Preparing the students for the process.

This is an element that is currently in practice. There are links on the Columbus Technical College website to assist students in preparation of the exam. There are links to practice tests and several resources available to help prepare. The same could be done for the computer literacy placement exam. Tutors might also be needed to help incoming students prepare for the computer placement exam, since many of the incoming students may have had limited or no access to a computer (Hodara, Smith Jaggars, & Mechaur Karp, 2012).

1. Aligning standards of college readiness with expectations of college-level coursework

CCRC describes this point that the test itself may not be a good instrument if the skills needed to be successful in taking the exam are not aligned with the foundation required for success in college courses (Hodara, Smith Jaggars, & Mechaur Karp, 2012). Unsuccessful results from the placement test may indicate a number of issues that could be the test itself or the expectations of what college level work is considered.

1. Flexibility in program standards.

Institutions recognize that different areas of study require different levels of academic preparedness. Many schools set different cutoff scores and prerequisite requirements for different college level courses (Hodara, Smith Jaggars, & Mechaur Karp, 2012).The CCRC report uses the Georgia Technical College System as an example, where cutoffs for an associate degree programs are higher than the certificate degree programs. Having varying standards provide more pathways for success. Flexibility in program standards also allows the institution to change as the job market and industry changes (Hodara, Smith Jaggars, & Mechaur Karp, 2012).

1. Raising cutoff scores

Using across the board cutoff levels can cause misalignments between the placement test and necessary college-level skills. Meaning, if there are low success rates in introductory college coursework, the cutoff score may need to be adjusted as was seen in the CCRC study with the Georgia Technical College System (Hodara, Smith Jaggars, & Mechaur Karp, 2012).

1. Developing customized exams

Exams may need to be customized by the institution so that the test is aligned with the level of information students are expected to be at (Hodara, Smith Jaggars, & Mechaur Karp, 2012).

1. Assessing multiple measures related to college success

Even when there is preparation for the exam and all standards are aligned with the student’s program of study, the exam’s placement accuracy may also be limited by assessing other academic and non-academic factors. Taking a more comprehensive approach in the assessment of student placement may prove to improve the chances of student success (Hodara, Smith Jaggars, & Mechaur Karp, 2012).

# QEP DESIGN

## Strategy 1: Implement Pre-Assessment for new students on computer literacy

Columbus Technical College will implement a pre-assessment for all new students entering the college. Under the original structure, the college does not assess computer literacy skills and places students in the college level Introduction to Computers Course (COMP 1000) along with other core classes. Data retrieved (see Table 4.2) from the Office of Institutional Effectiveness illustrated this course was very challenging for beginning students as it was seen by the high failure (below 60%) and high withdrawal rate. From the data collected, the college determined students need to be assessed in computer literacy prior to starting their first semester with the college so that interventions can be put in place to foster student success. This test helps the college place students in basic computer skills courses or to test out of a computer skills requirement. The assessment assesses seven skills to include using the computer and managing files, word processing, spreadsheets, database, presentation, and information communication.

The pre-assessment tool (Accuplacer) is aligned with the student learning outcomes of the introductory computer course. The pre-assessment will be provided to first-time new students entering the college. Students will have to achieve a score of 60% or better to be deemed computer literate and will be eligible to enroll in the introductory computer course. Students that achieve below 60% on the pre-assessment will be routed to a remedial-learning support course in Introduction to Computers (COMP 0099).

**Implementation for Strategy #1**

In Fall 2014, the Academic Affairs Division performed a pilot assessment using Accuplacer on 40 new students entering the college. Moving forward, the Student Affairs Department (Office of Testing) will administer the Accuplacer pre-assessment through the testing center effective spring 2015. Results will be recorded in BANNER, a student information system and database of student records and information, and then the student can be advised appropriately for academic course preparation. A direct assessment measure (Accuplacer) will be used to implement this strategy and the results will be used to help remediate students for computer literacy if applicable. The Office of Institutional Effectiveness will survey all new incoming students on computer literacy using the computer literacy questionnaire as well effective spring 2015.

## Strategy 2: Develop Remediation course for Introduction to Computers

Currently, the college does not offer any remediation for new students that struggle with computer literacy. The college finds it necessary to offer a learning support-remedial course due to the approximate failure rate of 38% in the introductory computer course. The Computer Information Systems (CIS) faculty will develop four course modules, measure objectives for each module, customize tutorial material, and develop a valid/reliable pre-test and post-test for each module with the help of Microsoft Office 2013 publishers/educators (third party subject matter experts).

The remedial course (COMP 0090) will teach students basic computer skills such as how to turn a computer on, how to identify parts of the computer, how to use a keyboard, and other related basic functions for four weeks. After the student satisfies the course by receiving an “S” in all four modules, the student can then move forward to the Introduction to Computers course (COMP 1000).

The college offers a 15 week course and a 10 week (mini-mester) course in Introduction to Computers in fall and spring semester. Once the student finishes the four week remediation course, the student can enroll in the 10 week Introduction to Computers course within the same semester he/she was remediated in. Summer semester is only a ten week session, so the remedial course for Introduction to Computers will be offered for three weeks and if students satisfy the three week remediation requirement with “S”, (satisfactory) they will be able to enroll in a seven week Introduction to Computers course. If a student receives a “U” (unsatisfactory) in the remedial course, he/she will be remediated again through the Computer Support Lab on the module or modules identified as unsatisfactory in the remedial course.

**Implementation for Strategy #2**

The Computer Information Systems (CIST) faculty members in conjunction with Microsoft Office 2013 educators will construct a remedial introduction to computers course. Students will not receive a grade in the course, but will receive “S” or “U” for satisfactory or unsatisfactory. This grade will not impact students’ grade point average. The class is projected to go live in the fall of 2015.

The Computer Information Systems faculty and the QEP Implementation Team will consistently review the remedial Introduction to Computers course at the conclusion of each academic semester to make necessary modifications in order to enhance student learning. Direct assessment measures will be used such as pre-test, post-test, and evaluation of student learning outcomes as assessed by rubrics or standardized assessment. This course will be under construction fall 2014, spring 2015, and summer 2015 and be implemented in the fall semester of 2015.

## Strategy 3: Tutoring and Skills Lab

Columbus Technical College will add computer literacy support services through the computer lab ten hours a day, four days a week. Currently, the computer lab is offering services for a maximum of four-five hours per day @ four days a week. The college reviewed sign in sheets for the computer lab. On the average 45 students are served a day and of the 45 students 84% of the students visited the lab to get help with the Introduction to Computers course. The lab is currently supervised by a full-time faculty member that is teaching and advising full-time. Work study students are hired to help as funding permits, but a vast majority of the work study students that work in the lab do not have the technology skills or credentials needed to assist students with computer literacy.

To address this issue, the institution will hire another credentialed full-time faculty member to teach the remedial course and serve as the Computer Lab Coordinator. This instructor will also be responsible for forming a peer group (geek squad) to help provide tutorial services in the lab. This tutoring service will not only help students with COMP 1000 course competencies, but will help students learn how to properly use their electronic devices for educational purposes (lap tops, I-Pads, Mac books, etc.), assist with learning management system challenges, and aid with projects in program related courses that require advanced technology skills (i.e. digital portfolios, web page development, etc.). The lab will operate from 10 am-4pm and 5pm-8pm.

In addition the college will also hire three additional part-time faculty (19 hours per week) to serve as Teacher Aides for the Introduction to Computers Course and assists in the Computer Lab. These aides will float between the Introduction to Computers courses to assist full-time faculty during teaching time. Currently, The Introduction to Computers course serves 48 students per class and 15-25 sections are offered each semester. The college recognizes this is a heavy load for one instructor due to students having various learning styles and computer literacy challenges.

**Implementation for Strategy #3**

The Dean of Academic Affairs for the Business Division will hire and supervise a full-time lab coordinator/instructor by fall semester 2015 (year 2 of the QEP). The lab coordinator will hold an open house with students in the Computer Information Systems Program to form a “Geek Squad” (learning community) for peer to peer learning initiatives in computer literacy. The Lab Coordinator will supervise the Geek Squad and any part-time lab assistants. The Lab Coordinator will keep daily sign in logs, construct monthly reports for the quality enhancement team and Office of Institutional Effectiveness, and work collaboratively with the Retention Manager and Computer Information Systems faculty members as needed.

To assure tutoring and the computer lab is effective, all of the faculty hired for the computer lab will be required to attend professional training on tutoring techniques. Indirect and direct assessment measures will be used to determine the effectiveness of the computer lab. (final grades in Introduction to Computers course, Retention manager reports on Introduction to Computers course, surveys to students)

## Strategy 4: Implement a Student Learning Outcome for computer literacy in all programs at the institution.

Columbus Technical College has begun to implement a general education core competency in all student learning outcomes for credit based educational programs within the college. The QEP committee found it advantageous to incorporate a learning outcome on computer literacy as well. Each division, in conjunction with their academic dean, will be responsible for measuring the success of the computer literacy student learning outcome through projects, presentations, assignments, or other course/occupational related work.

Currently, there is a quality enhancement team in place through the Office of Institutional Effectiveness assigned to student learning outcome initiatives for the college. This committee and assigned academic affairs program faculty will collaborate on how to implement this strategy

**Implementation for strategy #4**

In the fall of 2015 and spring of 2016, the student learning outcomes committee in collaboration with assigned academic affairs program faculty will work together to develop student learning outcomes for all programs in the institution. Professional development for the entire academic affairs faculty will occur in summer 2016 on how to record and document data for the computer literacy student learning outcome. In fall 2016, the college will implement and require all academic programs across the institution have a student learning outcome devoted to computer literacy.

