ASSESSING ONLINE READINESS:
PERCEPTIONS OF DISTANCE LEARNING
STAKEHOLDERS IN THREE OKLAHOMA
COMMUNITY COLLEGES

by

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Submitted to the faculty of
Graduate College of
Oklahoma State University
in partial fulfillment
of the requirements
for the degree of
DOCTOR OF PHILOSOPHY
July 2006
ASSESSING ONLINE READINESS:
PERCEPTIONS OF DISTANCE LEARNING
STAKEHOLDERS IN THREE OKLAHOMA
COMMUNITY COLLEGES

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PREFACE

This study was conducted to provide new knowledge pertinent to identifying the perceptions of distance learning stakeholders concerning student readiness for online learning. The author would like to acknowledge the contributions of Dr. Lynna J. Ausburn, dissertation advisor. You are truly the lion to my rabbit. Thank you. To the rest of my committee, thank you as well; Dr. Mary Jo Self, for making me establish my philosophy; Dr. Robert Nolan, for forcing me to be able to articulate my study concisely yet thoroughly; and Dr. Gary Conti, for stepping in at the last minute to read the study and provide valuable input.
ACKNOWLEDGMENTS

I wish to express my sincere appreciation to all who have helped me survive the past five years. I could not have completed this degree without the support of the Business and Information Technology Division at Tulsa Community College. Your understanding and support have been outstanding. And to the entire TCC family, so many people have provided assistance and support that I could not begin to thank you all.

But the most important people to thank are my family. David, who could ask for a better husband? Thank you for putting your degree on hold for me. Thank you to my children who have understood (most of the time) that Mom had homework too. Justin, you are the son who went from a young man to a husband and father during this time; Whitney, the young woman who was willing to take on my son and then providing me with a wonderful grandson, Coltn; and Jessica, the sprite who became a beautiful young woman. And to my parents, Johnny and Brenda Butler, who instilled the dream to someday have a college graduate in the family in me, and who had a dream that someday our family would have a doctor (OK, a medical doctor, but . . .). I love you all.
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“Distance learning is not a fad, but instead appears to be a driving force for the future of education” (Davis, 2004, p. 168). Hofmann (2003) stated:

We all know that the use of online learning has gone beyond a trend to become an accepted and permanent part of the learning mix. It’s hard to find a subject that isn’t in some form and at some level, taught online. (¶ 1)

In fact, distance education is an ancient form of education although the definition has evolved over time. In the beginning, it was characterized as following the teacher from one location to the next because the teacher traveled and took the information being taught to the students. The education was considered distance education because it took place outside of a traditional educational setting; instead, the classrooms were often outdoors in public settings. In Biblical times, the faithful gathered to hear the words of Jesus as he traveled. The same is true of Plato and Socrates and their students and of Mohammed and his followers. More recently, rather than the student or teacher traveling, the instructional materials have been sent to the student at locations distant from the brick and mortar facilities of the institution via mail-based correspondence courses,
satellite, interactive television, computer-based training, and multimedia (L. Ausburn, personal communication, February 2006). The roots of modern distance education are found in the original correspondence courses dating back to the 1800s according to Horton (2000). Specifically, Horton (2000) stated:

> By 1840, Sir Isaac Pitman was teaching his shorthand system by mail. About that time Scottish educator James Stewart of Cambridge University began offering off-campus lectures. In the US Illinois Wesleyan University began a home-study program in the 1870s, and a ‘Correspondence University’ was founded in Ithaca, New York, in 1883. (p. 3)

Today, the definition of distance learning has evolved to mean “any type of instruction in which student and instructor are not in the same room; they are separated by physical distance” (Wahlstrom, Williams, & Shea, 2003, p. 1). Currently, distance education students have the option of utilizing the Internet for courses. Most institutions have identified courses taught over the Internet as online learning, distance learning, or distance education. Maeroff (2003) described online learning as “Dynamic, changing even as you read the words” (p. xi). Online learning is defined by the Online College of Oklahoma Delivery Methods (2002 - 2005) as courses where all course materials are transferred over the Internet.

The Sloan Consortium (Sloan-C), in a report written by Allen and Seaman (2004), estimated that over 1.9 million students studied in online classes during the fall of 2003 with an expected growth rate of almost 25% for 2004. In the Sloan-C report published in November 2005, Allen and Seaman (2005) reported 2.33 million students had taken at least one online course during the fall of 2004. The resultant growth rate of 23% was not quite as large as expected, but very
close to the previous year’s projections. Swenson and Myer (2005) referred to a report from the United States Department of Education that estimated “by 2008, 60% of college and university enrollees will be between the ages of 18 – 24. Of this group, at least 75% will be non-traditional students” (p. 3). In this context, non-traditional students were defined as students who were not enrolled in traditional place-bound college classes. Based upon this information, Swenson and Myer predicted that “online and blended delivery education will continue to grow exponentially to meet their [non-traditional students] needs” (p. 3). Huff (2002), in apparent support for learning via non-traditional methods, wrote, “In the Internet Age, working with new and exciting technologies can give one a competitive advantage in the job market” (¶ 19). Furthermore, Huff continued, “Knowledge has become a commodity in the new economy, and technology has finally become indispensable” (¶ 19). Harley (2001) also described today’s society as a global knowledge economy.

The majority of administrators in schools surveyed by the Sloan-C indicated their belief that “Online education is critical to the long-term strategy” for success of the institutions (Allen & Seaman, 2004, p. 2). Recent research has indicated that many students are turning to online classes as an educational option (Allen & Seaman, 2004; Distance Learning Task Force Report, 1999; Gallagher, 2002; Seppanen & Stern, 1999; Tulsa Community College, 2003). Although tremendous growth in this area is apparent and administrators have recognized the need for online education in the long-term strategy for success of educational institutions, the Illinois Online Network: Educational Resources
The corporate community has also moved employee development into the online educational world. According to Horton (2000), over 40% of large corporations have conducted training using online methods. ION has stated that “Corporations are using the online model to train technical professionals while private and public universities redefine the world as their markets. The market for students is expanding rapidly” (ION: Educational Resources, 2005b, ¶ 1). Not only will the market for online classes expand, but Maeroff (2003) stated, “Online courses will edge closer to the mainstream with each passing year, so much so that eventually few distinctions will be made between courses taken online, courses taken in the classroom, and courses that incorporate attributes of both settings” (p. xii – xiii).

For those who teach in the online environment, the growth in online classes, the increased numbers of students, and the acceptance of online learning by academic leaders appears to be good news. Although little evidence can yet be found in the literature that suggests the rapid growth in the number of online students has increased the number of students who may be ill-prepared for this unique learning environment, the ION Self Evaluation for Potential Online Students was created based upon anecdotal evidence of the need to educate students about the realities of online learning (V. Varvel, personal communication, September 19, 2005). Multiple institutions have placed student
online readiness assessments on their websites. Many of these assessments are similar in content to the ION assessment. One example of the importance of student readiness and its assessment that is available in the literature is reported in an evaluation report of the Illinois Virtual High School (IVHS). Clark, Lewis, Oyer, and Schreiber (2002) stated in their IVHS evaluation report that students had requested a comprehensive orientation to online learning. The evaluation team for the IVHS agreed, recommending that the virtual high school “consider offering a more comprehensive student orientation, and perhaps a short course to encourage effective online study skills” (p. v.). The justification for this recommendation of an online student orientation was supported by Clements (2002):

    Online classes are different from regular classes in some important ways. Online classes are more student self-directed, which can make it harder than the traditional class. It takes motivation and an active participation to be an online student. The online students must be able to keep up with the course schedule without a teacher looking over their shoulder. Online courses can also require more time than the average class. The online student must be aware of the challenging experiences that go along with the virtual classroom. (¶ 2)

In apparent agreement with Clements, Maeroff (2003) wrote, “Online courses demand adaptation simply because the approach differs from the familiar” (p. 85). Lorenzi, MacKeogh, and Fox (2004), reported upon the practices of Osail (National Distance Education Centre—Ireland), “Another challenge to be faced is the readiness of students to engage with elearning” (¶ 12). Lorenzi et al. continued, “If students are to benefit from the undoubted advantages of elearning, a system of support is required which integrates skills training with
academic content, designed to prepare students to succeed in elearning, as well as to enjoy the experience” (¶ 13).

The Researcher’s Experience in Context

This researcher’s personal experience as a distance education instructor at one of the participating institutions and anecdotal data from colleagues provided additional support for a student on-line learning orientation or readiness assessment. A veteran college professor teaching her first online class, reported to this researcher that she was shocked by the amount of time she spent during that first semester teaching students how to open e-mail attachments and how to post word processing documents into the class management site (A. Taff, personal communication, February, 2005). Another online college professor with three years of experience reported amazement at the number of students who struggled with deadlines (M. Smith, personal communication, November, 2004). As the faculty mentor assisting others as they learn to teach in the online environment, this researcher has had numerous conversations with faculty about the lack of preparation in today’s online students. Another faculty mentor at the same institution as this researcher has found that “A student who is new to online learning is often overwhelmed by the amount of ongoing engagement with the learning process that is required of them in a highly interactive learning environment” (W. Smith, personal communication, July 13, 2005).

