Viability of Online Learning for Customers of the North Shore Career Centers

December 2014

TABLE OF CONTENTS

Introduction

In an effort to improve services to One-Stop Career Center customers, the North Shore Workforce Investment Board has conducted a survey of several colleges and university faculty on the prevalence of online courses. Conducted in conjunction with Salem State University, Endicott College, and North Shore Community College, the online learning survey sought to determine the current depth, availability, and suitability of online training for Career Center customers. The impetus for the online learning survey came from focus groups of One-Stop Career Center customers who had requested that training options be available through online or hybrid courses. The survey tool was developed by the North Shore Workforce Investment Board with input from representatives from each of our college partners. The survey was distributed electronically via Constant Contact to professors from each of the three institutions. The survey period was from 3/18/14 until it was closed on 6/23/14. A total of 64 responses were received.

Summary of Online Learning Survey Results

The role of technology is changing the delivery of services throughout higher education environments. Online and hybrid courses have expanded the accessibility of services and options available to students. Professors indicated, through their listing of courses that they taught online, that nearly every subject could be available in an online format depending on a particular institutions academic offering. Nearly all professors have taught, at some point, courses in an online or hybrid format. The hybrid format is currently being utilized at a greater extent than a purely online format. The majority of courses that require access to online resources are at the Bachelor's degree level. This is partially a reflection of the survey distribution. The survey was distributed to professors who taught at Salem State University, Endicott College, or North Shore Community College. North Shore Community College grants primarily Associates degrees and the other two institutions grant primarily Baccalaureate degrees and above. Twenty out of the fifty-nine Professors indicated that they taught Associates degree course on-line (based on responses to question 3, "At what level are the on-line courses?"). This would support the assumption that course levels are being skewed towards Bachelor level courses as more professors who taught at Bachelor degree granting institutions were surveyed. Any future surveys should be conducted at either the institutional level or have a question that allows for the filtering by institution.

Institutional support varied somewhat by respondent intuitions. North Shore Community College has received a Technology Across the Curriculum (TAC) grant to help professors develop online and hybrid classes. The TAC is a competitive grant to promote faculty innovation by employing technology in support of teaching and learning. This grant is available to both full-time and part-time faculty. North Shore Community College also has an academic support team to aid professors when handling technology issues, including hybrid and online courses. Salem State University has a Center of Teaching Innovation (CTI) that offers support to faculty in creating online courses and multimedia pieces. CTI offers workshops, presentations, weeklong

institutes, and yearlong programing in the support of curriculum development. They also have onsite assistance available for immediate help and consultation. Endicott College has Department of Academic Technology that provides institutional support across all levels of the college. This includes technological support for the two Learning Management Systems used by Endicott, i.e., GullNet and Canvas. Additional support is provided to faculty, staff, and students through workshops and training seminars throughout each academic semester.

Please refer to provided links for more information on each institutions technology support services:

- North Shore Community College
  - Technology Across the Curriculum
  - Academic Technology
- Salem State University, Center for Teaching Innovation
- Endicott College, Department of Academic Technology

Teaching methodologies varied depending on the professor who provided instruction for the course. Commonalities did occur in that the majority of all the professors stated that they still utilize textbooks and assigned reading as part of their curriculum. The main differences occurred in how professors incorporated the use of technology into their courses. Some professors would use online message forums to hold conversations about assigned reading materials or particular topics. Survey responses indicated that professors believed that students would put more thought into their statements or be more likely to participate in a conversation when they could interact online. Video assignments are being used as a supplemental learning tool. Similar to the reading assignments, students could be asked to provide feedback about the video assignment on a message forum. To a lesser degree, test and quizzes are being given online. It is more common in hybrid courses for quizzes to be used as a means to monitor student progress than it is to give midterm and final exams online. Students engage with their online and hybrid course courses through the use of an online learning platform. The online learning platform is the management tool that professors utilize to post course materials and monitor student progress. Students login to the online learning platform for updates on course expectations and interact with their professor and colleagues. Online learning platforms differ across institutions. However, students at the same university will find themselves using the same platform throughout different courses.

Student success with online learning came down to two main indicators, self-motivation and time management. With online learning, students have more responsibility for their own learning and progress compared to traditional face-to-face courses. This requires students to have the motivation to continue through a course without the accountability that comes from face-to-face interaction with their professor. Time-management skills become highly important, as students need to manage their course work independently to meet deadlines. The combination of self-motivation and time management skills are important for students as they seek to create a balance between their personal and educational lives. Professors also mentioned the need for students to have access to technology along with broadband internet capabilities. Students would also need an understanding of Microsoft Office, particularly Excel, Word, and to a lesser extent PowerPoint.

Career Center customers who are looking to take hybrid or online courses as part of/or as a standalone training program would need to have the same self-motivation and time management skills as indicated above. Career Center customers would have to account for the technology aspect of online and hybrid learning models both from having access to the technology and the ability to utilize it effectively. Professors recommended exposing Career Center customers to sample course materials and syllabi before they enroll in a course to further their appreciation for the work involved. A survey of a Career Center customer's technological skills should be taken before they enroll to ascertain their suitability for online and hybrid courses. A hybrid course could serve a good introduction into an online learning environment as this type of course provides the student with both online and face-to-face interaction. After successfully completing the hybrid course, a Career Center customer could progress onto a pure online course.