The student learning outcome committee is comprised of several faculty members from all divisions (Business, General Studies, Professional and Technical Studies, Health Sciences). Program faculty and said committee will collaborate to explore direct assessment options and rubrics to be used for evaluation of outcomes. The results of technology based student learning outcomes will be documented and stored in the Office of Institutional Effectiveness.

**Institutional Capability**

The College has allocated resources and developed a marketing plan to support and ensure the capability of implementation of the QEP over its five year span.

**Budget and Resources**

Columbus Technical College is fiscally stable. CTC has adequate financial resources to support the scope of its programs, services, and the College as a whole. Sufficient lab, classroom, office space, computers, telecommunications and supplementary materials are included as resources.

The College developed the **C**omputer **L**iteracy **I**s **C**ritical **K**nowledge QEP in an effort to improve student computer literacy. In full support of Columbus Technical College’s mission, the QEP budget demonstrates a sustaining financial commitment for the five-year life of the project. During fiscal year 2015, pre-implementation stage, $11,750.00 will be spent to on promotional items, printing and publications. These costs are necessary for the effective development of the QEP. An explanation of budgetary categories is presented in detail in the following table.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | |
|  | | | | | | | |
|  | | | | | | | |
|  |  |  |  |  |  |  |  |

**COLUMBUS TECHNCIAL COLLEGE**

**5 - Year Budget Estimate**

**PROPOSED QEP BUDGET**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Line Item** | **2015** | **2016** | **2017** | **2018** | **2019** | **Total** |
| **Personnel:** |  |  |  |  |  |  |
| **QEP Co-Directors** | **$39,217.00** | **$ 40,394.00** | **$ 41,606.00** | **$ 42,854.00** | **$ 42,854.00** | **$ 206,925.00** |
| **50% Salary Lab Facilitator** | **$ 0.00** | **$ 36,848.00** | **$ 37,954.00** | **$ 39,092.00** | **$ 39,092.00** | **$ 152,986.00** |
| **Computer Lab Support Aides** | **$ 0.00** | **$ 35,000.00** | **$ 35,000.00** | **$ 35,000.00** | **$ 35,000.00** | **$ 140,000.00** |
|  |  |  |  |  |  |  |
| **Total Personnel** | **$39,217.00** | **$ 112,242.00** | **$ 114,560.00** | **$ 116,946.00** | **$ 116,946.00** | **$ 499,911.00** |
|  |  |  |  |  |  |  |
| **Instructional Software and Testing Supplies** | **$12,600.00** | **$ 10,400.00** | **$ 9,400.00** | **$ 9,000.00** | **$ 9,000.00** | **$ 50,400.00** |
|  |  |  |  |  |  |  |
| **Travel** | **$ 6,000.00** | **$ 2,000.00** | **$ 2,000.00** | **$ 2,000.00** | **$ 2,000.00** | **$ 14,000.00** |
|  |  |  |  |  |  | **$ -** |
| **Staff Development** | **$ 4,000.00** | **$ 4,000.00** | **$ 4,000.00** | **$ 4,000.00** | **$ 4,000.00** | **$ 20,000.00** |
|  |  |  |  |  |  |  |
| **Marketing** |  |  |  |  |  |  |
| **Promotional Items** | **$11,750.00** | **$ 2,100.00** | **$ 750.00** | **$ 750.00** | **$ 1,700.00** | **$ 17,050.00** |
|  |  |  |  |  |  |  |
| **TOTAL** | **73,567.00** | **$ 130,742.00** | **$ 130,710.00** | **$ 132,696.00** | **$ 133,646.00** | **$ 601,361.00** |

**Personnel Costs**

The budget for CLICK allocates $ 499,911.00 for personnel costs for the five-year project. Included in this cost is a prorated portion of salary and benefits for a faculty member and an assistant dean who will serve as co-directors. Additional costs include salary for a part-time computer lab facilitator.

**Instructional Software and Testing Supplies**

Funds have been allocated to purchase Accuplacer access and accessories. In addition, resources for training supplies are a part of this allocation. Posters, displays, and lab supplies are also resources in this line item. Instructional software and testing supply costs total $50,400.00 for the five-year period.

**Marketing**

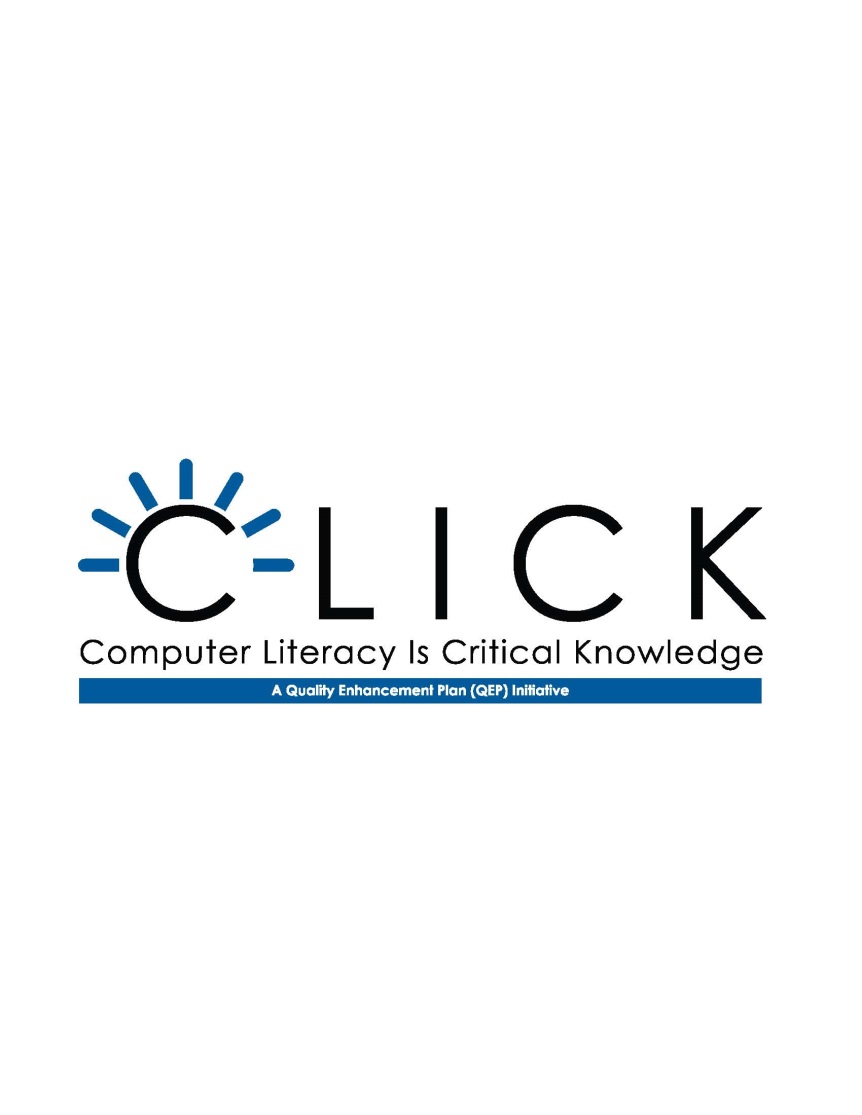
The marketing budget includes costs for printing, promotional items, and publications. Targeted QEP events are will be held to encourage interest and participation. Marketing costs total $17,050.00 for the five -year period.

**Marketing the QEP**

Columbus Technical College’s (CTC) Quality Enhancement Plan (QEP) Marketing Subcommittee was established to promote the QEP while informing both internal and external stakeholders of the plan and its importance. Stakeholders include faculty, staff, students, board members, and the general public. The marketing committee consists of six individuals: Exec. Dir. of Community & College Relations (chair), Marketing & Branding Manager, Dir. of Student Success Center, Recruitment & Student Activities , Paralegal Program Director, as well as a student organization representative and a student government representative.

July 2013, the initial marketing effort for the QEP began with a student incentive drawing to encourage student participation in the QEP topic selection survey. The names of all students participating in the survey were entered into a drawing for an iPad mini. In May 2013, the QEP Marketing Subcommittee was charged with developing a communications plan that would be fun, informative, and memorable. They were asked to create a communications plan that would create interest and excitement for the QEP, while maintaining an open communications channel. The plan is also expected to provide accurate and understandable information and updates, and encourage students to take appropriate action to improve their basic computer skills.

At a meeting held July, 2014, the committee voted on the below logo and theme of “CLICK” which stands for **C**omputer **L**iteracy **I**s **C**ritical **K**nowledge. There is also a mascot – “Linx the Mouse.” The committee chair submitted a draft communication plan and tentative launch during that same meeting and topics were discussed for the launch and an adjoining timeline. Once the communication plan was approved, the committees begin implementation.





Additional members were added to the committee to bring in additional personnel to assist with the successful planning and execution of CLICK. During August, 2014, Columbus Technical College held there Annual Planning Retreat where CLICK and Linx the mascot were introduced. The marketing committee reconvened the following day to plan a kick-off event for the entire CTC community. Posters, banners, digital signage, social media and website updates will be continuous to keep CLICK at the front of everyone’s minds. The committee is planning for the use of several promotional items possibly including: tee shirts, USB drives, stress ball “mice” and even a grand prize of a tablet. There will even be a committee member donning a “Linx” mascot costume to keep everyone excited.