Allen and Seaman (2004) reported that “The Associates degree granting institutions have the largest number of students taking at least one online course, representing about half of all the students studying online” (p. 7). According to
College Lingo, a publication from the Oklahoma State Regents for Higher Education (2005), two-year or community colleges grant the majority of associate degrees which may transfer to a four-year university or may be for career preparation. The community colleges are “known as ‘open-door’ institutions because performance standards (standardized test scores or combination of class rank and grade point average) are not required for admission” (p. 5). Referring to this concept of open access, Carr-Chellman (2005) wrote, “The underlying assumption that the primary benefits of higher education are vocational” (p. 5) which corresponds with one mission of most Associates degree granting institutions: the mission of preparing a workforce of highly trained workers. One institution’s self study stated that, “All applications are reviewed and admission decisions made based upon admission criteria set forth by the Oklahoma State Regents for Higher Education. Distance learners are admitted to Tulsa Community College within the same guidelines as those for on-campus students” (Tulsa Community College, 2003, p. 29).

The faculty teaching online classes at Tulsa Community College work with faculty mentors to develop and improve faculty technological skills and instructional design techniques for online classes. As a faculty mentor, this researcher works with approximately 29 full-time faculty and five adjunct faculty who teach online at the West Campus of Tulsa Community College in addition to providing support services across the college as needed. Through interaction with these online faculty and counterparts at other institutions, this researcher has seen the emergence of a common complaint. Many of the faculty with whom
this researcher has worked indicated that some students were unprepared for the online environment. The level and type of the lack of preparation differed from faculty to faculty and from institution to institution. Based upon this personal experience and anecdotal data, a more formal investigation into this question of student preparation was conducted by this researcher as an exploratory study. A one-question survey of 29 faculty at Tulsa Community College’s West Campus was sent via e-mail. Twenty faculty responded, for a 69% response rate. Eighteen of the faculty responded that each semester at least one, and usually many more students, attempted to take an online class without the proper skills needed to be successful. One faculty member reported that she rarely had unprepared students, and another faculty member felt that students were prepared for the online class environment. Based upon the reality as perceived by 90% of these faculty respondents, it appeared to this researcher that many students were entering online classes unprepared to succeed. Un-preparedness or under-preparedness for online learning became an issue that interested this researcher and served as the impetus for the present study.

Theoretical Perspective

Grounded in the theory of learning readiness, this study applied basic learning readiness theory to the online learning environment. According to Wynn (2002), “‘Readiness’ is what we call the things that help children be successful in school” (p. 2). The underlying principle of learning readiness is that children learn daily and are born with a readiness to learn. Readiness does not occur in isolation, but instead is a process over time (Wynn, 2002). These same
principles can be applied to learning readiness for adults to the online environment.

Wynn (2002) identified five factors of readiness for children: (1) health and physical development; (2) social and emotional development; (3) approaches to learning; (4) communication; and (5) thinking and general knowledge. Although Wynn was focused on readiness to enter kindergarten, many of the points she made were echoed by Smith, Murphy, and Mahoney (2003) who used McVay’s (2000) *Readiness for Online Learning Questionnaire* to identify comfort with e-learning and self-management of learning as the two main factors for online learning success.

The present study uses learning readiness theory as its underpinning. It is based on a substantive/operational theory. This researcher hypothesized that online student readiness requirements can be identified by practitioners and learners, can be measured, and is a factor in learner success in online courses. This study focused on the first two components of this operational theory; the third must be addressed in future research.

Assessing Online Readiness

To address the issue of assessment of preparation for online learning, two factors are necessary. First, it is necessary to determine the characteristics, traits, and skills needed by students to be successful in online classes. In addition, it is important to determine if online readiness assessments evaluate the required characteristics, traits, and skills effectively. Swan (2004) stated that “Learner characteristics and their effects on learning in the online environment is
an important topic in online learning research. While findings in this area are preliminary, they are plainly intriguing” (p. 71). Hsu and Shiue (2005) added an international dimension to the need for research into the topic of online learning readiness.

The success of distance education delivery lies in understanding individual participants and their varying requirements for successful instructional delivery. This understanding may lead to better design and delivery of services offered to distance learners. Because of the rapid development of distance education and school-based applications of computing technology in Taiwan, research in this area is necessary to understand student success in relation to their readiness for self-directed learning, as well as to improve distance learning programs overall. (p. 144)

Research into this topic is limited, but an underlying theme is the criticality of student preparation for success in online learning classes. Weinstein, Corliss, Beth, Cho, and Bera (2002) wrote:

In the hands of students or trainees prepared to take responsibility for using these tools [instructional resources and technical tools] to enhance their learning, they can indeed be powerful tools. But in the hands of students who have difficulty with self-regulation, such as problems with managing time, meeting commitments, and maintaining motivation, online learning can offer many challenges. (p. 1)

Blocher, Montes, Willis, and Tucker (2002) posed the question, “Can anyone learn anywhere at anytime or are there required prerequisite skills or strategies needed to achieve such learning” (p. 1)? This question formed the framework for the present study. The study was based upon the fundamental premise that required learner characteristics, traits, and skills do exist and are needed to be successful in online classes.

At the time of this study, many institutions offered an online readiness assessment to prospective online students, but this researcher’s personal
investigations revealed that most institutions did not require the readiness assessment for enrollment into online classes. The researcher's extensive investigation further revealed that when this study was undertaken, data about the effectiveness and appropriateness of these online assessments appeared to be non-existent. In addition, many of the institutions researched prior to this study appeared to be using versions of a readiness assessment published by the Illinois Online Network (ION), but without data to determine if the ION readiness assessment was testing the appropriate characteristics, traits, and skills.

According to Varvel, Director of University Outreach and Public Service at the University of Illinois (the home of the Illinois Online Network), the ION readiness assessment was created in 1997, with minor updates being made over the past nine years. The assessment was created based almost entirely on anecdotal evidence that was philosophically understandable. The assessment has proven to be useful (V. Varvel, personal communication, September 19, 2005).

However, without clear, empirical data detailing the characteristics, traits, and skills needed for online success, it is at present very difficult to determine if the ION assessment or a derivative would be an effective screening instrument even if it were required by the institutions using it. This lack of data regarding what characteristics, traits, and skills are appropriate as prerequisites to enrolling in an online class is currently a major deterrent to the effective use of the available screening assessments that might improve student success rates. In addition to the discussion of the characteristics, traits, and skills needed for student success, Kennedy (2000) tackled the meaning of the term *success*:
One of the challenges to any study of the effects of online education is defining what is meant by success. The definition could depend on the audience: Teachers may be most concerned with student learning, students may be most concerned with course grades, and administrators may be most concerned with retention. (p. 11)

This study sought to add to the body of knowledge in online learning by identifying and describing the perceptions of distance learning stakeholders concerning the characteristics, traits, and skills necessary for the readiness of students to be successful in online courses. It also evaluated the most commonly used student readiness assessment in light of those stakeholder perceptions.

Statement of the Problem

Those involved in online learning have suggested multiple characteristics, traits, and skills that may be required for success in online courses. However, it is unknown if agreement exists among the stakeholder groups concerning what characteristics, traits, and skills constitute a properly prepared online student. It is also unknown if the ION Self Evaluation for Potential Online Students, which many institutions either adopt or adapt for online readiness assessment, addresses the characteristics, traits, and skills that are identified as necessary by stakeholders. Without this knowledge, development of an online readiness assessment tool that effectively meets identified needs is impossible.

Purpose of the Study

The purpose of this study was three-fold. First, the study described and compared what distance learning stakeholders, comprised of administrators, online faculty, and online students, in three community colleges located in
Oklahoma perceived as important characteristics, traits, and skills for online students to have prior to entering the online classroom. Second, the study developed a profile of the institutional stakeholders and the faculty and student stakeholders involved with distance learning at the three Oklahoma community colleges participating in the study. Finally, the study evaluated the ION Self Evaluation for Potential Online Students which currently serves as the basis for many of the online readiness assessments used by institutions in the United States. The goal of the evaluation was to determine if the ION assessment actually assessed what administrators, faculty, and students perceived as important for online success and thus represented an appropriate online readiness assessment tool.

Research Questions

This study was guided by nine specific research questions:

1. What characteristics, traits, and skills do distance learning administrators perceive as important for student readiness?

2. What characteristics, traits, and skills do distance learning faculty perceive as important for student readiness?

3. What characteristics, traits, and skills do distance learning students perceive as important for student readiness?

4. What perceptions do the three distance learning stakeholder groups have in common regarding the characteristics, traits, and skills necessary for online students?

5. What perceptions are unique to each distance learning stakeholder group regarding the characteristics, traits, and skills necessary for online students?

6. What is the demographic profile of the community colleges offering online degrees in Oklahoma?
7. What is the demographic profile of the online faculty at the community colleges offering online degrees in Oklahoma?

8. What is the demographic profile of the online students at the colleges offering online degrees in Oklahoma?

9. How effective is the ION *Self Evaluation for Potential Online Students* in addressing the characteristics, traits, and skills identified by the study’s stakeholder groups?

The research questions were addressed in various ways. Table 1 presents the instruments and analyses used to address the various research questions.