Recommendations:

- The Career Center should review approved training providers for programs that provide training either through hybrid or online delivery methods. A review of these programs should be conducted for their suitability for inclusion onto the approved Individual Training Account list. Furthermore, the Career Center should work with educational institutions to enroll their online & hybrid courses into TrainingPro.
    - o Please refer to the TrainingPro website, provided by the Massachusetts Executive Office of Labor and Workforce Development for more information.
- Career Center Case Managers can use the Online Learning Discussion Questionnaire to help Career Center customers assess their suitability for online courses. The Online Learning Discussion Questionnaire was adopted from North Shore Community College's Distance Learning Questionnaire with modifications based on the indicators of a successful online student by the professors. These indicators are time management, self-motivating, and the ability to use technology as a professional tool.
- Career Center customers should be exposed, at the Career Center, to example syllabi and course work from online and hybrid courses at the equivalent educational level they plan to enroll in so that they have an understanding of the work involved in these types of courses.
- Encourage Career Center customers to meet face-to-face with course instructors after they enroll in a course. Instructors indicated in their responses that students who they meet with face-to-face have a higher rate of success in their course than those students who do not meet face-to-face. If it is not possible to meet face-to-face, a phone call to the professor could substitute for an in person meeting.
- Career Center customers who enroll in online courses should consider forming virtual study groups with other students in their course. Career Center customers, with permission from the course instructor, can ask other students for their Skype or FaceTime account names. This will give them the ability to create a support network and assist one another with course objectives.

- Develop a Career Center Workshop that focuses on how customers can effectively utilize online learning and succeed in an online environment.
- Depending on results of the Career Center training provider review, the performance outcomes of Career Center customers need to be monitored for effectiveness compared to the general Career Center training cohorts.

Online Learning Survey Results

1. **How many courses do you teach that are purely online, i.e., courses that are NOT part of a hybrid/blended model, in a typical year? Could you tell us some of the course titles in the comments section?**
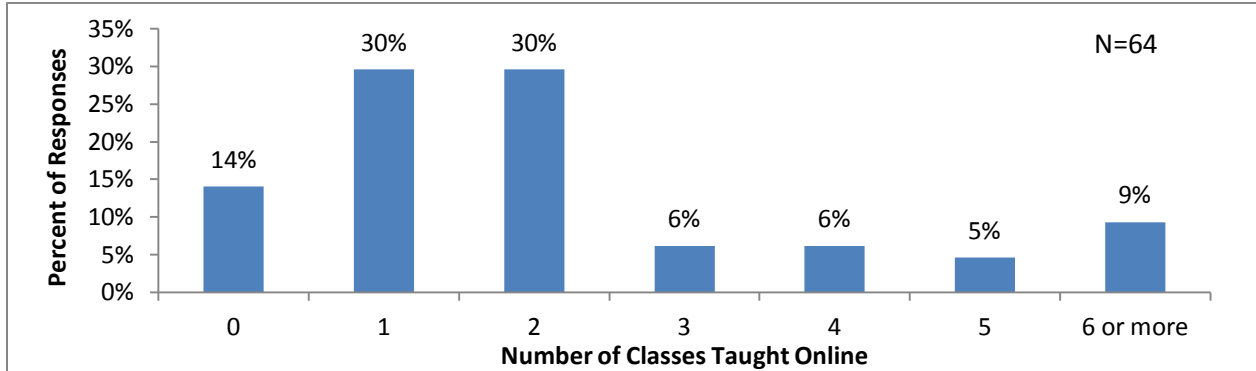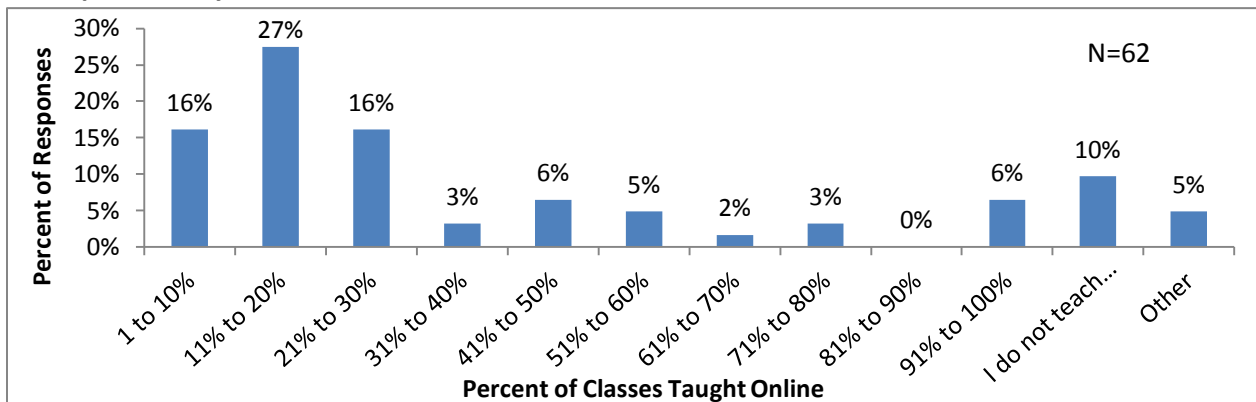

Other Responses:
- Nine respondents (14%) indicated that they do not teach online courses.
- Five respondents (9%) indicated that they teach more than five online courses in a typical year.