Both the steering and marketing committees are committed to student success in computer literacy via continuous communication about the QEP and fulfillment of the plan. During the five-year implementation timeline, there will be annual QEP refresher sessions. The refresher will keep CLICK at the forefront of all stakeholders’ minds.

# Revised QEP Assessment

Assessment of the QEP is focused on the assessment of the student learning outcomes (table 2.1). Assessment will take place across the campus through admissions testing, in class assessments, surveys, and institutional data collection. Assessment will involve all stake holders from students to faculty to administration and even the local board and community. It is fully understood that as we collect data and review data adjustments may need to be made to have the greatest impact on student learning.

|  |  |
| --- | --- |
| TABLE 2.1 | QEP SLOs |
| 1. **The student will understand the basic functions of computer usage** | |
| 1. Student has defined and identified basic parts of the computer (hardware components, keyboard, mouse, and monitor). | |
| 1. Student has operated a mouse (right click – left click functions). | |
| 1. Student has saved documents, uploaded and downloaded files, sent documents electronically, etc… | |
| 1. Student has explored ways to navigate between different computer applications. | |
| 1. **The student will demonstrate a basic understanding of Microsoft Office Suite** | |
| 1. Student has demonstrated basic competency in the Microsoft PowerPoint application. | |
| 1. Student has demonstrated basic competency in the Microsoft Excel spreadsheet application. | |
| 1. Student has demonstrated basic competency in the Microsoft Word application. | |
| 1. **The student will demonstrate an understanding of how to use the learning management system** | |
| 1. Student has logged into LMS course shell successfully. | |
| 1. Student has checked, read, and replied to outlook email or course management (LMS) communication. | |
| 1. Student has clicked, viewed, and uploaded assignments to drop box within LMS. | |
| 1. Student has completed electronic assessments and participated in online discussion forums within the LMS. | |
| 1. Student has viewed grades, syllabi, and course announcements within the LMS. | |
| 1. Student has navigated effectively in a virtual library for research based projects through the LMS. | |

(Columbus Technical College, 2014)

|  |  |  |
| --- | --- | --- |
| TABLE 6.2 | QEP Assessment Plan by Levels | |
| **College/Course Level Assessments** | | **Faculty/Staff Assessment** |
| Computer Literacy Questionnaire | | Faculty Classroom Observations |
| Student satisfaction surveys on computer lab, remediation course for Introduction to Computers, and Introduction to Computers course | | Student Course Evaluations |
| Pass rate for Introduction to Computers Course | | Surveys to Internship Providers |
| Retention Rate for Introduction to Computers course | | Survey stakeholders to get feedback on computer literacy needs for workforce |
| Pretest Accuplacer® | |  |
| Pretest COMP 1000 Introduction to Computers | |  |
| Pretest/posttest –Remedial Introduction to Computers Course | |  |
| Angel (Learning Management System) Activity Reports (Logins, Mail, and Submissions) (SEMN 1000) | |  |

(Columbus Technical College, 2014)

**Student Learning Outcomes Assessment Plan**

Based on evidence from our Topic Selection Committee we hypothesized that entering college students are unable to demonstrate sufficient computer skills to perform college level work. For the first student learning outcome we have identified a computer usage exam developed by Accuplacer® as our assessment. In our pilot run of the assessment which included 40 incoming students we found a mean score of 52% which was well shy of our current cut score of 60% for competency. We would like to improve this mean 10% over the next 4 years. Data will be collected following each subsequent year.

**Table 1. SLO 1.** Students will understand the basic functions of computer usage

***Hypothesis:*** Entering college students are unable to demonstrate sufficient computer skills to perform college level work.

***Base Line Test Instrument:*** Computer Usage Exam Developed by Accuplacer®

***Baseline Test Subjects:*** 40 entering freshman at the beginning of Fall Term 2014 scored 52 out of 100

***QEP Annual Subjects:*** Students tested in future years following the conclusion of the “COMP 0090” pre-course intervention.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **a. Benchmarks \*\*** | **b. Students Tested** | **c. Achieved score** | **d. Delta Ratio (a:c)** |
| \*2018 | 76.1332 | -- | -- | -- |
| 2017 | 69.212 | -- | -- | -- |
| 2016 | 62.92 | -- | -- | -- |
| 2015 | 57.2 | -- | -- | -- |
| Baseline-2014 | Accuplacer 52  mean score | 40 |  |  |

\*QEP SLO Improvement Goal

\*\* 10% improvement over previous year’s benchmark

Based on evidence from our Topic Selection Committee we hypothesized that entering college students are unable to show college level mastery of Microsoft Office Suite components. For the second student learning outcome we have identified an Exam on Microsoft Office 13 and Windows 8 from our COMP 1000 course as our assessment. For our 458 COMP 1000 students from Fall 2014 we found a mean score of 62.19% which was well shy of our current cut score of 70% for competency. We would like to improve this mean 10% over the next 4 years. Data will be collected following each subsequent year.

**Table 2. SLO 2.** Students will apply an understanding of how to use Microsoft Office Suite products

***Hypotheses*:** Entering college students are unable to show college level mastery of Microsoft Office Suite components

***Baseline Test Instrument*:** COMP1000 - Exam on Windows 8: Microsoft Office 13

***Baseline Test Subjects:*** Entering students taking the course on Microsoft Office: COMP1000.

***QEP Annual Subjects:*** Students completing the course on Microsoft Office: COMP1000.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **a. Benchmarks \*\*** | **b. Students Tested** | **c. Achieved score** | **d. Delta Ratio (a:c)** |
| \*2018 | 91.05 | -- | -- | -- |
| 2017 | 82.77 | -- | -- | -- |
| 2016 | 75.25 | -- | -- | -- |
| 2015 | 68.40 | -- | -- | -- |
| Baseline-2014 | Office Suite pre-test  mean score 62.19 | 458 |  |  |

\*QEP SLO Improvement Goal

\*\* 10% improvement over previous year’s benchmark

Based on evidence from our Topic Selection Committee we hypothesized that entering college students are unable to adequately use the college’s learning management system (ANGEL). For the third student learning outcome we have identified Documented Student Performance in our SEMN 1000 Course through ANGEL Course Reports as our assessment. For our 717 SEMN 1000 students from Fall 2014 we found an average of 77.41 were able to login to the ANGEL learning management system, 127 submissions were received, and 192 messages were sent. We would like to improve each of these metrics 5% over the next 4 years. Data will be collected following each subsequent year

**Table 3. SLO 3.** Students will demonstrate an understanding of how to use the learning management system.

***Hypotheses:*** Entering college students are unable to adequately use the college’s learning management system (ANGEL).

***Baseline Test Instrument:*** Documented Course Performance (ANGEL Course Reports) in First Year Experience Course.

***Baseline Test Subjects:*** Entering students taking the SEMN 1000 Course

***QEP Annual Subjects:*** Students completing the SEMN 1000 Course

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **a. Benchmarks \*\*** | **b. Students Tested** | **c. Achieved score** | **d. Delta Ratio (a:c)** |
| \*2018 | (L)94.1, (S)154.4, (M)233.4 | -- | -- | -- |
| 2017 | (L)89.6, (S)147, (M)222.3 | -- | -- | -- |
| 2016 | (L)85.3, (S)140, (M)211.68 | -- | -- | -- |
| 2015 | (L)81.3, (S)133.4, (M)201.6 | -- | -- | -- |
| Baseline-2014 | Angel Course Performance Report – (L)77.41% student login rate, (S)127 student submissions, (M)192 messages sent. | 717 |  |  |

\*QEP SLO Improvement Goal

\*\* 5% improvement over previous year’s benchmark

**Goals**

The Goal of this plan is to ensure students develop or enhance their computer skills for academic success. Further, the college aspires to improve the pass rate (60% or above) in the Introduction to Computers course. Finally, the College would like to assess computer literacy skills prior to students starting their first semester, and assess student learning outcomes for the introductory computer course and their impact on program success. Of the courses offered at Columbus Technical College, 95 percent are linked to technology by way of the learning management system. The main goals of this QEP are:

1. Ensure new students have computer literacy skills needed for academic success
2. Ensure students can utilize the learning management system required by the college

**Strategies and Targets for Improvement**

The following chart illustrates the initiatives that have been set forth by the QEP Committee along with baseline data, strategies, and projected targets for improvement. (see Table 6.3 on following page)

|  |  |  |  |
| --- | --- | --- | --- |
| TABLE 6.3 | Initiatives and Baselines | | |
| **Initiative (QEP SLO#)** | **Baseline Data** | **Target for Improvement** | **Strategies** |
| Decrease the failure rate for Introduction to Computers course (1&2) | Current failure rate is about 36% | Decrease failure rate over five year period | Pre-assess Students prior to starting college (freshman)  Implement remediation course for students that test below 60% on pre-assessment  Survey students on computer literacy prior to starting with the institution |
| Improve the retention rate for the Introduction to Computers Course (1&2) | Currently 8% of students withdraw from the course yearly. (Data retrieved from Fall 2011 through Fall 2013) | Decrease in withdrawal by 5% over five year period- | Increase the computer support lab hours from 5 hours per day to 10  Use peer groups to help students with computer literacy  Explore software options that can be used to aid with teaching the Introduction to Computers course  Use the early alert system to notify academic counselors when student’s overall course grade is below 60% for intervention  Refer students to retention manager for academic counseling  Use teacher aides in classroom |
| Ensure graduates have computer literacy skills (1, 2, & 3) | Data to be gathered Fall 2015 | To be determined | Embed computer literacy student outcome in all credit programs (certificate, diploma, degree)  Implement computer literacy capstone assessment in certificate/diploma/degree programs. |
| Ensure students have proper training/tutorial services for the learning management system (3) | Data To be gathered from students Summer 2015 SEMN 1000 class | To be determined | Improve the learning management system training in SEMN 1000 course  Link an assessment (direct or indirect) to the learning management system training |

(Columbus Technical College, 2014)

**IMPLEMENTATION TIMELINE**

CLICK (Computer Literacy is Critical Knowledge) is a comprehensive five year plan designed to enhance student learning in computer literacy by implementing strategies based on goals and student learning outcomes designed to meet the needs of students. The implementation timeline focuses on actions to be implemented, stakeholders, timeframes in which implementation occurs, and responsible parties for ensuring action is completed. The college recognizes that this plan involves continuous-extensive data collection, so the timeline serves as a semester by semester checklist to monitor and evaluate all QEP activities.