**Table 1**

*Basic Research Methodology*

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Data Gathering Instrument</th>
<th>Data Analysis Method(s)</th>
</tr>
</thead>
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<tr>
<td>Questions 1 – 3</td>
<td>Survey</td>
<td>Content Analysis with Constant Comparison and Descriptive Statistics</td>
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<tr>
<td>Questions 4 – 5</td>
<td>Thematic Coding from Survey</td>
<td>Descriptive Statistics and Cross-Tabulation</td>
</tr>
<tr>
<td>Questions 6 – 8</td>
<td>Survey and publicly available information published by the institutions identified in the study</td>
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<tr>
<td>Question 9</td>
<td>Summative Evaluation of the ION <em>Self Evaluation for Potential Online Students</em></td>
<td>Elements of Scriven’s Key Evaluation Checkpoints (KEC)</td>
</tr>
</tbody>
</table>

The descriptive statistics used in the study were frequency response reporting, \( \Sigma \) Rank Point, mean, and percentages. Frequency response reporting involved analyzing the open-ended question responses of three surveys and placing those responses into categories. \( \Sigma \) Rank Point is a statistical reporting tool to place responses in order when the respondents are asked to rank a
specified number of items from a larger list. Means were calculated for
demographic data where appropriate, and percentages were calculated in
conjunction with frequencies and $\Sigma$Rank Point.

Scriven’s Key Evaluation Checkpoints is an evaluation process that has
been used for over three decades. Referring to Scriven’s work with the Key
maintains that there is a science of valuing and that is evaluation” (p. 32). The
KEC has been in use world-wide for more than 30 years. It was first used for
evaluating educational products, but is currently primarily used for program
evaluation. Scriven’s Key Evaluation Checkpoints (KEC) is a checklist of items
that “Was designed primarily for application to program evaluation” (Davidson,
2005, p. 5), but may be included in any evaluation. Specifically, “The KEC should
be thought of both as a checklist of necessary ingredients to include in a solid
evaluation and as a framework to help guide evaluation planning and reporting”
(p. 5). In the context of this study, the KEC was used for its original educational
purpose of evaluation of an educational product, i.e. the ION Self Evaluation for
Potential Online Students.

Population and Sample

The population of the study included the distance learning stakeholders,
comprised of administration, online faculty, and online students, at three
community colleges in Oklahoma that offer online degrees: Tulsa Community
College (TCC), Rose State College (RSC), and Oklahoma City Community
College (OCCC). The institutions selected for the study were limited to those
public schools agreeing to participate in the study and recognized by the Oklahoma State Regents for Higher Education as having permission to offer online degrees, excluding institutions that offer graduate level online degrees. All distance learning stakeholders at the three institutions that met these criteria were invited to participate in the study. The obtained sample was a self-selected convenience sample comprising all individuals who elected to complete the research surveys.

The final student population numbered approximately 9,000 students enrolled in online classes in the three Oklahoma community colleges. These students may or may not have been seeking an online degree at the institution. The sample from this population equaled 749 self-selected students who completed the research survey. The faculty and administrator populations were determined by the distance learning administrator deploying the surveys at each of the three community colleges. The numbers available in the administrator and faculty populations were not provided to this researcher. The reason for withholding the information was to protect the anonymity of the individual faculty members and administrators. The final sample of faculty comprised 137 self-selected faculty members and 14 self-selected administrators who completed the research survey. Generalizations of the findings beyond this sample were not appropriate.

Research Design and Methods

This study design was descriptive in nature, using a mixed method technique for collection and analysis of data. In this study, the focus was on
quantifying the data received via three separate online stakeholder surveys and evaluating the ION Self Evaluation for Potential Online Students using Scriven’s Key Evaluation Checkpoints methodology to compare the ION Self Evaluation for Potential Online Students to the stakeholder perceptions.

Instrumentation

The three survey instruments used were created by the researcher. The survey construction was a multi-step process. The first step in the design process was a brief, one question survey of faculty at one campus of an urban community college. The survey asked if online students were prepared for online classes. Based upon the results of the preliminary survey, a three-round Delphi study was conducted at Tulsa Community College. Approximately 15 online faculty participated in the Delphi study. Through the Delphi study, the online faculty identified characteristics, traits, and skills that were considered important for student success in the online environment. The next step involved creating the actual surveys. Once created, the surveys were evaluated by a research director at a metropolitan community college. The research director evaluated each survey for the appropriateness of the questions. The director identified weaknesses in the survey design and provided suggestions for continuity and quality. At this point, the dissertation committee reviewed the surveys. The surveys were tightened in scope based upon the committee input. Then, the surveys were peer-reviewed for content validity by five experts in the field of online learning. Following the peer review for content validity, the surveys were placed in a pilot study with a limited number of respondents. The purpose of the
A pilot study was conducted to test the workability of the surveys and the time involved with completing the surveys. Other than demographic data unique to each stakeholder group, the three surveys asked identical questions of the distance stakeholder groups.

Data Analysis and Methods

Basic descriptive statistics were used on each category of surveys. Frequency of response tables with percentages were used for the categorical data. Central tendency statistics were used for numeric data as appropriate. Thematic coding was used to compare and contrast the data provided to identify the similarities and differences in the opinions of the three stakeholder groups. The Key Evaluation Checkpoint methodology was used as a framework for a summative evaluation of the ION Self Evaluation for Potential Online Students. The evaluation was a goals-free evaluation with evaluation criteria and weighting based upon the identified values of the distance learning stakeholders at the three Oklahoma community colleges participating in this study.

Limitations and Assumptions of the Study

The request to participate in the study was limited to only those public two-year and four-year institutions identified by the Oklahoma State Regents for Higher Education as having approval to offer and grant online degrees in Oklahoma at the time of the study. Fourteen institutions had received permission from the Oklahoma State Regents for Higher Education to offer and grant online degrees. The researcher eliminated those institutions that offered degrees at the Masters level. The institutions offering Masters level degrees were excluded.
from the study because the research objective sought to discover the perceptions of student stakeholders who were primarily enrolled in workforce degree programs, and who were also in the early stages of a degree. Eight institutions met these criteria. Seven institutions were community colleges and one institution was a regional four-year university. Each of the eight institutions was contacted via telephone to determine the appropriate person at the institution to provide permission for the study. This researcher spoke directly to either the academic vice-president or the equivalent administrator or this administrator’s personal assistant at each institution. All eight institutions required a written document, submitted via e-mail, requesting permission for the research study. This written request was provided as requested to each institution. After repeated attempts to gain permission for the research study from all eight institutions, this researcher encountered institutional barriers to subject access at a few of the institutions. Tulsa Community College, Rose State College, and Oklahoma City Community College each granted permission for the study to take place. Western Oklahoma State College was eliminated when it informed the researcher that the institution did not have a complete online degree at the present time, but anticipated a full degree by the next academic year. One institution denied permission for the study. The remaining three institutions, after repeated telephone calls and e-mails, did not respond to the request to conduct research. Copies of the formal request to conduct research and the written permissions can be found in Appendix A of this document. This phenomenon of institutional barriers was not unique to the present study. Other researchers (e.g.
Ho, 2005; Pachowski & Jurczyk, 2000) have encountered institutional barriers to subject access in studies of online learning. According to Ho (2005), appropriate barriers to access should be limited to the data protected by the *Family Educational Rights and Privacy Act of 1974 (FERPA).* The inappropriate barriers to access include institutional protocol, instructor reluctance, and departmental issues including a lack of coordination between departments. In the present study, institutional barriers forced delimitation of the study to three Oklahoma community colleges.

Of the institutions granting access to this researcher, enrollment information was provided by the institution. According to the admissions office, Tulsa Community College had approximately 27,000 enrollments and 22,000 students during the semester studied with approximately 7,000 enrollments in online classes and an unduplicated student head count of approximately 4,000 students in online classes (personal communication, TCC Admissions, March 10, 2006). Rose State College enrolled approximately 7,220 students during the semester studied with 1,635 unduplicated student enrollments in online classes (C. Meyer, personal communication, March 27, 2006). Enrollment statistics for Oklahoma City Community College indicated approximately 4,200 enrollments in online classes with an unduplicated headcount of 3,400 online students and approximately 23,000 enrollments at the institution with an unduplicated headcount of approximately 13,000 students (personal communication, K. Wullstein, March 24, 2006).
With this delimiter to the study of only those institutions offering online degrees and the further restriction imposed by the institutional barriers encountered, a limitation was imposed on the external validity of the study directly related to the limited access to the institutional populations.

A second limitation of the study was that the study relied upon anonymous, self-reported data gathered through an electronically deployed survey. This researcher had to assume that the data provided were accurate and unduplicated.

A third limitation of the study was the self-selection of the respondents in the study. The survey was deployed through the individual institutions’ course management system to the students. All students participating in online learning during the Spring 2006 semester were invited to participate. The individual institutions selected the administrators and faculty who participated in the study. The data received was limited to the distance learning stakeholders who elected to participate in the study. Because the sample was not randomly selected via scientific sampling methods, the external validity of the study was compromised, which made generalization of findings problematic.

A fourth limitation of the study involved the researcher’s employment status as an assistant professor at one of the participating institutions. It is possible that the respondents may have been influenced due to the researcher’s name being on the consent form for participation. The request for participation in the study was sent via a distance learning division administrator and was not directly sent by the researcher.
An additional delimiter of the study was that only adult students at the participating institutions were included in the sample. Community colleges in Oklahoma allow concurrent enrollment of high school students in courses at the community college. Students under the age of 18 were excluded from the study.