Sample Course Titles: A Review of the sample courses showed that Colleges are offering a full array of courses online. Students pursuing liberal arts, business, or science and technology degrees all have the option of taking these courses online. A few of the courses taught online include: Intermediate Algebra, World History, Managerial Economics, Networking Technologies, Gender & Society, and Business Fundamentals.

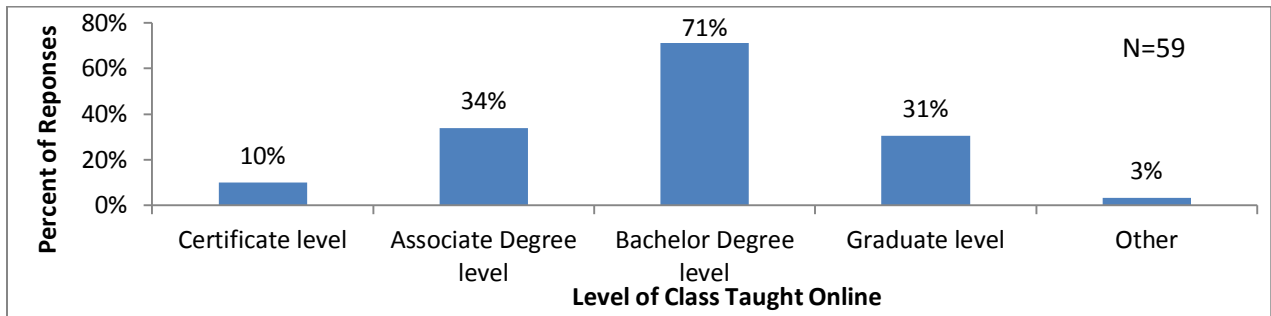2. **What percent of your total course load are online courses?**

Other Responses:
- Two Respondents are adjunct faculty who teach online.
- One Respondent will teach one hybrid course in the fall semester

3. **At what level are the online courses?**

    Respondents were allowed to select more than one answer. This is the reason why percentages add up to more than 100%.

Other Responses:

- Two other responses indicating that the question was not applicable to them.

4. **How many courses do you teach in a typical year that require some use of technology, i.e., use a hybrid/blended model, an accelerated model (with a few class meetings in conjunction with online), a traditional class using online resources? Could you tell us some of the course titles in the comment section?**
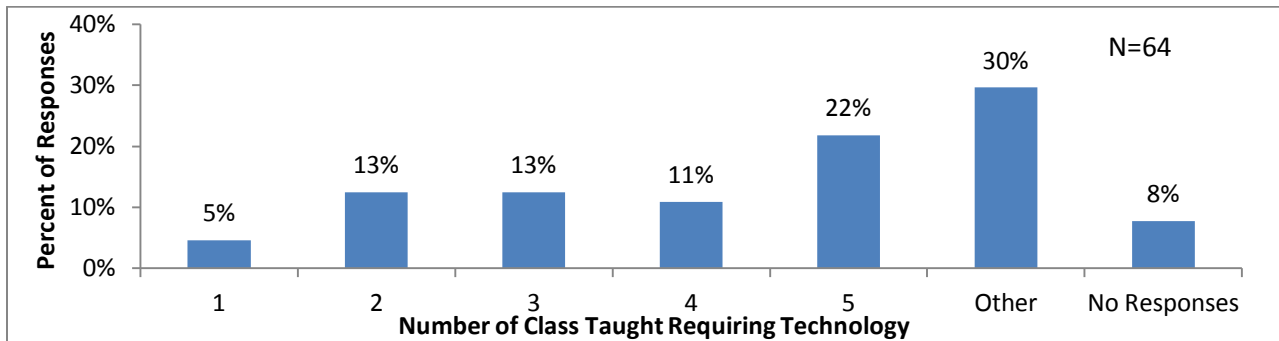

Other Responses:

- 17 responders indicated that more than 5 of their courses required the use of technology.
- 1 responder indicated that they had no technology requirement.

Sample Courses: As with question 1, a review of the sample courses show that Colleges are offering a full array of courses that utilize technology. A few of the sample courses include: Research Methods, American Literature, Operations Management, Financial Accounting, and Advanced Statistics.