**Year 1**

(Fall 2014, Spring 2015, Summer 2015)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TABLE 6.8 | Year 1 | | | |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL UNDERSTAND THE BASIC FUNCTIONS OF COMPUTER USAGE** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Pilot -Pre-assess new students for computer literacy | | Academic Affairs | Accuplacer | Fall 2014 |
| Implement pre-assessment for all new incoming students | | Student Affairs-Office of Testing | Accuplacer | Spring 2015, Summer 2015 |
| Collaborate to create a survey for all new students on computer literacy | | Office of Institutional Effectiveness and Academic Affairs | -Agenda and minutes of meeting to verify collaboration efforts | Fall 2014 |
| Implement computer literacy questionnaire for all new students | | Office of Institutional Effectiveness | Student Survey | Spring 2015, Summer 2015 |
| Request approval to implement new course (remedial Introduction to Computers Course) from Technical College System of Georgia | | Vice President of Academic Affairs | Completion of all paperwork required for the process | Summer 2015 |
| Explore content for syllabi/competencies/student learning outcomes for remedial course Introduction to Computers (COMP 0090) | | Assigned Computer Information Systems Faculty along with Microsoft Office 2013 education experts | Agenda and minutes of meetings to verify collaboration efforts | Fall 2014, Spring 2015, Summer 2015 |
| Explore content for syllabi/competencies/student learning outcomes for remedial course Introduction to Computers (COMP 0090) | | Assigned Computer Information Systems Faculty along with Microsoft Office 2013 education experts | Syllabi review form signed by participating faculty members | Summer 2015 |
| Explore content for syllabi/competencies/student learning outcomes for remedial course Introduction to Computers (COMP 0090) | | Assigned Computer Information Systems Faculty along with Microsoft Office 2013 education experts | Verification of student learning outcomes and creation of modules | Summer 2015 |
| Explore content for syllabi/competencies/student learning outcomes for remedial course Introduction to Computers (COMP 0090) | | Assigned Computer Information Systems Faculty along with Microsoft Office 2013 education experts | Rubrics locally designed or standardized assessments are in place to assess student learning outcomes | Summer 2015 |
| Review all data for Accuplacer, surveys, , review progress and needs on implementing remedial course | | Academic Affairs Faculty  Office of Institutional Effectiveness  Student Affairs Staff | Data Analysis Reports | Summer 2015 |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL APPLY AN UNDERSTANDING OF HOW TO USE MICROSOFT OFFICE SUITE PRODUCTS (WORD, EXCEL, ACCESS, POWER POINT)** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Pre Assess new students for computer literacy | | Academic Affairs and Student Affairs | Accuplacer | Fall 2014, Spring 2015, Summer 2015 |
| Explore objective ways to assess competencies in Microsoft Office Suite (Excel, Word, Power Point, Access) | | Assigned Computer Information Systems Faculty | Create Rubrics to assess competencies for projects in Microsoft office | Fall 2014 |
| Explore objective ways to assess competencies in Microsoft Office Suite (Excel, Word, Power Point, Access) | | Assigned Computer Information Systems Faculty | Assigned CIST faculty will sign form indicating rubrics or standard assessments will be used for grading Microsoft excel projects | Fall 2014 |
| Implement standardized way to assess competencies for Microsoft Office Suite Projects | | Assigned Computer Information Systems Faculty | Use rubrics designed to assess the competencies in Word, Excel, Power Point, Access. | Spring 2015, Summer 2015 |
| Collaborate to explore best practices on ways to implement a tutorial skills lab according to the needs of the institution. Collaborate on ways to implement Teacher’s Aide into Introduction to Computers Course | | Assigned Computer Information Systems Faculty | Agenda and minutes of meetings verifying collaboration efforts | Fall 2014, Spring 2015. Summer 2015 |
| Administer comprehensive Final Exam in Introduction to Computers Course on competencies in excel, word, power point, access | | Assigned Computer Information Systems Faculty | Exam developed with help of Microsoft 2013 education experts | Pilot test-Fall 2014  Continue with test spring 2015 and summer 2015 |
| Review all data collected on competencies for Introduction to Computers Corse, final exam scores, Accuplacer assessment | | Assigned CIST Faculty, Office of Institutional Effectiveness, Academic Affairs. Student Affairs, QEP Coordinator | Results of data analysis | Summer 2015 |
| Review all data collected on competencies for Introduction to Computers Corse, final exam scores, Accuplacer assessment | | Retention Manager | Retention Reports | Summer 2015 |
| Professional Development Activities for faculty on computer literacy | | Office of Institutional Effectiveness | Faculty and student Surveys for training needs on computer literacy | Fall 2014 |
| Professional Development Activities for faculty on computer literacy | | Vice President of Academic Affairs | Official documentation for professional development participation on all faculty (sign in sheets, etc) | Spring 2015, Summer 2015 |
| Professional Development Activities for faculty on computer literacy | | Office of Institutional Effectiveness | Student/Faculty Survey on professional development needs in computer literacy | Summer 2015 |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL DEMONSTRATE AN UNDERSTANDING OF HOW TO USE THE REQUIRED LEARNING MANAGEMENT SYSTEM FOR THE INSTITUTION** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Review the functions and needs of the learning management system to gain a full understanding of requirements needed for students to be successful | | Assigned Academic Affairs Faculty along with assigned technical staff | Review of content to be provided for learning management system training for students | Fall 2014, Spring 2015, Summer 2016 |
| Review the functions and needs of the learning management system to gain a full understanding of requirements needed for students to be successful | | Assigned Academic Affairs Faculty along with assigned technical staff | Review of methods to assess training material (rubrics, pre-test/posttest) | Fall 2014, Spring 2015, Summer 2016 |
| Implement the computer literacy questionnaire as indicated under student learning outcome #1 | | Office of Institutional Effectiveness | Survey | Spring 2015, Summer 2015 |
| Create material for professional development activity for faculty: How to maximize the use of the learning management system for student engagement and success | | Assigned Academic Affairs Faculty | Modules for professional development reviewed and approved | Spring 2015, Summer 2015 |
| Create material for professional development activity for faculty: How to maximize the use of the learning management system for student engagement and success | | Assigned Academic Affairs Faculty | Pre-test and posttest developed and approved | Spring 2015, Summer 2015 |
| Review data received on all surveys and benchmarks for completion on creating training and assessment material for the learning management system | | Assigned Academic Affairs Faculty | Verification of valid training material and assessment | Summer 2015 |
| Review data received on all surveys and benchmarks for completion on creating training and assessment material for the learning management system | | Office of Institutional Effectiveness | Survey Results | Summer 2015 |

(Columbus Technical College, 2014)