This researcher recognized the limitations of the study and attempts to generalize beyond of the sample have not been made. Future research may involve expansion of the study beyond the Oklahoma community colleges that participated in this study.

Additional delimiters of the study surrounded its purpose. It was not the purpose of this study to validate online learning. Nor was it a purpose of the study to compare online learning to traditional learning.

A final and potentially serious limitation of the study involved institutional barriers. This researcher encountered barriers of access to information concerning students, faculty, and administrators. These barriers are described in the study. The study was conducted with the data received and generalizations of the findings beyond the sample were not attempted. Further research may be needed to determine the underlying causes of the institutional barriers encountered in this and other studies.

**Definition of Terms**

The following conceptual and operational definitions were applied in this study.

**Conceptual Definitions**

**Anecdotal Data:** Records of observed behaviors written down in the form of anecdotes. The best anecdotes tell exactly what the participant did or said
without making evaluative statements in the process of reporting this information (Fraenkel & Wallen, 2003b).

**Associate Degree/Associate Degree Granting Institution:** An institution that grants a degree upon completion of two years of full-time study or the equivalent. Some associate degrees are for career preparation while others may transfer to universities. Most associate degrees are awarded by two-year colleges (Oklahoma State Regents for Higher Education, 2005).

**Characteristics:** A feature that helps to distinguish a person or thing (American Heritage Dictionary, 2000).

**Class Management Site/Course Management System (CMS):** “Software that enables the development, delivery, and administration of web-based courses and academic resources” (Gallagher, 2002, p. 8).

**Community College/Two-year College:** An institution that does not require performance standards for admission (Oklahoma State Regents for Higher Education, 2005).

**Concurrent Enrollment:** A “program that allows eligible high school students (junior and seniors) to take credit-earning college courses” (Oklahoma State Regents for Higher Education, 2005, p. 5).

**Distance Learning:** “Any type of instruction in which student and instructor are not in the same room; they are separated by physical distance” (Wahlstrom, Williams, & Shea, 2003, p. 1).

**Facilitator:** “The online course instructor is often referred to as the course facilitator. Online instructors do not retain their traditional ‘teacher-centered’ roles from the onground paradigm. Instead, they become the medium through which discovery learning is facilitated in a student-centered environment” (Illinois Online Network: Educational Resources, 2005a).

**Faculty Mentor:** A faculty member who “provides direct, one-on-one support to faculty during their development semester, assists the Distance Learning Department in Blackboard Learning System administration, and conducts workshops to train faculty in the use of Blackboard Learning System” (Tulsa Community College, 2003, p. 20).

**Ill-Prepared/Under-Prepared Student:** Students with inadequate preparation in reading, writing, and arithmetic as determined by a score of less than 19 on the ACT (Oklahoma State Regents for Higher Education, 2004).
**Instructional Design:** “guidance and assistance delivered to faculty to support their development of online courses and resources” (Gallagher, 2002, p. 9).

**Learning Preference/Style:** “The ways in which people acquire knowledge” (Wahlstrom, et al., 2003, p. 60).

**Learning Readiness:** “‘Readiness’ is what we call the things that help children be successful in school” (Wynn, 2002, p. 2).

**Non-Traditional Student:** A student who does not attend traditional classes or a student who is older than the traditional 18 – 22 college age student (Seppanen and Stern, 1999).

**Online Course:** A course in which at least 80% of the course content is delivered online via the Internet (Allen & Seaman, 2004).

**Online Learning:** Courses where the course information, instruction, interaction, and assignments are transferred over the Internet in real time or as needed. Access to a computer and the Internet are required to complete an online course (Oklahoma State Regents, 2005).

**Student-Centered/Learner-Centered:** “Students construct knowledge through gathering and synthesizing information and integrating it with the general skills of inquiry, communication, critical thinking, problem solving, and so on” (Huba & Freed, 2000, p. 5).

**Student Readiness:** “The things that help children be successful in school. However, readiness is not just about children. It has two parts: the skills and abilities children have and the readiness of the school to meet the needs of the individual child” (Wynn, 2002, p. 2).

**Student Skill/Personal Traits:** “Student perceptions, attitudes, and expectations about online courses or web enhanced courses” (Student Readiness, n.d., Student Factors ¶1).

**Teacher-centered:** “Knowledge is transmitted from professor to students” (Huba & Freed, 2000, p. 5).

**Traditional Learning:** Learning gained in the traditional, brick and mortar, classroom setting (Chute, Thompson, & Hancock, 1999).

**Traits:** A distinguishing feature (American Heritage Dictionary, 2000).
Operational Definitions

**Distance Learning/Online Administrator:** The administrators identified by the participating institutions as distance learning administrators.

**Distance Learning/Online Faculty:** The faculty members teaching in the online environment as identified by the participating institutions.

**Distance Learning Stakeholders:** Administrators, faculty, and students involved with distance or online learning in the three community colleges participating in this study during the Spring 2006 college semester.

**Distance Learning/Online Student:** The students enrolled in online classes as identified by the participating institutions.

**Illinois Online Network (ION) Self Evaluation for Potential Online Students:** An online student readiness assessment created in 1997 by the Illinois Online Network.

**Online Course:** Courses taught via the Internet as determined by the participating institutions.

**Online Degree:** A degree that can be earned entirely in the online environment.

**Scriven’s Key Evaluation Checkpoint:** An evaluation tool used to evaluate educational programs or educational products.

**Stakeholder Perceptions:** Identified from stakeholder surveys created by the researcher for this study.

**Technical Skill:** Skills in the use of a computer, computer software, computer hardware, and online resources, such as Internet searches, to accomplish the task of learning.

Significance of the Study

As more businesses move to online resources for training employees, graduates of collegiate institutions need to be prepared to learn in the online environment. Educational institutions also recognize that the future of education will include online components. The Sloan-C report by Allen and Seaman (2004) stated that “three quarters of all academic leaders believe that online learning
quality will be equal to or superior to face-to-face instruction in three years” (p. 3). The significance of this study lies in its provision of evidence from distance learning stakeholders regarding what ought to be pre-assessed in a valid online student readiness assessment tool. A valid assessment could result in higher student success rates as evidenced by increased grades in online classes, lower attrition rates in online classes, maximization of investment in distance learning funding, increased student and faculty satisfaction, and expanded potential for life-long learning. This study was the first step in determining what should be included in an online student readiness assessment. Its findings could lead to development of a valid and useful online student readiness assessment tool for users of Internet-based courses.
ASSESSING ONLINE READINESS:
PERCEPTIONS OF DISTANCE LEARNING
STAKEHOLDERS IN THREE OKLAHOMA
COMMUNITY COLLEGES

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

This literature review contains information about the following topics as they are related to online learning and student readiness:

- The Changing Face of Higher Education
  - Student/Enrollment Trends
  - Faculty Trends
  - Academic Trends
  - Technology Trends
  - Economic Trends
  - Distance Learning Trends

- Growth in Online Learning Enrollments

- Online Degrees in Oklahoma

- Learning Readiness Theory
  - Health and Physical Development
  - Social and Emotional Development
  - Approaches to Learning
  - Communication
  - Thinking and General Knowledge

- Traits of Successful Online Students
  - Technology Skills
  - Educational Background
  - Learning Style
  - Self-Discipline and Responsibility
  - Motivation
  - Communication Skills
The literature review is organized as shown in Figure 1.

**Figure 1**: Literature Review and the Relationships with Online Learning Readiness.
Occupational education, also known as workforce development, prepares students to be contributing members of today’s workforce. The community college network in Oklahoma provides much of the education to the future workforce, and community colleges provide a significant amount of retraining to bring the skills of the current workforce up-to-date. In an address to the faculty of Tulsa Community College—Northeast Campus, Hess, the campus provost, (2005), stated that a community college does five things. One important function of the community college is to prepare its students for a career or vocation that could not be obtained without education (C. Hess, personal communication, March 11, 2005). This workforce education is currently changing. Ausburn (2002) stated that, “Like the business and industry community it serves, occupational education stands on a hill of opportunity looking at a horizon that is fast, flexible, and digital” (p. 47). In addition, as a part of occupational education, recognition of a changing global environment is needed. Gatta and McCabe (2006) wrote, “As international competition intensifies and technological advances drive our labor market, workforce training and skills development must become America’s No. 1 economic development policy priority, as they are for emerging rivals India and China” (¶ 4). Online learning is one way to accomplish the skills training (2006). Evidence of the digital environment can be seen in the growth of online learning. Allen and Seaman (2005) reported, “Schools are offering a large number of online courses, and there is diversity in the courses and the programs being offered” (p. 1). Online education is considered to be an important part of a school’s long-term strategy, with 72% of the Associates
degree granting institutions that participated in the study reporting the importance of their online offerings to their long-term strategy (2005). In addition, Allen and Seaman reported, “The online enrollment growth rate [18.2%] is over ten times that projected by the National Center for Education Statistics [0.87% to 1.31%] for the general post-secondary student population” (p. 3 [10]), and “overall online enrollment increased from 1.98 million in 2003 to 2.35 million in 2004” (p. 3).

Mayadas, Program Officer for the Alfred P. Sloan Foundation, (2001), in written testimony to the Kerry Commission stated, “We [Sloan-C] believe online learning has very large significance for our work force. The workforce of tomorrow will have to be better trained, and better able to access education, training and other knowledge resources” (p. 137). Since Associates degree granting institutions are a major contributor to the training of the workforce, these institutions will also play a significant role in online learning and distance education.