5. **What percent of your total course load are hybrid/blended, accelerated model, or a traditional class using on-line resources?**
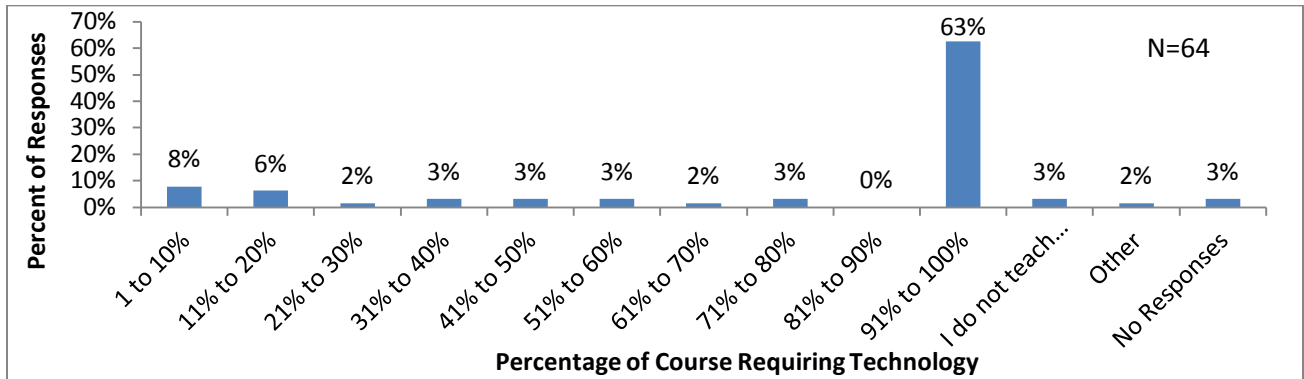
- The majority of a professors total course load requires the usage of online resources.

6. **At what level are the hybrid/blended, accelerated model, or a traditional class using online resources?**
Respondents were allowed to select more than one answer. This is the reason why percentages add up to more than 100%.
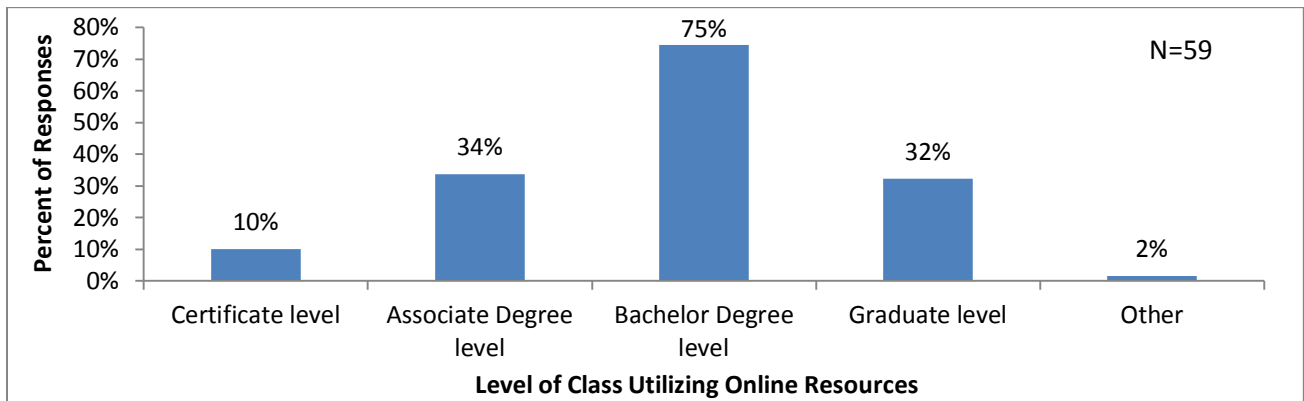
- Bachelor Degree level courses have a higher level of utilization of online resources.
  - This may be a reflection of Bachelor degree courses being more common at Salem State University and Endicott College.

7. **Please briefly describe the teaching methods you use in these courses. For example, do your students use textbooks as the primary instrument? Do you post items online for students to read? Do you use video or discussion boards?   Do you use technology to assess learning or more traditional methods like paper tests in class? Other thoughts are welcome here.**
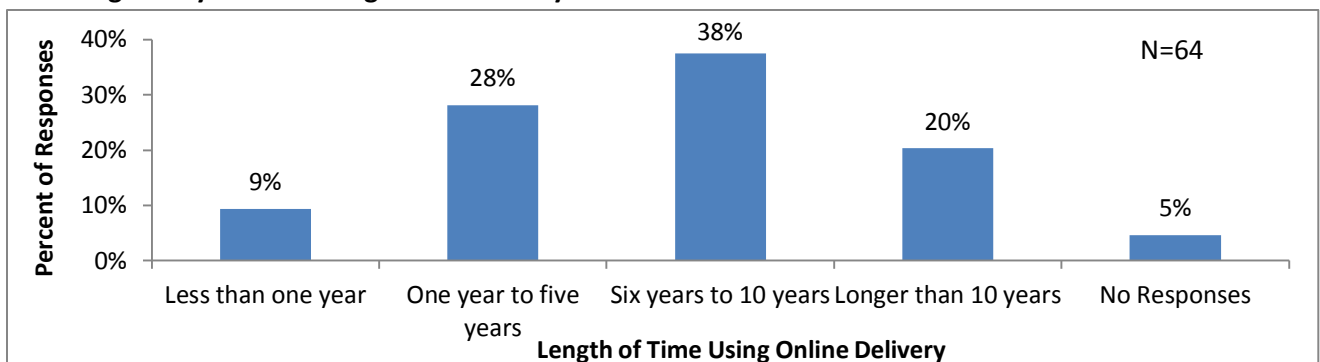The methodology of classroom instruction is changing to incorporate technology into the classroom. Fifty-one professors responded to this question and all indicate some level of online interaction with their students. The majority of professors still use a textbook as the primary learning tool with 59% of the respondents indicating their use in the classroom. Professors are now incorporating online learning platforms into the curriculum. However, the extent and breadth of technology utilized varies based upon the individual professor's preferences. 58% of responding professors are posting reading assignments online to supplement textbooks and having forum discussions surrounding the reading. A