**Year 2**

(Fall 2015, Spring 2016, Summer 2016)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TABLE 6.9 | Year 2 | | | |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL UNDERSTAND THE BASIC FUNCTIONS OF COMPUTER USAGE** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Continue to Pre-assess new students for computer literacy | | Student Affairs-Testing Division | Accuplacer | Fall 2015, Spring 2016, Summer 2016 |
| Continue to survey new students using the computer literacy questionnaire | | Office of Institutional Effectiveness | Survey | Fall 2015, Spring 2016, Summer 2016 |
| Launch remediation course for Introduction to Computers | | Computer Information Systems Faculty | Pre/Post Test | Fall 2015 |
| Launch remediation course for Introduction to Computers | | Computer Information Systems Faculty | Documented Performance on Student Learning Outcomes for fall, spring, and summer semester | Fall 2015, Spring 2016, Summer 2016 |
| Launch remediation course for Introduction to Computers | | Dean of Academic Affairs | Faculty Observation | Fall 2015, Spring 2016 |
| Launch remediation course for Introduction to Computers | | Assigned Academic Faculty | End of Course  Surveys | Fall 2015, Spring 2016, Summer 2016 |
| Review all data for Accuplacer, student computer literacy questionnaire, student satisfaction surveys for computer lab, focus group feedback | | Office of Institutional Effectiveness  Academic Affairs Faculty  Student Affairs Staff | Data Analysis | Summer 2016 |
| Review all data for Accuplacer, student computer literacy questionnaire, student satisfaction surveys for computer lab, focus group feedback | | Retention Manager | Retention Manager | Summer 2016 |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL APPLY AN UNDERSTANDING OF HOW TO USE MICROSOFT OFFICE SUITE PRODUCTS (WORD, EXCEL, ACCESS, POWER POINT)** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Pre Assess new students for computer literacy | | Student Affairs-Testing Division | Accuplacer | Fall 2015, Spring 2016, Summer 2016 |
| Continue to use standardized method for assessing competencies for projects in Word, Excel, Power Point, Access | | Assigned Computer Information Systems Faculty | Rubrics designed to assess competencies | Fall 2015, Spring 2016, Summer 2016 |
| Utilize standardized comprehensive final exam in Introduction to Computers Course | | Assigned Computer Information Systems Faculty | Exam developed by Microsoft 2013 education experts | Fall 2015, Spring 2016, Summer 2016 |
| Implement teacher aide’s in Introduction to Computers course (2 teacher’s aides to be hired) | | Assigned Computer Information Systems faculty | Faculty Observations, end of course evaluations | Fall 2015, Spring 2016, Summer 2016 |
| Implement teacher aide’s in Introduction to Computers course | | QEP Coordinator | Focus Group Meetings with faculty and students | Fall 2015, Spring 2016 |
| Implement teacher aide’s in Introduction to Computers course | | Office of Institutional Effectiveness | Student satisfaction surveys | Fall 2015, Spring 2016 |
| Implement full-time tutorial lab | | Assigned Computer Information Systems faculty | Daily Sign in Logs to gage purpose for students visiting the computer lab | Fall 2015, Spring 2016, Summer 2016 |
| Implement full-time tutorial lab | | QEP Coordinator | Faculty and Student Focus Group Feedback | Fall 2015, Spring 2016 |
| Implement full-time tutorial lab | | Office of Institutional Effectiveness | Student Satisfaction Surveys | Fall 2015, Spring 2016 |
| Student Learning Outcomes Committee and Program Faculty will meet to develop computer literacy student learning outcome for all credit programs | | Assigned Academic Affairs Faculty | Develop rubrics to assess computer literacy student learning outcome | Fall 2015, Spring 2016 |
| Professional Development Activities for Computer Lab Coordinator and Teachers Aide (techniques for tutoring | | Assigned CIST Faculty | Sign in Logs to verify attendance of faculty in training | Fall 2015, Spring 2016 |
| Professional Development Activities for Computer Lab Coordinator and Teachers Aide (techniques for tutoring | | Assigned Academic Affairs Faculty | End of Course Evaluations for Introduction to Computers course to see how aides and lab helped with successful completion of Introduction to Computers | Fall 2015, Spring 2016 |
| Professional Development Activities for Faculty on maximizing use of learning management system | | Vice President of Academic Affairs | Sign in Logs to verify attendance of faculty in training  pre-test and post test | Fall 2015 |
| Professional Development Activity for all faculty on how to capture and record data for computer literacy student learning outcome | | Vice President of Academic Affairs | Sign in logs to verify attendance | Summer 2016 |
| Professional Development Activity for all faculty on how to capture and record data for computer literacy student learning outcome | | Vice President of Academic Affairs | Signed documentation to verify rubrics received and will be used | Summer 2016 |
| Professional Development Activity on embedding technology in learning | | Academic Affairs faculty | Sign in logs to verify attendance | Spring 2016 |
|  | |  |  |  |
| Compile all results for surveys, rubrics, exams utilized this semester | | Academic Affairs, Office of Institutional Effectiveness, QEP Coordinator  Retention Coordinator | Results of Data Analysis | Summer 2016 |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL DEMONSTRATE AN UNDERSTANDING OF HOW TO USE THE REQUIRED LEARNING MANAGEMENT SYSTEM FOR THE INSTITUTION** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Implement the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) for students | | Assigned Academic Faculty | Pre Test | Fall 2015, Spring 2016, Summer 2016 |
| Implement the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) for students | | Assigned Academic Faculty | Post Test -70% or better achievement | Fall 2015, Spring 2016, Summer 2016 |
| Implement the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) for students | | Assigned Academic Faculty | Rubrics designed to assess competence | Fall 2015, Spring 2016, Summer 2016 |
| Implement the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) for students | | Assigned Academic Faculty | Class attendance Rosters | Fall 2015, Spring 2016, Summer 2016 |
| Provide Professional Development Training on maximizing the use of the learning management system for faculty | | Vice President of Academic Affairs | Signed Attendance Rosters of faculty that attended training | Fall 2015 |
| Implement the learning management system training and assessment to allfaculty | | Assigned Academic Affairs Faculty | Pre-Test | Fall 2015 |
| Implement the learning management system training and assessment to allfaculty | | Assigned Academic Affairs Faculty | Post-Test | Fall 2015 |
| Implement the learning management system training and assessment to allfaculty | | Assigned Academic Affairs Faculty | Rubrics designed to assess competencies | Fall 2015 |
| Analyze all data received this year on learning management system training efforts | | Office of Institutional Effectiveness | Results of assessment in SEMN 100 course | Summer 2016 |
| Analyze all data received this year on learning management system training efforts | | Office of Institutional Effectiveness | Results of Faculty assessment on learning management system | Summer 2016 |
|  | |  |  |  |

**Year 3**

(Fall 2016, Spring 2017, Summer 2017)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TABLE 6.10 | Year 3 | | | |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL UNDERSTAND THE BASIC FUNCTIONS OF COMPUTER USAGE** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Continue to Pre-assess new students for computer literacy | | Student Affairs/Testing Division | Accuplacer | Fall 2016, Spring 2017, Summer 2017 |
| Continue to survey new students using the computer literacy questionnaire | | Office of Institutional Effectiveness | Survey | Fall 2016, Spring 2017, Summer 2017 |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Computer Information Systems Faculty | Pre/Post Test | Fall 2016, Spring 2017, Summer 2017 |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Computer Information Systems Faculty | Documented Performance on Student Learning Outcomes | Fall 2016, Spring 2017, Summer 2017 |
| Continue to utilize remediation course for Introduction to Computers | | Office of Institutional Effectiveness | Student Satisfaction Surveys | Fall 2016, Spring 2017 |
| Continue to utilize remediation course for Introduction to Computers | | QEP Coordinator | Faculty and Student Focus Group Feedback | Fall 2016, Spring 2017 |
| Continue to utilize remediation course for Introduction to Computers | | Dean of Academic Affairs | Faculty classroom Observation | Fall 2016, Spring 2017 |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Academic Affairs Faculty | End of course surveys | Fall 2016, Spring 2017, Summer 2017 |
| Compile and Compare Data for improvement or modifications | | Office of Institutional Effectiveness  Academic Affairs Faculty  Student Affairs Staff | Data Analysis Report | Summer 2017 |
| Compile and Compare Data for improvement or modifications | | Retention Manager | Retention Reports | Summer 2017 |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL APPLY AN UNDERSTANDING OF HOW TO USE MICROSOFT OFFICE SUITE PRODUCTS (WORD, EXCEL, ACCESS, POWER POINT)** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Pre Assess new students for computer literacy | | Academic Affairs and Student Affairs | Accuplacer | Fall 2016, Spring 2017, Summer 2017 |
| Continue to utilize standardized method for assessing competencies for projects in Word, Excel, Power Point, Access | | Assigned Computer Information Systems Faculty | Rubrics | Fall 2016, Spring 2017, Summer 2017 |
| Continue to utilize comprehensive standardized final exam in Introduction to Computers Course | | Assigned Computer Information Systems Faculty | Exam developed by Microsoft 2013 education experts | Fall 2016, Spring 2017, Summer 2017 |
| Continue with use of teacher aide’s in Introduction to Computers course (hire an additional teachers aide) | | Assigned CIST faculty | Student Satisfaction Survey- Fall 2016, Spring 2017 | Ongoing |
| Continue with use of full-time tutorial lab | | Assigned Computer Information Systems faculty | Student Satisfaction Surveys- Fall 2016, Spring 2017 | Ongoing |
| Continue with use of full-time tutorial lab | | QEP Coordinator | Faculty and Student Focus Group Feedback- Fall 2016, Spring 2017 | Ongoing |
| Continue with use of full-time tutorial lab | | Office of Institutional Effectiveness | Student Satisfaction Surveys-- Fall 2016, Spring 2017 | Ongoing |
| CIST Faculty to collaborate with Program Directors of each credit program in the institution to create a locally developed computer literacy capstone exam for graduates | | Assigned CIST Faculty, Program Directors for Academic Instruction | Sign in logs to verify attendance of meetings along with minutes | Fall 2016, Spring 2017, Summer 2017 |
| CIST Faculty to collaborate with Program Directors of each credit program in the institution to create a locally developed computer literacy capstone exam for graduates | | Assigned CIST Faculty, Program Directors for Academic Instruction | Explore rubrics or standardized test to be used for the capstone exam | Fall 2016, Spring 2017, Summer 2017 |
| Implement all credit programs are required to have a computer literacy student learning outcome embedded in the curriculum | | Assigned Academic Affairs faculty | Rubrics designed to assess computer literacy student learning outcome | Fall 2016, Spring 2017, Summer 2017 |
| Implement all credit programs are required to have a computer literacy student learning outcome embedded in the curriculum | | Academic Affairs Faculty | Outcomes recorded and documented in the Office of Institutional Effectiveness | Fall 2016, Spring 2017, Summer 2017 |
| Professional Development Activities for computer literacy | | Assigned CIST Faculty | Sign in Logs to verify attendance of faculty attending professional development | Fall 2016, Spring 2017 |
| Professional Development Activities for computer literacy | | Assigned CIST Faculty | Survey faculty to get ideas on what training is needed for computer lab and teacher’s aide based on current trends | Summer 2017 |
| Professional Development Activities for computer literacy | | Assigned CIST Faculty | End of Course Evaluations | Fall 2016, Spring 2017, Summer 2017 |
| Professional Development Activities for computer literacy | | Assigned CIST Faculty | Faculty Observations | Fall 2016, Spring 2017 |
| Survey Stakeholders to get baseline data on computer literacy skills for graduates | | Office of Institutional Effectiveness | Surveys to internship providers | Summer 2017 |
| Survey Stakeholders to get baseline data on computer literacy skills for graduates | | Office of Institutional Effectiveness | Surveys to work force industry (where students work after graduation) | Summer 2017 |
| Compile all results for surveys, rubrics, exams utilized this semester | | Academic Affairs  Office of Institutional Effectiveness  QEP Coordinator  Retention Manager | Results of Data Analysis | Summer 2017 |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL DEMONSTRATE AN UNDERSTANDING OF HOW TO USE THE REQUIRED LEARNING MANAGEMENT SYSTEM FOR THE INSTITUTION** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Provide the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | | Assigned Academic Faculty | Pre Test | Fall 2016, Spring 2017, Summer 2017 |
| Provide the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | | Assigned Academic Faculty | Post Test -70% or better achievement | Fall 2016, Spring 2017, Summer 2017 |
| Provide the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | | Assigned Academic Faculty | Rubrics designed to assess competence | Fall 2016, Spring 2017, Summer 2017 |
| Provide the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | | Assigned Academic Faculty | Class attendance Rosters | Fall 2016, Spring 2017, Summer 2017 |
| All newly employed faculty will receive the learning management system training and assessment | | Assigned Academic Affairs Faculty | Pre-Test | Fall 2016, Spring 2017, Summer 2017 |
| All newly employed faculty will receive the learning management system training and assessment | | Assigned Academic Affairs Faculty | Post-Test | Fall 2016, Spring 2017, Summer 2017 |
| All newly employed faculty will receive the learning management system training and assessment | | Assigned Academic Affairs Faculty | Rubrics designed to assess competencies | Fall 2016, Spring 2017, Summer 2017 |
| Professional Development for faculty on updates of learning management system | | Vice President of Academic Affairs | Signed Attendance Rosters of faculty that attended training | Fall 2016 |
| Analyze all data received this year on learning management system training efforts | | Office of Institutional Effectiveness | Results of assessment in SEMN 100 course | Spring 2017 |
| Analyze all data received this year on learning management system training efforts | | Office of Institutional Effectiveness | Results of Faculty assessment on learning management system | Spring 2017 |