Compora (2003) stated, “Distance education, while not a new idea, is new to many faculty members and students” (p. 13). Directly related to the unfamiliarity with online learning is the need to identify the characteristics, traits, and skills needed for online students to be successful. According to Siemens (2002), one of the first things required for student success is a shift in perspective “from passive learner to active learner” (¶ 3). Located in California, the Adizes Graduate School Online (1994 – 2005) website cautioned prospective and current students:

Online education is not the same as sitting in the back of an auditorium with 100 college-age students. You may avoid driving and parking and set
your own hours, but your participation is expected and will be highly visible – *no sleeping back there!* (¶ 1)

The Changing Face of Higher Education

Chute, Thompson, and Hancock (1999) stated, “Like business, education is being influenced by the transformation into an information society” (p. 4). Traditionally, universities and colleges around the world required students to attend brick and mortar campuses in order to earn a college degree. When the first institutions began offering online classes and degrees, articles flooded the journals with concerns about validity, quality, and academic integrity of online learning (cf. Higher Education Program and Policy Council of the American Federation of Teachers, 2000; Lamb, 1995; Ohler, 2005). Rapidly following these concerns were studies offering evidence that online learning posed “no significant difference” from traditional classes (Allen & Seaman, 2003; Allen & Seaman, 2004; Blocher, Montes, Willis, & Tucker, 2002; Hsu & Shiue, 2005; Kennedy, 2000; Mayadas, 2001; McDonald, 2002; Phipps & Merisotis, 1999; Russell, 1999; Twigg, 2001). Ausburn (2005b) referred to a significant number of meta-studies and reported that the conclusion from an analysis of these meta-studies was that “Online learning is generally equal or superior to learning in traditional classroom settings” (p. 9). Additional studies, meta-studies, and meta-analyses of these studies (cf. Allen & Seaman, 2003; Allen & Seaman, 2004; Blocher et al., 2002; Hsu & Shiue, 2005; Kearsley, 2000; Kennedy, 2000; MacGregor, 2001; Mayadas, 2001; McDonald, 2002; Neumann & Shachar, 2003; Olson & Wisher, 2002; Phipps & Merisotis, 1999; Russell, 1999; Twigg, 2001;) concluded that there is no significant difference between the face-to-face learning
and online learning environments. Based on such research evidence, Ausburn (2005b) concluded that it is time to move beyond the debates about the quality of online learning and focus on the issues needed to support learners and learning in the online environment. Harley (2001), in support of the high-quality interaction that is possible in the online environment wrote:

If one spends any time around computer scientists at a research university, however, one realizes that, indeed, Internet2 (www.internet2.edu/) and the myriad applications it can support (tele-immersion and haptic feedback to name two examples) will provide ubiquitous high-quality online interaction among individuals in the not-too-distant future. (p. 12)

Allen and Seaman (2004) reported that at least 60% of the chief academic officers of institutions with more than 3,000 students felt that online courses were equivalent to traditional courses. Acceptance of the quality of online courses has become so much a part of the fabric of education that the question was eliminated from the survey conducted by Allen and Seaman in 2005.

Evidence that the government has also accepted online learning can be seen in a potential governmental regulation being removed. According to Masie (2006):

The United States Congress is about to remove a restriction on distance education in higher education. This move can be seen as a ‘tipping point’, reflecting the rates of acceptance of e-Learning on the campus (and society at large). In 1992, Congress passed a regulation, called the 50% Rule, that prevented any college that enrolls more than half of their students from a distance or offers more than half their courses on-line, from participating in federal student aid programs. This rule was triggered by a rash of diploma mills and low quality correspondence courses. But, much has changed as our field has evolved and mainstream colleges add e-Learning options for both campus based and remote students. There have been waivers already for institutions like Capella and Jones International. Watch for steady increases in e-Learning offerings and blended models at campuses throughout the U.S. There is still debate
underway about the 50% Rule, but most expect Congress to eliminate this
rule. (p. 1)

Dooley (2005) agreed, stating that “Education is changing as a result of
distance learning applications and practices” (p. 254). One of the most
significant changes appears to be a shift away from seat time. “Occupying a seat
in a physical classroom for a specific period of time is fast becoming the
exception rather than the rule” (Reid, n.d., ¶ 11). Chute et al. (1999) stated,
“Traditional centralized classroom learning is losing value in organizations that
are becoming more decentralized and more global” (p. 1). Change is a driving
factor for businesses today, as “Skilled employees have to be current workers
who develop their skills through training and retraining” (p. 3). This is facilitated
by availability of online learning opportunities.

Howell, Williams, and Lindsay (2003) identified thirty-two trends that affect
distance education and divided those trends into six categories:

1. student/enrollment trends,
2. faculty trends,
3. academic trends,
4. technology trends,
5. economic trends, and
6. distance learning trends.

Student/Enrollment Trends

“The current higher education infrastructure cannot accommodate the
growing college-aged population and enrollments, making more distance
education programs necessary” (Howell et al., 2003, p. 2). Traditional college-
age students may elect to attend a brick and mortar institution for the college experience, but they may join the non-traditional students by enrolling into online classes as well as the traditional classes (Seppanen & Stern, 1999). This movement of traditional students into the online environment may help alleviate over-crowding in higher education. Students are also looking for flexibility to meet their demanding personal schedules, and they are willing to attend multiple institutions to achieve their educational goals (Education Commission of the States, 1999; Howell, et al., 2003). Students are willing to shop for the institution that can offer a quality degree with the most convenience (Education Commission of the States, 1999; Howell et al., 2003). Levine (2003) predicted that “The most successful institutions will be those that can respond the quickest and offer high-quality education to an international student body” (p. 19).

In addition to growing emphasis on flexibility, higher education enrollments are also being impacted by the changing nature of its customer base. Demographic trends affecting higher education include minority students becoming the majority in schools, increasing school segregation, more children living in poverty, and growing numbers of senior citizens (Education Commission of the States, 1999). Howell, et al. (2003) declared, “Not only are they numerous, adult learners are the fastest growing population in higher education” (p. 4).

Many participants in higher education belong to a new and different generation. Tapscott (1998) wrote about this Net Generation (N-Gen). Born between the years 1980 and 1995, the first wave of this generation has already
graduated from college and over the next several years colleges will see this generation continue to push through its doors. The N-Gen is a generation of technology consumers. N-Geners expect to be active participants in the learning process and they expect to see instant results. Other authors have referred to this generation as Generation Y, Echo Boomers, and the Millennium Generation (Allen, 2004; Neuborn, 1999; Verrett, 2000). Tapscott (1998) disagreed with the term Generation Y. He wrote that a generation is defined by the way it shapes society and Generation Y implies the lack of a mission. “The N-Gen is defined by something positive. They are breaking free from the one-way, centralized media of the past and are beginning to shape their own destiny” (p. 33). Members of the N-Gen are typically computer literate, have grown up with the choices of dozens or even hundreds of television channels (although they often prefer to be entertained via the Internet instead of television which is passive), and instant gratification. These young people have “been weaned on peer-to-peer file swapping, Google searches, and wireless instant messaging” (Harley, 2001, p. 12). Harley (2001) asked, “What expectations will they have about their learning environments and the nature of scholarship” (p. 12). N-Geners prefer active learning. Possibly, it is this need for active participation that draws these students into the online learning environment. The generation, born in the late 1990s through the present, that follows the N-Gen will be even more versed in interactive technology. This generation has several names assigned to it, but according to CBS Broadcasting (2005), the term Generation M is being used to
describe the next generation because they are a generation of multi-taskers who utilize multiple multi-media devices simultaneously.

Faculty Trends

The faculty trends now impacting higher education include an unbundling of faculty responsibilities, where faculty specialize in a specific role such as instructional design. One side effect of this trend is an increased number of non-traditional faculty roles and a decrease in faculty tenure positions. Another result of the rapid growth in distance education is a need for additional faculty development to prepare faculty, some of whom are resistant to distance learning, for the online environment (Howell, et al., 2003).

Academic Trends

Emerging academic trends revolve around change. Today’s students will live and work in a world where knowledge and new information abounds. Another change is that for-profit institutions are growing while enrollments at traditional campuses are declining. Within the classroom, education is moving towards a learner-centered model with identifiable and measurable outcomes. The outcomes are also being used to place an emphasis on academic accountability. An important change in academia is the blurring of academic levels. Students have the option of earning college credit from non-traditional sources such as career centers, often while these same students are enrolled in secondary education programs (Howell et al., 2003).
Technology Trends

The main technology trend impacting higher education is that technology is becoming more versatile and assessable to people around the world at increasing levels of age, ethnicities, and socio-economic levels. Technology fluency is growing and becoming a graduation requirement for many institutions at all levels of education from secondary schools through graduate programs (Howell et al., 2003).

Economic Trends

Economically, resources for higher education are shrinking and costs are rising (Howell et al., 2003). Accountability for results is another trend that is pushing its way into higher education. Elementary and secondary schools are dealing with the No Child Left Behind legislation. Zimar (2006) claimed that higher education may find itself more accountable as well and pointed out that, “Public universities seem most vulnerable to regulatory oversight because they are subsidized by state taxpayers” (¶ 9).