large percentage (47%) of professors are having their students watch online videos as part of their homework assignments. Thirty-three percent indicated that they give quizzes or tests online to their students. These tests can be used to monitor student progress or understanding of class subject matter or as a midterm or final.

Sample Responses:
- Since my courses are taught online, my students are expected to have access to a computer every day. They must read my lectures online and complete all assignments online. We have discussion assignments in which students post their thoughts and then respond to the thoughts of their classmates. Students are given articles to read online (some do print them), and they often have videos to watch. There are also team assignments that require students to work together. While this collaborative work can be done on campus, the majority of my students work with each other online, either by email or Facebook or some other electronic means. One of my classes (CPS104) has an e-text - they access the text only online, while the other (CPS124) has a more traditional text book. All exams are only online, they include True/False, Multiple Choice, Fill-in-the-Blanks and short essay questions. The computer grades all the questions except for the essays (I do review and often over-ride the computer).
- I post readings for students online, or students participate in locating and posting readings. I often make use of video as an online teaching tool (videos of teachers in their classrooms), and every online class I teach uses a structured online discussion format.
- I lecture once per week for 4 hours using Power Point and interacting with students. I assign students with literature related to the topic and they need to show critical thinking regarding that topic. They may be asked to post their work and comment to classmate's responses online.
- Depending on the class, I blend a text with on-line readings, videos or readings on webs sites. Many assignments may be turned in on-line. Some quizzes and exams are completed on-line.
- Students use online texts, email is completely online, online math instructional systems are used, video is prominent and testing is online.

8. **How long have you been using online delivery?**

Chart: Length of Time Using Online Delivery (Percent of Responses), N=64
- Less than one year: 9%
- One year to five years: 28%
- Six years to 10 years: 38%
- Longer than 10 years: 20%
- No Responses: 5%

- Fifty-eight of the respondents have been using online delivery for over six years.

9. **What type of support do you have from your institution in developing or teaching an online and/or hybrid course?**

The vast majority of professors, 90%, indicated that their institution provided support in developing or teaching online/hybrid courses. All of the institutions have dedicated departments for assisting professors with developing online courses and solving technical issues. Several Professors mentioned their institution, North Shore Community College, has received a Technology Across the Campus (TAC) Grant which can be used to help develop online & hybrid courses.

Sample Responses:
- A lot of institutional support. There is a full process of applying to teach an online course, taking an online course (to learn about online learning), and a 6-month development process where you are paired with an instructional designer.
- The college offers a variety of teaching workshops that are available should a professor choose to use them! We also have a great Academic Technology group that is always there to support your needs.
- CTI at Salem State continues to offer courses to help support online teaching. More important to me has been the actual tech support at SSU...quick, responsive and problem-solving focuses for both me and my students.
- Our college has a supportive and innovative distance learning/academic technology department. When I developed my online course, I had a Technology Across the Curriculum (TAC) grant, the help of two instructional designers, and a course release. I feel free to contact the instructional designer on staff whenever I want help adding technology to my online or F2F classes or experience technical difficulties.
- NSCC has a wonderful support team from Educational Technology. They help make online learning a positive and rewarding experience for me and my students