**Year 4**

(Fall 2017, Spring 2018, Summer 2018)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TABLE 6.11 | Year 4 | | | |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL UNDERSTAND THE BASIC FUNCTIONS OF COMPUTER USAGE** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Continue to Pre-assess new students for computer literacy | | Student Affairs/Testing Division | Accuplacer | Fall 2017, Spring 2018, Summer 2018 |
| Continue to survey new students using the computer literacy questionnaire | | Office of Institutional Effectiveness | Survey | Fall 2017, Spring 2018, Summer 2018 |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Computer Information Systems Faculty | Pre/Post Test | Fall 2017, Spring 2018, Summer 2018 |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Computer Information Systems Faculty | Documented Performance on Student Learning Outcomes | Fall 2017, Spring 2018, Summer 2018 |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Computer Information Systems Faculty | Student Satisfaction Surveys- Fall 2017, Spring 2018 | Ongoing |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Computer Information Systems Faculty | Faculty and Student Focus Group Feedback- Fall 2017, Spring 2018 | Ongoing |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Computer Information Systems Faculty | Faculty Observation | Fall 2017, Spring 2018, Summer 2018 |
| Continue to utilize remediation course for Introduction to Computers | | Assigned Computer Information Systems Faculty | End of course surveys | Fall 2017, Spring 2018, Summer 2018 |
| Compile and Compare Data for improvement or modifications | | Office of Institutional Effectiveness  Academic Affairs Faculty  Student Affairs Staff | Data Analysis Report | Summer 2018 |
| Compile and Compare Data for improvement or modifications | | Retention Manager | Retention Reports | Summer 2018 |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL APPLY AN UNDERSTANDING OF HOW TO USE MICROSOFT OFFICE SUITE PRODUCTS (WORD, EXCEL, ACCESS, POWER POINT)** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Pre Assess new students for computer literacy | | Academic Affairs and Student Affairs | Accuplacer | Fall 2017, Spring 2018, Summer 2018 |
| Continue to utilize standardized method for assessing competencies for projects in Word, Excel, Power Point, Access | | Assigned Computer Information Systems Faculty | Rubrics | Fall 2017, Spring 2018, Summer 2018 |
| Utilize standardized final exam in Introduction to Computers Course | | Assigned Computer Information Systems Faculty | Exam developed by Microsoft 2013 education experts | Fall 2017, Spring 2018, Summer 2018 |
| Utilize teacher aide’s in Introduction to Computers course | | Assigned CIST faculty | Student Satisfaction Survey | Fall 2017, Spring 2018 |
| Utilize full-time tutorial lab | | Assigned Computer Information Systems faculty | Student Satisfaction Surveys | Fall 2017, Spring 2018 |
| Utilize full-time tutorial lab | | Assigned Computer Information Systems faculty | Faculty and Student Focus Group Feedback | Fall 2017, Spring 2018 |
| Continue to require credit programs must have a computer literacy student learning outcome embedded in the curriculum | | Assigned Academic Affairs faculty | Rubrics designed to assess computer literacy student learning outcome | Fall 2017, Spring 2018, Summer 2018 |
| Continue to require credit programs must have a computer literacy student learning outcome embedded in the curriculum | | Assigned Academic Affairs faculty | Outcomes recorded and documented in the Office of Institutional Effectiveness | Fall 2017, Spring 2018, Summer 2018 |
| Professional Development Activities for computer literacy | | Assigned Academic Affairs faculty | Sign in Logs to verify attendance of faculty | Fall 2017, Spring 2018 |
| Professional Development Activities for computer literacy | | Assigned Academic Affairs faculty | Student Satisfaction Surveys- Fall 2017, Spring 2018 | Ongoing |
| Professional Development Activities for computer literacy | | Assigned Academic Affairs faculty | Faculty Observations- Fall 2017, Spring 2018 | Ongoing |
| Compile all results for surveys, rubrics, exams utilized this semester | | Academic Affairs, Office of Institutional Effectiveness, QEP Coordinator Retention manager | Results of Data Analysis | Summer 2018 |
| **STUDENT LEARNING OUTCOME:**  **STUDENTS WILL DEMONSTRATE AN UNDERSTANDING OF HOW TO USE THE REQUIRED LEARNING MANAGEMENT SYSTEM FOR THE INSTITUTION** | | | | |
| **Implementation Actions** | | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Provide the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | | Assigned Academic Faculty | Pre Test | Fall 2017, Spring 2018, Summer 2018 |
| Provide the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | | Assigned Academic Faculty | Post Test -70% or better achievement | Fall 2017, Spring 2018, Summer 2018 |
| Provide the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | | Assigned Academic Faculty | Rubrics designed to assess competence | Fall 2017, Spring 2018, Summer 2018 |
| Provide the enhanced learning management system tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | | Assigned Academic Faculty | Class attendance Rosters |  |
| All newly employed faculty will receive the learning management system training and assessment | | Assigned Academic Affairs Faculty | Pre-Test |  |
| All newly employed faculty will receive the learning management system training and assessment | | Assigned Academic Affairs Faculty | Post-Test |  |
| All newly employed faculty will receive the learning management system training and assessment | | Assigned Academic Affairs Faculty | Rubrics designed to assess competencies |  |
| Professional Development for faculty on updates of learning management system | | Vice President of Academic Affairs | Signed Attendance Rosters of faculty that attended training |  |
| Analyze all data received this year on learning management system training efforts | | Office of Institutional Effectiveness | Results of assessment in SEMN 100 course |  |
| Analyze all data received this year on learning management system training efforts | | Office of Institutional Effectiveness | Results of Faculty assessment on learning management system |  |