Schnitzer and Crosby (2003) saw community colleges responding to these trends and partially fulfilling the role of successful institutions. They claimed, “Community colleges are market-sensitive, and strive to serve the community. With the advent of distance learning, community colleges now serve a global community” (¶ 1).

Distance Learning Trends

According to Howell et. al (2003), “The current higher education infrastructure cannot accommodate the growing college-age population and
enrollments, making more distance education programs necessary” (p. 2) and based upon this information, growth in distance learning programs should continue in the foreseeable future as more students enroll into the educational systems at all levels.

Growth in Online Learning Enrollments

As early as 1997, the U.S. Department of Education was documenting the enrollment in distance learning. According to a report published in 1999, almost 1/3 of all post-secondary institutions offered distance learning courses, with an additional 20% of the schools planning to offer distance learning courses by 2000. At that time, almost 50,000 college courses were offered through distance learning with over 1.3 million enrollments. Online enrollment growth may be the result of population trends in the United States. Cappelli (2003) referred to the National Center for Education Statistics (NCES) projection of a “20 percent increase in the number of high school graduates, from approximately 2.5 million in 1994 to 3.1 million in 2008, as children of the baby boom, or the echo boom, begin to graduate from high school” (p. 45). Cappelli continued by estimating 16 million adults enrolling in higher education by 2008 resulting in “campuses [that] are crowded and e-learning is uniquely positioned to relieve the pressure” (p. 47).

Helping to spur growth in online enrollments is the growth in the institutions offering online classes. Allen and Seaman (2005) reported that in the Fall 2004 semester, “Four out of every ten schools with face-to-face Associate’s programs [were] also offering at least one online version” (p. 6). Master’s programs have the largest percent of penetration of online classes integrated
with the traditional classes at 44 percent overall, with a 56 percent penetration rate at public schools and 78 percent penetration rate in private, for-profit institutions. The lowest penetration rates are in the Baccalaureate institutions at only 19 percent (Allen & Seaman, 2005). The types of online courses are also diverse. Allen and Seaman (2005) claimed that by the Fall 2004, online education had “made strong inroads in the core offerings for most types of institutions” (p. 5). The growth was observable as early as 2001. Pittinsky (2003) reported, “In the fall of 2001, nearly 30 percent of all campus-based college enrollments arrived to find the Web a meaningful part of their course administration and delivery” (p. 3-4). Distance education is also becoming more common at the secondary level. Patrick (2005) stated:

One-third (36 percent) of public school districts and nine percent of public schools had students enrolled in distance education courses in 2002—03. The majority of these courses are being taken at the high school level, which helps account for the smaller percentage of schools—since there are more elementary and middle schools feeding into larger high schools or multi-grade schools. (¶ 4)

Individual student enrollments in online education are growing rapidly. Ashby (2002) testified in the United States Senate about this phenomenon. She stated, “About 1 in every 13 post-secondary students enroll in at least one distance education course, and the Department of Education (Education) [sic] estimates that the number of students involved in distance education has tripled in just 4 years” (p. 1). Placing actual numbers on this statistic, approximately 1.5 million out of 19 million students were involved in one or more online courses during the 1999 – 2000 academic year (Ashby, 2002). Overall enrollment in online courses as reported by Allen and Seaman (2005) equaled 2,329,783
students during the Fall 2004 semester, with a predicted growth rate of almost 20 percent for the Fall 2005 semester. Cappelli (2003) claimed that most of these online courses were supplemental, reporting that, “I have yet to see significant signs of cannibalization, as schools that offer online courses generally offer them to supplement traditional courses rather than as a replacement” (p. 63).

The institutions that participated in this study have reported strong growth in students in online courses. Tulsa Community College (TCC), a metropolitan, urban community college in northeastern Oklahoma, has experienced this phenomenal growth in online enrollments (See Figure 2). During the Spring 1998 semester, the first semester of online offerings, TCC offered 11 courses to 124 students. By the Spring 2001 semester, 2,067 students were enrolled in 67 online courses. During the Spring 2005 semester, TCC offered 163 courses to an enrollment of 5,878 online students, reflecting an amazing 4640 percent growth rate over 7 years (Dominguez, 2005). Tulsa Community College predicted over 7,000 enrollments in almost 200 courses for the Fall 2006 semester (personal communication, R. Dominguez, November 2005). The growth rate in online learning courses greatly outpaced the growth in other distance learning media at TCC (See Figure 3).

Rose State College, an urban community college in the greater Oklahoma City area, has also experienced extraordinary growth in online enrollments. During the fall semester of 1998, Rose State enrolled 21 students into three online sections. Growth continued to mushroom over the next few years to 2,744
enrollments and an unduplicated head count of 1,635 students during the spring 2006 semester (personal communication, C. Meyers, March 2006).

Oklahoma City Community College (OCCC), another urban community college in the greater Oklahoma City area, has experienced the growth as well. According to the distance learning office at OCCC, enrollments jumped from approximately 2,000 during the Fall 2005 semester to 3,400 in the Spring 2006 semester (personal communication, K. Wullstein, March 9, 2006).

Tuition and fees for online courses are comparable to traditional courses in most institutions. Cappelli (2003), referring to the United States Department of Education, reported that “57 percent of institutions are charging both comparable tuition and comparable fees for distance education and on-campus courses” (p. 63). From the tuition data published in the Oklahoma institutions’ college catalog, this situation is true at Tulsa Community College and Rose State College. At the present time, no difference is apparent between the tuition and fees of the on-campus classes and the online classes. Oklahoma City Community College charged a nominal electronic media fee of $12 per credit hour for online courses.
Figure 2: Course enrollments and the number of courses offered has grown at an exponential rate recently. Source R. Dominguez, 2005.
Figure 3: Although enrollment in Interactive Television and Telecourse classes has remained steady or declined, enrollment in the Internet courses grew at an exponential rate. Source R. Dominguez, 2005.
Online Degrees in Oklahoma

According to the Online College of Oklahoma Degree Programs (2002) degrees offered online in Oklahoma range from an Associate level degree to a Master level degree. Colleges and institutions that allow a student to earn a distance degree in Oklahoma include:

- University of Oklahoma
- University of Oklahoma: Health Sciences Center
- Oklahoma State University
- Northwestern Oklahoma State University
- Rogers State University
- Southwestern Oklahoma State University
- University of Central Oklahoma
- Cameron University
- Northern Oklahoma College
- Oklahoma State University—Oklahoma City
- Oklahoma City Community College
- Redlands Community College
- Rose State College
- Tulsa Community College
- Western Oklahoma State College

From this list, only Rogers State University, Northern Oklahoma College, Oklahoma State University—Oklahoma City, Oklahoma City Community College, Redlands Community College, Rose State College, Tulsa Community College,
and Western Oklahoma State College concentrate on the undergraduate online
degrees. The other institutions may offer undergraduate degrees, but the
majority of the degrees offered are at the graduate level.

Learning Readiness Theory

This study is grounded in the theory of learning readiness, and was based
on a working hypothesis that learning readiness applied not only to the traditional
classroom and/or to specific academic disciplines, but also to online learning.
With online education becoming more important in the academic arena and
online enrollments increasing, the issue of learning readiness for the online
learning environment became evident. According to Wynn (2002), “‘Readiness’
is what we call the things that help children be successful in school” (p. 2). The
central question of this study asks if there are things that can help learners be
successful in online classes.

The underlying principle of learning readiness is that children learn daily
and are born with a readiness to learn. Readiness does not occur in isolation,
but instead is a process over time (Wynn, 2002). These same principles can be
applied to learning readiness for adults to the online environment. Edwards
(1999) identified school readiness as the “Preparedness of children to learn what
schools expect or want them to learn” (p. 1).

Wynn (2002) identified five factors of readiness for children: (1) health
and physical development; (2) social and emotional development; (3)
approaches to learning; (4) communication; and (5) thinking and general
knowledge. Although Wynn was focused on readiness to enter kindergarten,
many of the points she made were echoed by Smith, Murphy, and Mahoney (2003) who used McVay’s (2000) *Readiness for Online Learning Questionnaire* to identify comfort with e-learning and self-management of learning as the two main factors for online learning.

Smith et al. (2003) identified the comfort factor as “a readiness for engagement with the particular form of resource-based learning delivery” (p. 63). This factor is similar to Wynn’s principle of approach to learning, and it can be related to research by Sadler-Smith and Riding (1999) which indicated a link between cognitive learning style and comfort with learning. The self-management of learning factor can be found throughout distance learning literature (e.g. Maeroff, 2003; Queiroz & Mustaro, 2003; Shrawder & Schrawder, 2002). Related to Wynn’s principles of communication and social and emotional development, self-management appears frequently as a skill critical for online success (e.g. Davis, 2005; Kramer, 2002).

According to Wynn (2002), children learn daily and are born with a readiness to learn. Readiness is a process for a child which occurs over time. Acknowledging that readiness is a process with identifiable factors, this researcher’s primary interest involved applying readiness theory to online learning and student readiness for the online environment. Working on the hypothesis that the principles of learning readiness apply to online learning as well as learning readiness for entrance into school, this researcher began reviewing the current readiness literature.
Health and Physical Development

This principle applies to the physical ability of young children to allow them to have the necessary energy to concentrate on school (Wynn, 2002). Although not directly related to any of the principles suggested in the literature as a success factor for adults in online learning, a connection can be considered to the Knowles’ (1984) model of andragogy which stresses that adults learn best when the need to learn is important to them at that point in time.