10. **In general, what percent of your students in past/current online courses do you think were/are appropriately skilled for this type of learning and did/are doing well using on-line learning?**
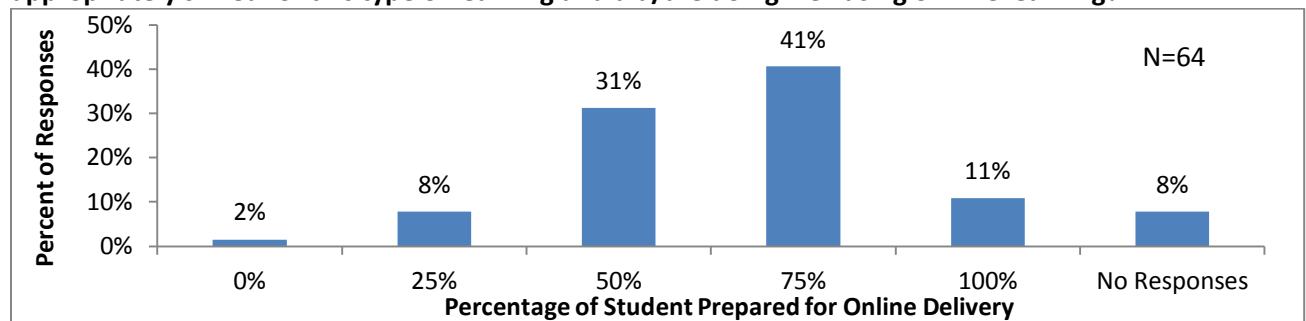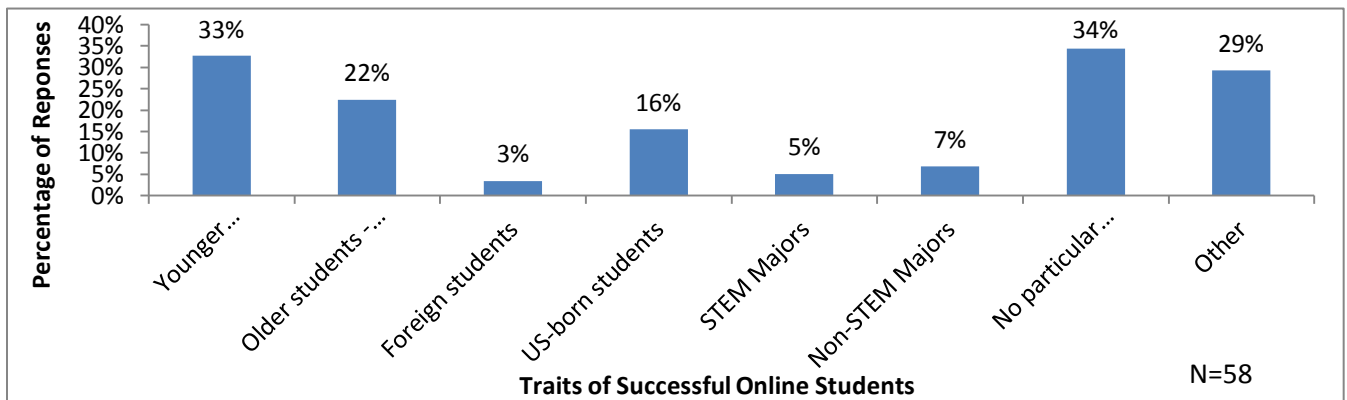

Sample Responses:
- Being a successful student in an online course is more difficult than being successful in a face to face course. The student must have a high level reading and comprehension ability and the ability to manage time successfully. Students should understand the requirements before attempting an online course.
- As more students are becoming familiar with online, I do feel that there is a need to educate students on how to take online courses and the amount of work that they are going to be required to do. Often students are not prepared for the type of commitment level/ standards that online courses require. They are also not knowledgeable about the technology (surprisingly) other than bare basics and need much structured coaching, advising, hand-holding, and support- you need to stay on top of them.

- Online courses are very challenging. Staying motivated and keeping up with the calendar are very difficult tasks with adults who have busy lives. It is easy to put off and fall behind in these classes. Writing skills and tech skills must be more advanced than in regular classrooms because all material is communicated and all grading is based in the online environment. Online is not an easy alternative to face to face classes.
- I ask all of my online students to take a skills inventory before the end of add/drop period. Some don't bother and don't attend my F2F orientation for my online class; some of those never get the hang of it.
- Because this is a program that includes adult learners/non-traditional students the majority of them have a big learning curve in the beginning of the program adapting to online classes and miss face to face meetings more frequently.

11. **What, if any, characteristics/traits are reflected in students who learn well using online learning?**
Respondents were allowed to select more than one answer. This is the reason why percentages add up to more than 100%.

Bar chart: Percentage of Responses vs Traits of Successful Online Students. Younger... 33%, Older students -... 22%, Foreign students 3%, US-born students 16%, STEM Majors 5%, Non-STEM Majors 7%, No particular... 34%, Other 29%. N=58

Sample Other Responses:
- Independent learners with college level reading ability
- Organized and able to pay attention to detail
- Previous use of technology for learning.
- Self-motivated students
- Time management skills, self-directed behavior

Sample Comments:
- I don't believe it is any single demographic trait. I have had successful and unsuccessful students in all of these categories. Motivation and time management, willingness to persevere through technical glitches and basic writing and communication skills are the key to success in my online courses.
- Self-discipline and self-organizational skills clearly help online students. Language difficulties, which mask comprehension difficulties, are less easily addressed online.
- It is not a demographic characteristic/ trait that explain students who learn well online, it is more the maturity level in their educational and technology process and their willingness and commitment to this type of teaching structure. Students need to be disciplined and self-starters; able to work on their own with good support but not "needy" support or verbal instruction.