**Year 5**

(Fall 2018, Spring 2019, Summer 2019)

|  |  |
| --- | --- |
| **TABLE 4.9** | **Year 5** |

|  |
| --- |
| STUDENT LEARNING OUTCOME:  STUDENTS WILL UNDERSTAND THE BASIC FUNCTIONS OF COMPUTER USAGE |

|  |  |  |  |
| --- | --- | --- | --- |
| **Implementation Actions** | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Continue to Pre-assess new students for computer literacy | Student Affairs/Testing Division | Accuplacer | Fall 2018, Spring 2019, Summer 2019 |
| Continue to survey new students using the computer literacy questionnaire | Office of Institutional Effectiveness | Survey | Fall 2018, Spring 2019, Summer 2019 |
| Continue to utilize remediation course for Introduction to Computers | Assigned Computer Information Systems Faculty | Pre/Post Test | Fall 2018, Spring 2019, Summer 2019 |
| Continue to utilize remediation course for Introduction to Computers | Assigned Computer Information Systems Faculty | Documented Performance on Student Learning Outcomes | Fall 2018, Spring 2019, Summer 2019 |
| Continue to utilize remediation course for Introduction to Computers | Office of Institutional Effectiveness | Student Satisfaction Surveys- Fall 2017, Spring 2018 | Ongoing |
| Continue to utilize remediation course for Introduction to Computers | Dean of Academic Affairs | Faculty and Student Focus Group Feedback- Fall 2017, Spring 2018 | Ongoing |
| Continue to utilize remediation course for Introduction to Computers | Academic Affairs Faculty | Faculty Observation | Fall 2018, Spring 2019, Summer 2019 |
| Continue to utilize remediation course for Introduction to Computers | Academic Affairs Faculty | End of course surveys | Fall 2018, Spring 2019, Summer 2019 |
| Compile and Compare Data for improvement or modifications | Office of Institutional Effectiveness  Academic Affairs Faculty  Student Affairs Staff | Data Analysis Report | Summer 2019 |
| Compile and Compare Data for improvement or modifications | Retention Manager | Retention Reports | Summer 2019 |

|  |
| --- |
| STUDENT LEARNING OUTCOME:  STUDENTS WILL APPLY AN UNDERSTANDING OF HOW TO USE MICROSOFT OFFICE SUITE PRODUCTS (WORD, EXCEL, ACCESS, POWER POINT) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Implementation Actions** | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Pre Assess new students for computer literacy | Student Affairs/Testing Division | Accuplacer | Fall 2018, Spring 2019, Summer 2019 |
| Continue to utilize standardized method for assessing competencies for projects in Word, Excel, Power Point, Access | Assigned Computer Information Systems Faculty | Rubrics | Fall 2018, Spring 2019, Summer 2019 |
| Utilize standardized final exam in Introduction to Computers Course | Assigned Computer Information Systems Faculty | Exam developed by Microsoft 2013 education experts | Fall 2018, Spring 2019, Summer 2019 |
| Utilize teacher aide’s in Introduction to Computers course | Assigned CIST faculty | Student  Satisfaction Survey | Fall 2018, Spring 2019, Summer 2019 |
| Utilize  full-time tutorial lab | Assigned Computer Information Systems faculty | Student Satisfaction Surveys | Fall 2018, Spring 2019, Summer 2019 |
| Utilize  full-time tutorial lab | Assigned Computer Information Systems faculty | Faculty and Student Focus Group Feedback | Fall 2018, Spring 2019, Summer 2019 |
| Continue to require credit programs must have a computer literacy student learning outcome embedded in the curriculum | Assigned Academic Affairs faculty | Rubrics designed to assess computer literacy student learning outcome | Fall 2018, Spring 2019, Summer 2019 |
| Continue to require credit programs must have a computer literacy student learning outcome embedded in the curriculum | Assigned Academic Affairs faculty | Outcomes recorded and documented in the Office of Institutional Effectiveness | Fall 2018, Spring 2019, Summer 2019 |
| Implement computer literacy capstone exam for graduates to be administered in identified capstone course of each program | Assigned Academic Affairs Faculty | Standardized assessment or locally designed assessment | Fall 2018, Spring 2019, Summer 2019 |
| Implement computer literacy capstone exam for graduates to be administered in identified capstone course of each program | Assigned Academic Affairs Faculty | Rubrics to assess competencies on capstone exam | Fall 2018, Spring 2019, Summer 2019 |
| Professional Development Activities for faculty | Assigned Academic Affairs faculty | Sign in Logs to verify attendance of faculty | Fall 2018, Spring 2019 |
| Professional Development Activities for faculty | Assigned Academic Faculty | End of Course Evaluations | Fall 2018, Spring 2019, Summer 2019 |
| Professional Development Activities for faculty | Dean of Academic Affairs | Faculty Observations | Fall 2018, Spring 2019 |
| Compile all results for surveys, rubrics, exams utilized this semester | Academic Affairs  Office of Institutional Effectiveness  QEP Coordinator Retention manager | Results of Data Analysis | Summer 2019 |

|  |
| --- |
| STUDENT LEARNING OUTCOME:  STUDENTS WILL DEMONSTRATE AN UNDERSTANDING OF HOW TO USE THE REQUIRED LEARNING MANAGEMENT SYSTEM FOR THE INSTITUTION |

|  |  |  |  |
| --- | --- | --- | --- |
| **Implementation Actions** | **Responsible Person** | **Assessment Measure** | **Time Line** |
| Provide the  enhanced learning management system  tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | Assigned Academic Faculty | Pre Test | Fall 2018, Spring 2019, Summer 2019 |
| Provide the  enhanced learning management system  tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | Assigned Academic Faculty | Post Test -70% or better achievement | Fall 2018, Spring 2019, Summer 2019 |
| Provide the  enhanced learning management system  tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | Assigned Academic Faculty | Rubrics designed to assess competence | Fall 2018, Spring 2019, Summer 2019 |
| Provide the  enhanced learning management system  tutorial training and assessment in the Freshman Experience Course (Seminar 1000) | Assigned Academic Faculty | Class attendance Rosters | Fall 2018, Spring 2019, Summer 2019 |
| All newly employed faculty will receive  the learning management system training and assessment | Assigned Academic Affairs Faculty | Pre-Test | Fall 2018, Spring 2019, Summer 2019 |
| All newly employed faculty will receive  the learning management system training and assessment | Assigned Academic Affairs Faculty | Post-Test | Fall 2018, Spring 2019, Summer 2019 |
| All newly employed faculty will receive  the learning management system training and assessment | Assigned Academic Affairs Faculty | Rubrics designed to assess competencies | Fall 2018, Spring 2019, Summer 2019 |
| Professional Development for faculty on updates of learning management system | Vice President of Academic Affairs | Signed Attendance Rosters of faculty that attended training | Fall 2018 |
| Analyze all data received this year on learning management system training efforts | Office of Institutional Effectiveness | Results of assessment in SEMN 100 course | Summer 2019 |
| Analyze all data received this year on learning management system training efforts | Office of Institutional Effectiveness | Results of Faculty assessment on learning management system | Summer 2019 |

The Computer Information Systems faculty, the Office of Institutional Effectiveness, and other components of Academic Affairs will collaborate to discuss how the computer literacy initiatives are working to achieve the desired learning outcomes based on trends and changes that occur within the institution. If the direct and indirect assessment measures indicate through data that the college wide strategies and initiatives are not beneficial to the purpose of the QEP, the college will explore adjustments and implement as necessary.

**References**

Accuplacer. (2014, August 22). *About accuplacer*. Retrieved from Accuplacer: http://accuplacer.collegeboard.org/professionals

American Association of Community Colleges. (2014, April). *2014 Fact Sheet.* Retrieved from American Association of Community Colleges: http://www.aacc.nche.edu/AboutCC/Documents/Facts14\_Data\_R3.pdf

Bettinger, E. P., Boatman, A., & Bridget, T. L. (2013). Student supports: Developmental education and other academic programs. *The Future of Children, 23*(1) Retrieved from http://search.proquest.com/docview/1519298024?accountid=10275

Bill and Melinda Gates Foundation. (2014). *College ready education.* Retrieved from Bill and Melinda Gates Foundation: http://www.gatesfoundation.org/What-We-Do/US-Program/College-Ready-Education

Boylan, H. R., Bonham, B. S., & White, S. R. (1999). Developmental and Remedial Education in Postsecondary Education. *New Directions for Higher Education*, (108), 87.

Casper College. (2006). *Casper college assessment plan.* Retrieved 08 21, 2014, from Casper College: http://www.caspercollege.edu/assessment/downloads/assessment\_manual.pdf

Columbus Technical College (CTC). (2012). *Learning Support Redesign Presidents' Council*.

Columbus Technical College (CTC). (2013). OLE': Online learning for everyone: Your stairway to distance learning success. Retrieved from https://softchalkcloud.com/lesson/serve/fK5sacCvwDepI4/html

Columbus Technical College (CTC). (2014). Columbus, GA: Office of Institutional Research.

Columbus Technical College. (2014). *COMP 1000*. Retrieved from Catalog and Student Handbook 2013-2014: http://www.columbustech.edu/Catalog%20and%20Student%20Handbook/comp-1000---introduction-to-computers-1-4-3.htm

Columbus Technical College. (2014, July 24). QEP Meeting. *QEP Meeting Assessment Team*. Columbus, GA.

Davis, P. (1999). How undergraduates learn computer skirts: Results of a survey and focus group. *T H E* Journal, *26*(9), 68-72.

Dymond, S. K., Neeper, L. S., &Fones, D. (2010). Typing with purpose: Linking the word processing curriculum to real world applications through service learning. *Clearing House*, *83*(2), 33-38.doi:10.1080/00098650903505480

Galliher, R. et al. (1995). Preparing technical educators for interactive instructional techniques: a review of research and practice*. Paper presented at the Annual American Vocational Association Convention, Denver, CO December, ’95.*

Hainline, L., Gaines, M., Long Feather, C., Padilla, E. & Terry, E. (2010).Changing students, faculty and institutions in the twenty-first century. *AAC&U,* Summer, 7-10.

Hodara, M., Smith Jaggars, S., & Mechaur Karp, M. (2012). *Improving developmental education assessment and placement: Lessons from community colleges across the country.* New York: Teachers College Columbia University.

Hodges, R., Simpson, M., & Norman, S. (2012). *Teaching study strategies in developmental education: Readings on theory, research, and best practice.* Boston, MA: Bedford/St. Martin’s.