Social and Emotional Development

Attitude is a part of the learning environment. Wynn (2002) wrote, “Children who are confident about their abilities and who like being with others will probably enjoy being in school and work hard there” (p. 2). It can be theorized that adult students who are also confident in their abilities and self-motivated will probably work harder in the online environment than those who are not. The hints Wynn provided for success in school included a need for students to work on practicing skills such as following directions, offering praise and encouragement, and establishing routines for consistency to achieve greater understanding. These hints for younger students are mirrored for adult students in the online success literature and active learning literature (e.g. Barry, 1999; Bushweller, 2000; Dillon & Greene, 2003). In addition, multiple authors have concluded that adult students who are self-motivated or self-disciplined, have the ability to follow written directions, possess a willingness to receive feedback from the online instructors in written form, and who dedicate time to the online class
report a higher level of satisfaction for online learning and the online learning environment (Ausburn, 2005b; Barry, 1999; Bellon & Oates, n.d.; Blocher, et al., 2002; Frankola, 2001; Gunawardena & Duphorne, 2000; Halsne & Gatta, 2002; Ho, 2005; Slick, 2004).

Approaches to Learning

How a child learns is important according to Wynn (2002). Specifically, “Helping him take responsibility for his learning” (p. 3) is important. Responsibility for learning is a critical factor in the online environment as evidenced by the current literature. Barry (1999) listed being highly motivated and self-disciplined as traits for success. Kramer (2002) added adaptability to change and independence to the list. Hsu and Shiue (2005) stated that, “Self-directed learning is a self-motivated desire to pursue one’s choice of knowledge” (p. 144). Additional support for self-directed learning can be found by reviewing the literature (cf. Maeroff, 2003; Queiroz & Mustaro, 2003; Shrawder & Shrawder, 2002).

Communication

Communicating clearly is an important ability for success. For the young child, it involves not only language skill, but the physical ability to control the body in order to listen and the ability to recognize and understand limits (Wynn, 2002). For the young child, communication is typically verbal, but for the online learner, communication is generally in written form and delivered electronically via the classroom management tool or through e-mail transmissions. Davis (2005) found above average writing skill and reading comprehension as important
factors for success. Kramer (2002) concurred, claiming successful participation was dependent upon adequate communication skill. The Children’s Action Alliance (n.d.) identified reading as one of the best predictors for success in the educational setting.

Thinking and General Knowledge

Although Wynn (2002) was referring to a young child’s exposure to the environment around them, her principle can be related to online learning in a similar way. Has the student been exposed to the world of technology prior to entering the online environment? Just as a child who has interacted with the world outside the home may be more successful in kindergarten, prior distance learning experience may be an advantage for adults (Barry, 1999).

Wynn (2002) summarized that the success factors for learning for young children as the ability to communicate wants, needs, and thoughts; the ability to share and take turns; an enthusiasm for learning; curiosity; and the ability to sit still and pay attention. This researcher hypothesizes that similar characteristics can be identified for adult learners as they prepare to enter the online learning environments.

The present study uses learning readiness theory as its underpinning. It is based on a substantive/operational theory expressed in this researcher's hypotheses that online student readiness skills can be identified by practitioners and learners, that the skills can be measured, and they are a factor in learner success in online courses. This study focuses on the first two components of this operational theory; the third must be addressed in future research.
Traits of Successful Online Students

“Dewey foresaw an active and collaborative student experience that, almost a hundred years later, we finally have the tools to implement” (Boettcher & Conrad, 2004, p. 49). While it is doubtful that Dewey predicted the future growth in online education, he did advocate a learning environment based upon active participation of the student in the learning process. Boettcher and Conrad (2004) referred to Dewey’s philosophy, claiming that “Dewey promoted the active participation of the learner in defining the learning environment and he conceived of the instructor as facilitator” (p. 49). The best practices for online learning literature was summarized by the Tennessee Board of Regents (2005) as requiring an active, engaging learning environment.

To be successful in the unique and active format of the online environment, students need to be self-sufficient. Barry (1999) described the successful distance education student as introverted, mature, highly motivated, self-disciplined, resourceful, flexible, self-indulgent, independent, and possessing a positive attitude. Kramer (2002) described the successful learner as:

- Highly motivated to achieve;
- Independent, and not needing someone telling them what to do;
- Active learners who took part in learning instead of sitting back and absorbing it;
- Disciplined enough to study without constant reminders; and
- Adaptable to changes and new ways of doing things. (p. 27)

Swan (2004) described successful online learners as independent, visual learners with high levels of motivation, computer proficiency, and a strong work
The Illinois Online Network also provided a list of traits for the successful online student. These traits included:

- Being open-minded about sharing life, work, and educational experiences;
- Being able to communicate in writing;
- Being self-motivated;
- Being self-disciplined;
- Being willing to ask questions;
- Being willing to commit the time required to complete the coursework;
- Being willing to meet program requirements;
- Accepting critical thinking and decision making as part of the learning process;
- Having access to a computer and the Internet; and
- Believing that high-quality learning can take place outside the traditional classroom. (ION: Educational Resources, 2005b)

Moore and Kearsley (1996) listed indicators for success that included the student’s intent to complete the course, early submission of the first assignment, and completion of other online courses. The indicators for success closely match those indictors pictured in Figure 4. Moore and Kearsley (1996) based the indicators on a model developed by Billings in 1989. The information provided in this graphic can be applied to the online student as well.
Figure 4: Success factors for completion of correspondence courses mirrors the success factors for completion of internet courses. Source Moore and Kearsley, 1996, p. 162.
Bellon and Oates (n.d.) asked, “What types of students will succeed or fail in web-based course settings” (p. 2)? In a similar train of thought concerning instructional technology, Moore and Kearsley (1996) asked, “. . . what characterizes those who learn better from the alternatives” (p. 242)? One of the questions of this study asks what are the characteristics, traits, and skills that online students need to be successful?

Technology Skills

Most would assume that technology skills would be a critical factor for success and yet computer literacy is not the only success factor stressed in the literature. In fact, one report from the Sloan-C Foundation reported, “Despite the technical expertise of our students who travel the Information Superhighway with ease, they often face taking online courses with some trepidation” (Effective Practices, n.d., ¶ 1). Technology skills are important for success and, “online learners still need to feel comfortable using technology and their technical skills must be at a certain level for them to successfully engage in Web-based courses” (Blocher et al., 2002, p. 3).

Some institutions offer potential online students technical readiness assessments and/or tutorials for improving technical skills. The skills identified by the institutions include: Familiarity with the basic operations of a computer and the operating system, using and navigating the Internet, word processing skill, and the ability to use e-mail (Are you ready to learn online?, n.d.; Ausburn, 2005b; Blocher, et al., 2002; College of DuPage, 2005). According to Huff
(2002), “Students will need to demonstrate proficiency in using technology to retrieve, interpret and present information in various formats” (¶ 2).

Educational Background

Moore and Kearsley (1996) claimed, “One of the best predictors of success in distance education is the educational background of the student. In general, the more formal education a person has, the more likely he or she is to complete a distance education course or program” (p. 161). Adding to the formal education, is experience with prior distance learning situations. Barry (1999) stated, “Prior distance experience had a positive effect on satisfaction” (p. 23).

Learning Style

Ausburn (2005b) emphasized that instructors need to “understand and anticipate the different needs and expectations of students with various skills and backgrounds, and focus on facilitating learning for everyone” (p. 19). This approach coincides with Moore and Kearsley’s (1996) view on preparing curriculum based exclusively upon learning styles. “Much less reliable as a predictor of success or failure, but clearly relevant, are the personality characteristics of the student (including what is often referred to as a learning style)” (p. 162-163). Dillon and Greene (2003) agreed that understanding the personal learning style may be important for the student. They suggested that, “While the research provides some evidence that learner differences should be considered, clearly our best guidance to teachers is to tell them to use a variety of strategies and media so that surely we can effectively teach most of the people some of the time” (p. 237).
Self-Discipline and Responsibility

Self-discipline is listed as an important trait by most of the literature. Adizes Graduate School Online (1994 – 2005) stressed that students are responsible for their success and have made a commitment to themselves, their family, and peers. In their letter to prospective students, they wrote, “You are responsible for making the decision and ongoing commitment to your future education. In this regard, you need to prepare . . .” (p. 1). Maeroff (2003) detailed the preparation that may be needed by students. He wrote, “Students on the receiving end of knowledge delivered in this way [online] must prepare themselves for a more active role than they have taken in the regular classroom. No passive vessels here” (p. 39). Queiroz and Mustaro (2003) saw the online instructor as a guide or facilitator. They said, “The student is guided to learn to be more autonomous, participative and more responsible for his/her own learning” (¶ 11). Shrawder and Schrawder (2002) stressed the importance of self-discipline, claiming that, “Without adding a healthy dose of self-discipline, it’s all too common to be blown off course by the fickle whirlwinds of activity that surround everyone” (p. 1). Online learning provides students with the freedom to complete college courses while maintaining other obligations, but only when they have the discipline to be responsible for their own learning.