Online courses move fast and tech. requirements necessary. Without understanding navigation, students get lost and do not keep up.

- You cannot characterize a student who learns well using online learning in any of the categories you have listed. Students need to have good time management skills and be an independent learner with college level reading skills. Online courses assume that the student is able to comprehend the material on his/her own and get the work done by the due date to earn a passing grade.
- I have had success (and failures) across all demographics.

12. **As the Career Center makes decisions on sending job seekers to on-line courses for retraining, what should be the primary issues and points discussed with the job seeker?**
Respondents were allowed to select more than one answer. This is the reason why percentages add up to more than 100%.
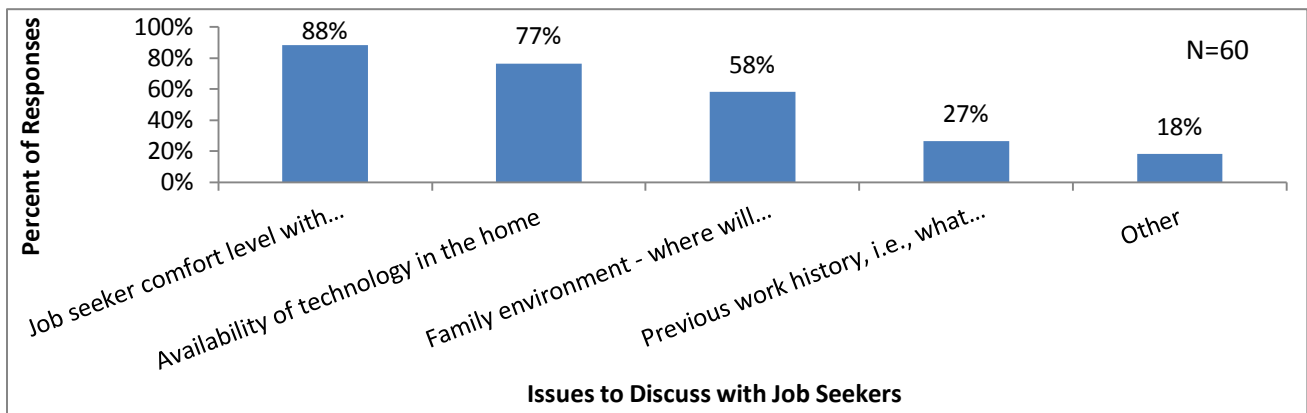
13. **How can a Career Center staff person be sure that a job seeker is ready for an online learning environment?**
The professors all stated several commonalties in the profile of a successful student for an online learning environment. The commonalties related towards personal aptitude, home environment, and technological proficiency. Online success starts with the student. The student needs to be college ready, which entails the ability to read and write at the college level. The lack the face-to-face communication means that the student has to be able to self-motivate to check the online learning platform utilized for updates to their course syllabus. Time management is a key indicated for success, as the workload for online course is the same as traditional classroom instruction. A computer with internet access is highly important as all course interaction is conducted online. The student may need to notify family members before the start of the course to make them aware of the student's need for computer usage and to negotiate time to use the computer. In terms of technological proficiency, students will need to be able to use computers as a professional tool. According to the professors' responses, the students need to be able to use the internet to access email, upload and download files, participate in message board discussions, collaborate on group documents (writing, editing documents and presentations), and view & listen to video files. Many of these activities are similar to everyday online activities such as engaging in social media, participating in online forums, or "surfing the net". Students also need to be proficient in Microsoft Office, particularly in Word, Excel and PowerPoint. They are expected to have access to Microsoft Office. The key to success in online education is making sure that the student is a self-motivator to complete assignments on time without face to face instruction and technologically

proficient enough to not get lost when accessing the online learning platform and collaborating online with their colleagues.

Sample Responses:

- As I stated before, to be successful in an online learning environment, the person must have college level reading comprehension and good time management skills. An online course is done without face to face instruction so the student must be a good independent learner. Technology is just a tool and the job seeker can certainly learn to use that tool in a timely manner. The ability to comprehend the material and get assignments in on the dates they are due is the most important skill that person must have. The majority of students that do not pass an online course have missed the deadlines that assignments are due or do not understand the material that they have read.

- Provide them with the online guidelines; schedule; syllabus; etc. and see if they understand/ have the technology (online teaching methods) used to take the course. Make sure that they understand that online courses require time commitment and are NOT a simplified learning model for course requirement. This type of learning experience is not for all students. A screening should be provided. But highly effective for those who are ready and able for this online learning experience.

- Interview to ascertain comfort level with technology and, most of all, the seeker's ability to be self-managed and to keep to a course schedule that unfolds in real-time.
  Depending upon subject/topic, applicant must have well-honed critical reading and writing abilities--along with an appropriate/effective lexicon, needed terminology, and--in most cases--a good command of English.

- Most use technology every day. Online learning uses a lot of the same elements to instruct and is the same curriculum as in the classroom.
  For example, if they belong to a message board or facebook they email or IM people all the time. This is the same as a discussion board where you are posting information and waiting for a response like an email.
  If they ever clicked a live link online to join a live video to watch this is the same as joining in a videoconference or webinar online
  If they download attachments from their email same as opening up handouts on line.