Hughes, K. L.-C. (2011). Assessing developmental assessment in community colleges. *Community College Review*, 39.

Korchmaros, J. D., & Gump, N. W. (2009). Evaluation of using course-management software. *College Teaching*, *57*(3), 161-166.

McGee, P, Carmean, C., and Jafari A. (2005, January 1). Course management systems for learning: Beyond accidental pedagogy. *Information Science Publishing, Idea Group Inc*. (IGI). Hershey, PA. Retrieved from http://books.google.com/books?id=VG2aF54Zef8C

National Center for Education Statistics. (2008). *Digest of education statistics.* Retrieved from National Center for Education Statistics: http://nces.ed.gov/programs/digest/d12/tables/dt12\_120.asp

National Council on Measurement in Education. (2014). *Glossary of important assessment and measurement terms*. Retrieved from National Council on Measurement in Education: http://ncme.org/resource-center/glossary/

National Telecommunications and Information Administration (NTIA).(2011, February). *Digital nation: Expanding internet usage*. U.S. Department of Commerce. Retrieved from http://www.ntia.doc.gov/files/ntia/publications/ntia\_internet\_use\_report\_february\_2011.pdf

Northstar. (2014, 8 22). *History and purpose*. Retrieved from Northstar: https://www.digitalliteracyassessment.org/history.php

Ohlemacher, J., & Davis, A. (2014). Community college strategies: An effective holistic assessment for general education. *Assessment Update, 24*(3), 11-13.

Paul, J.A., & Cochran, J.D. (2013). Key interactions for online programs between faculty, students, technologies, and educational institutions – a holistic framework. *The Quarterly Review of Distance Education,* 14 (1), 49-62.

Peng, G., & Eunni, R. V. (2011). Computer skills, non-routine tasks, and wage premium: A longitudinal study. *Journal of Strategic Information Systems*, *20*449-460. doi:10.1016/j.jsis.2011.09.002

Pew Research Center. (2013, March). Teens and technology 2013. Retrieved from Pew Research Center: http://www.pewinternet.org/files/old-media/Files/Reports/2013/PIP\_TeensandTechnology2013.pdf

Rutschow, E. Z., &Schneider, E. (2014, June).Unlocking the gate: What we know about improving developmental education. *MDRC*. Retrieved from http://www.mdrc.org/publication/unlocking-gate

SmarterServices, LLC. (2014). *About: Introduction to SmarterMeasure*. Retrieved from http://www.smartermeasure.com/about/

Stuart, R. (2009). Reinventing remedial education. *Diverse Issues in Higher Education, 26*(18), 14-17. Retrieved from http://search.proquest.com/docview/194193771?accountid=10275

Technical College System of Georgia (TCSG). (2014, July 1). *FY 2015 Strategic Plan*. Retrieved from https://tcsg.edu/all\_documents/FY\_2015\_TSCG\_Plan\_Update.pdf

Technical College System of Georgia. (2014). *TCSG Colleges*. Retrieved from Technical College System of Georgia: https://tcsg.edu/colleges.php

Tung-Cheng, H., Ming-Che, L., & Chien-Yuan, S. (2013). Designing and implementing a personalized remedial learning system for enhancing the programming learning. *Journal of Educational Technology & Society, 16*(4), 32-n/a. Retrieved from http://search.proquest.com/docview/1462203693?accountid=10275

United States Department of Commerace. (2010). *American Fact Finder*. Washington, D.C.: U.S. Census Buerau. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

United States Department of Commerce. (2011, May 13). *Fact sheet: Digital literacy*. Retrieved from http://www.commerce.gov/news/fact-sheets/2011/05/13/fact-sheet-digital-literacy

Wepner, S.B., Bowes, K.A., & Serotkin, R. (2005). Lessons learned from implementing technology in an undergraduate elementary education program. *Journal of Computing in Teacher Education*,21 (4), 11-119.

Wright, V.H. (2010). Professional development and the master technology teacher: the evolution of one partnership. *Education,*131 (1), 139-146.

Zachry, E.M., & Schneider,E.(2010, September). *Building foundations for student readiness: A review of rigorous research and promising trends in developmental education.* Paper presented at the meeting of the *NCPR Developmental Education Conference,* New York, NY. National Center for Postsecondary Research. Retrieved from http://www.postsecondaryresearch.org/conference/PDF/NCPR\_Panel%203\_ZachrySchneiderPaper.pdf

**Appendix A – QEP Teams and Committees**

**Columbus Technical College QEP Planning/Steering Committee**

**(November 2012 – Present)**

|  |  |  |
| --- | --- | --- |
| William Burgan | Director | Associate Dean, General Studies |
| Kelli Wilkes |  | Faculty, English |
| Tara Askew |  | Staff, Vice President, Student Affairs |
| Mark Thorne |  | Staff, Associate Dean for Division of Health Science |
| Nicole Jackson |  | Staff, Dean for Division of Business |
| Virginia McKenzie |  | Staff, Vice President for Administrative Services |
| Cheryl Myers |  | Staff, Public Relations and Information Director |
| Dr. Melanie Thornton |  | Staff, Vice President for Academic Affairs |
| Dr. Michael Lamb |  | Staff, Vice President of Institutional Effectiveness |
| Shaunte Scott |  | Student |
| Tyeshia Harris |  | Student |

**Assessment Subcommittee**

|  |  |  |
| --- | --- | --- |
| Nicole Jackson | Chair | Dean, Division of Business |
| Dr. Michael Lamb |  | Vice President of Institutional Effectiveness |
| Will Burgan |  | Associate Dean, Division of General Studies |
| Christopher Cunningham |  | Instructor, Economics |
| Patrea Wilson |  | Instructor, CIST |

**Budget Subcommittee**

|  |  |  |
| --- | --- | --- |
| Virginia McKenzie | Chair | Staff, Vice President for Administrative Services |
| Michael Martin |  | Faculty, CIST |
| Jim Smith |  | Faculty, Math |
| Cynthia Graves |  | Accounting Manager |

**Literature Review Subcommittee**

|  |  |  |
| --- | --- | --- |
| Stephanie Middleton | Chair | Staff, Library Services Director |
| Kelli Wilkes |  | Faculty, English |
| Berton Stewart |  | Faculty, Political Science |
| Will Burgan |  | Associate Dean, General Studies |
| Kermelle Hensley |  | Associate Vice President, Enrollment Services |

**Marketing Committee**

|  |  |  |
| --- | --- | --- |
| Cheryl Myers | Chair | Staff, Public Relations and Information Director |
| Betsy Bishop |  | Staff, Marketing and Branding Manager |
| Ken Lockhart |  |  |
| April Hopson |  | Faculty, Paralegal Services |
| Shaunte Scott |  | Student |
| Tyeshia Harris |  | Student |

**Implementation Team**

**(To be formed Fall Semester 2014)**

|  |  |  |
| --- | --- | --- |
| William Burgan | Co-Chair | Associate Dean, General Studies |
| April Hopson | Co-Chair | Faculty |
| Tara Askew |  | Staff, Vice President, Student Affairs |
| Nicole Jackson |  | Staff, Dean for Division of Business |
| Dr. Melanie Thornton |  | Staff, Vice President for Academic Affairs |
|  |  | Staff, Vice President of Institutional Effectiveness |
|  |  | Computer Faculty |
|  |  | Computer Faculty |
|  |  | Student Navigator (Retention) |
| Kermelle Hensley |  | Registrar |
|  |  |  |
|  |  |  |

**Appendix B**

**Marketing and Communication Plan**

|  |  |  |  |
| --- | --- | --- | --- |
| Activity/Project | Target Date | Details | Status |
| Survey Participation  Incentive | July 2013 | The names of all students that participated in the QEP topic survey were entered into a drawing for a free iPad mini. |  |
| Marketing Sub-Committee was formed | May 2014 | The subcommittee included faculty, staff, and students. |  |
| Creating a logo/mascot | July 2014 | Three concepts are presented to the Marketing Committee and a vote is taken. “CLICK” is our logo and “Linx” the mouse is the mascot |  |
| De-brief QEP Steering Committee & PLT | July 2014 | QEP Steering Committee and PLT will be advised of the logo chosen |  |
| Planning Budget finalized | July 2014 | Present budget items for the life of the QEP |  |
| De-brief staff | Aug. 2014 | The committee will update everyone @ a faculty/staff planning meeting |  |
| Kick-off event planning | Sept.2014 | Order promotional items, tee shirts, plan kick-off event. Produce video, posters, social media interest, and website. Dress rehearsal(s) on Sept. 17 and/or Sept. 18 |  |
| Logo reveal and kick-off event | Sept. 2014 | High energy event(s) to reveal logo, plan, etc. Food, tee shirts, quiz bowl contest with prizes and the like. Invitees include faculty, staff, students, media, Local & Foundation Board members, elected officials |  |
| Faculty, staff, and student implementation | Misc. from Sept. 22 on | Present QEP to various groups, faculty present to students and all staff communicate across lines to ensure a basic understanding. |  |
| SACS Team Visit | Oct. 13 – Oct.16, 2014 | On-site team visit |  |
| Student Orientation | Nov. 13, 2014 & April 30, 2015 | Present QEP to new students at orientation. |  |
| QEP Refresher Course(s) | Sept. 2015  2016, 2017 | Town Hall meetings and mini-events across campus to re-educate stakeholders on the QEP and why it’s important |  |
|  |  |  |  |