- 1) I would walk them through the website/delivery system, to make sure that they aren't totally confused when the class actually starts. From what I understand, all of those delivery systems have some weird quirk or other. Sometimes it is completed-assignment uploading, sometimes it is another problem
  2) Make sure that they understand their daily/weekly responsibility. I run into advisees who haven't even checked their email in the first two weeks of class, and so got dropped from an online course.
  3) Will they be able to access a computer as needed? Will they need to negotiate with family members for computer time? Think this through first!

14. **What are your general thoughts on the value and challenges of on-line learning to adult learners transitioning into new jobs and careers?**
    Online learning is an opportunity for adult learners to transition into new careers or employment. Online courses provide maximum time flexibility for adults who may not have the ability to attend traditional classes. This gives adults learners the ability to balance their personal and professional lives to develop a routine that works for them. Adult learners need to be aware that online courses are not easy substitutes for traditional classes. In certain cases, online learning can be more difficult than

traditional courses due to the lack of face-to-face interaction with professors. Professors noted that students that complete online courses can have a greater level of understand of course material because they were reliant on themselves to learn the subject matter.

Samples Responses:
- I think that using online learning is convenient for many adults (particularly parents) transitioning to new jobs and careers, and that most jobs and careers now have computer and online components with which job seekers must be familiar. Motivation, willingness to learn and to ask questions, and practice are keys.
- Online learning can be a tremendous boon to students. It provides maximum time flexibility for busy adults. Students who successfully complete online math courses often have a greater level of comprehension than many in-class students, since they have been largely responsible for their own learning and didn't rely on me. They also express a lot of pride and satisfaction with their accomplishments.
- Online learning is great for an adult learner that has college learning experience, and/or getting an advanced level degree. It is not a good idea for a student without college level skills and/or great time management skills. I think that students think an online course will be easier than a face to face course. However, the opposite is true. The student must gain the knowledge through his/her own abilities without the benefit of the instructor. Even though the time commitment may be flexible, the student must have good time management skills or they will not keep up with the course. Many adult learners would need support to be successful in an online course. Some would do well, but there would be a significant chance of a high dropout rate without support.
- I think it had tremendous potential. I have been pleasantly surprised at the level of engagement and the quality of the work submitted by students in my hybrid and online classes. In some cases, online discussions have been superior to anything that has occurred in the classroom. Students have confided that they like the online discussions because they have time to think about and compose their response to their classmates. It was not an outcome that I expected when I began teaching in this format.
- Online learning works great for busy adults. I'll have one student working at 2 AM when they have just gotten off work (I can see statistics on the course) and another at 5 AM when they're getting up for another day. It doesn't matter in an asynchronous course. But my students are grad students so already "own" the reading/writing skills. Can support for students with deficits in these areas be built into any program? Clearly the student who doesn't talk in class because they are verbally inarticulate has a metaphoric match in the student who doesn't write fluently online.
- It is especially difficult for adult learners to adapt to this type of learning if they do not also need or use technology in their jobs. Older students also feel "adrift" or "isolated" using completely online courses and would benefit from using hybrid programs if it is an option, especially in the beginning.

Online Learning Case Manager Discussion Guide
for North Shore Career Center Customers

Are you interested in online learning but wondering if it is the right option for you? Use this discussion guide with your Case Manager to help determine your suitability. Answer **yes or no** to the following questions.

1. I have (or am willing to obtain) access to a computer with a high-speed internet connection.

2. I have a solid understanding of Microsoft Office (Word, Excel, & PowerPoint).

3. I am comfortable using the internet (download & upload documents, send email, browse websites) and learning new technologies.

4. I have the ability to succeed in an academic environment without face-to-face interaction with my instructor.

5. I can dedicate 6 to 9 hours a week per course to participate in the learning process and to do homework.

6. I have the self-motivation to work independently without direction. I do not need constant reminders and attention from the instructor.

7. I have the time management skills to accomplish assignments before a given deadline. I can login daily to a course's Learning Management Platform for changes to a course's syllabus.

8. I am comfortable learning and understanding material by reading or viewing it on my own.

9. I can communicate my ideas effectively in writing. My communication with others through written correspondence is the same quality as my oral discussions.

10. My lifestyle (family, work, or schedule) makes it difficult for me to attend courses during the day or evening.

Your Results

Count the number of times you answered "yes" and find your score.
9-10 "yes" answers: you are an excellent candidate for online learning.

6-8 "yes" answers: you are mostly likely a good candidate for online learning. However, consider the questions that you answered "no" too. How will those questions influence your ability to succeed? Online learning takes self-motivation and time management for a student to be successful. Often hybrid courses can be a good introduction into online learning as they combine traditional on the ground courses with online learning.

1-5 "yes" answers: think seriously about whether online learning is the right choice for you. You may find greater success in a face-to-face course. Success with traditional course work can help prepare you for online learning.