Many students list convenience as a determining factor in their enrollment into online classes. However, Wahlstrom, Williams, and Shea (2003), pointed out that “The chief characteristic of distance learning, therefore, is that it offers more convenience. This means that YOU’LL HAVE MORE FREEDOM, BUT
YOU’LL ALSO HAVE MORE RESPONSIBILITY” (p. 15). Schamberlin, a Fullerton College professor, summarized student responsibility on his college website: “Only you are responsible for your learning. I can’t force it on you. I can’t make you study. I can share a little knowledge and experience, show you a few tools and hope you get it. The spark and desire to pursue your dreams must be yours” (Schamberlin, n.d., ¶ 10). The literature often links self-discipline with responsibility.

Motivation

Closely linked to self-discipline and responsibility is motivation. Maeroff (2003) stated, “Online learning extends great independence to students, requiring them to have motivation and to summon up more self-discipline than the usual classroom course demands” (p. 88). Davis (2005) found through a Delphi panel study that the majority of online faculty at Tulsa Community College ranked self-discipline and high motivation as the most important skills that students need for success in online classes. Online learning is also hard work: “Learning isn’t always fun. Often, it’s difficult. In the end, it’s our ability to overcome the difficulties and frustrations that make learning meaningful and satisfying” (Bushweller, 2000, p. 7). It is not always the most intelligent person who will succeed, but the student who is motivated and believes in personal success. Kramer (2002) wrote, “Most successful distance learners assume that they will do well and make the effort necessary to confirm that assumption” (p. 27). Desire and motivation to succeed contribute to the potential success for online students.
Communication Skills

In a Delphi panel study conducted as a class project, this researcher asked online faculty at Tulsa Community College to identify the skills most important for students to possess in order to be successful in online classes. Nine of the 14 respondents in the study listed above average written communication skills (Davis, 2005). Kramer (2002) concurred, claiming that, “Successful participation in education and training is also dependent in a large part on adequate skills in reading, writing, and critical thinking” (p. 27).

Communication is critical in the online environment, and it is typically in written format. Students need to ask for help because the non-verbal cues that are present in a traditional classroom are missing in the online environment. Success in the online environment can be increased with adequate communication skills, and “Online learners also need to communicate well in writing . . . ” (Communications, n.d., ¶ 1).

Maturity/Demographics

Knowles (1984) discussed his theory of andragogy, which stresses that adults learn differently from children. In part, his theory posits that timing of learning opportunities is important to adults. Adults need to be motivated to learn because the knowledge being offered is something for which they have immediate need. Just-in-time learning is also part of the andragogy model. Adults will wait to learn until the need is critical and thus requires just-in-time learning. Cross (1981) referred to “teachable moments presented by the
developmental tasks of the life cycle” (p. 238). The teachable moment is similar to the just-in-time philosophy of Knowles’ model of adult learning.

The demographics of online students appear to support the theories presented by Knowles and Cross. Most adults in online classes are full-time working adults, and the majority of the students are female with children living in the home (Gottschalk, 2002; Ho, 2005; Huff, 2002).

Reasons for Failure

Failure in the online environment is difficult to define. Faculty may see any student withdrawal from the class as a failure, but the student may view the same situation as a postponement due to outside responsibilities (Kennedy, 2000). Gottschalk (2002) provided another possibility: “Beginning students may have some difficulty determining what the demands of a course of academic study actually are because they do not have the support of an immediate peer group, ready access to the instructor, or familiarity with the technology being used for delivery of the distance-education course” (¶ 2). Levy (2003) suggested that “students with limited computer skills who are taking an ODL [online distance learning] class for the first time may not know what they are getting into; therefore, an ODL orientation and technical support are essential” (p. 11). This raises the issue of appropriate readiness orientation and testing for online students.

Online Readiness Testing and Orientations

Do students really know whether or not they are prepared for online learning? According to Baird (2000), “Knowing that you don't know or can't do
something is prerequisite to effective learning” (p. 6). Would an online readiness test and/or an online orientation help students? Pachnowski and Jurczyk (2000) wrote that the North Central Association (NCA) had developed guidelines for institutions that include the requirement that institutions assess the capabilities of students to succeed in distance education and to apply the information to recruitment and admission standards.

Hammond (1999) identified a need for research in the area of readiness testing, stating that:

Very few instruments of this nature are found in the distance learning literature today. We claim that more need to be developed. Given the diverse experiences of Internet, telecourse, and interactive learning combined with the infinite diversity of students who are taking these courses, there may be a great deal of support for our claim. (p. 19)

Guglielmino (1977) developed the Self-Directed Learning Readiness Scale (SDLRS). The SDLRS has been used in multiple studies about online learning success factors (cf. Beswick, Chuprina, Canipe, & Cox, n.d.; Hsu & Shiue, 2005; Pachnowski & Jurczyk, 2000). Although self-direction is an important part of success in online learning, other factors are also important, and the SDLRS is not a comprehensive measurement for online student readiness (Pachnowski & Jurczyk, 2000). A more comprehensive assessment is probably needed before any viable information could be gained from an online readiness assessment.

Although multiple institutions now provide a self-assessment for online students (Are distance-learning courses for me?, 1996; Are you ready to learn online?, n.d.; Are you ready to take an online course?, n.d.; Are you suited to distance ed?, n.d.), faculty typically do not see the assessment results, and
scores indicating inadequate proficiency are not barriers to student enrollment into online classes. Yet, from a study that associated readiness with satisfaction, Gunawardena and Duphorne (2000) found, “As learner readiness increases, so does satisfaction with the learning experience” (p. 15). One assessment survey cautioned students to “Answer honestly no one will see this but you” (Are Distance-learning Courses for Me?, 1996, ¶ 1). Willis and Lockee (2003) also found multiple self-assessments. They found that “Many institutions and distance organizations offer learners a self-assessment tool to predict their ability to successfully engage in and complete DE [distance education] courses” (p. 12).

Often a companion site to the online readiness self-assessment is an online orientation site. “The Online Student Orientation site is an efficient tool that is specifically related to distance learning and targets the unique needs of the online-distant learner” (Student Satisfaction, n.d., ¶ 6). Siemens (2002) advocated some form of orientation or tutorial, stating that “Before students learn content, they learn how to access content through technology tools. This process can be accomplished through effective introductory tutorials or pre-course work teaching how the software tools of the course work” (¶ 6). Slick (2004) conducted a study of student readiness as a predictor of satisfaction. Her study recommended, “Institutions that are developing online courses and degrees should consider technical training and support systems for students” (p. 3).

Berkley College requires students to take a preparatory course titled Road to Success in Online Learning (M.J. Clerkin, personal communication, August 29,
The course raises awareness for the students “of what it means to take
an online curse, of the pedagogical methods used, and how to navigate
Blackboard [the course management tool]” (Effective Practices, n.d., ¶ 4).
Berkley College appears to be in the minority with this requirement.

Evaluation Methods

With a variety of online readiness training and assessments available, it
becomes important to determine if they are effective and to evaluate the online
readiness assessments against some type of criteria. This necessitates some
form of evaluation. Many texts are available that describe and define various
evaluation approaches (cf. Alkin, 2004; Davidson, 2005; Mathison, 2005). Davidson (2005) described the typical steps in the evaluation process as
determining the evaluation question(s), developing the research design and
instruments, collecting data, and presenting the findings. Davidson (2005)
described Scriven as a leading theorist in the field of evaluation, claiming that
“Scriven has made by far the greatest contributions to the development of a
unique logic and methodology that is truly evaluation specific” (p. xi).

Evaluation is a discipline of research. According to Scriven (1999)
evaluation is “devoted to the systematic determination of merit, worth, or
significance” (p. 1). Davidson (2005) described evaluation as “possibility the
most important activity that has allowed us to evolve, develop, improve things,
and survive in an ever-changing environment” (p. 1).

Evaluation focuses on the value or worth of the program or product being
assessed. Scriven (1973), cautioned, “It is important to keep in mind that
evaluation (when the data is already in) is simply one kind of data-interpretation or data-transforming" (p. 9). Evaluation in education has two primary purposes. The first is to identify problems and the second is to improve services to stakeholders (Ausburn, 2005a). McNamara (1999) described three basic types of program evaluation: goals-based, process-based, and outcomes-based. A goals-based evaluation’s purpose is to determine if the program is meeting pre-determined goals or objectives. A process-based evaluation seeks to determine how a program works or how it produces the end-result. Outcomes-based evaluations focus on identifying the benefits to the program’s clients.

Stufflebeam and Guba (1970) discussed the key elements of an evaluation through the CIPP Assessment Model. CIPP is the Context, Input, Process, and Product of the program to be evaluated. Finch and Crunkilton (1999) stated that in the Stufflebeam model, context and input assessment focus on gathering information for making decisions; process assessment focuses on decisions associated with the operation of the program; and product assessment is more closely aligned with decisions about effects of the program.

Ausburn (2005a) related the Stufflebeam CIPP evaluation model to the basic systems theory model with the results of evaluation serving as the system feedback. This relationship is illustrated in Figure 5.
Figure 5: A Basic Systems Model as it relates to Stufflebeam’s CIPP Model. Source: L. Ausburn, 2005a.
Evaluation can also be conducted at different levels. Kirkpatrick (1994) detailed four levels of assessment. Level 1 is at the reaction stage. How does the person think or feel about the item being evaluated? Level 2 measures learning or knowledge. What has been learned as a result of the program? Level 3 is the application level. Is the product being used effectively? Level 4 identifies the results or effects of the evaluand. Phillips (2003) added a fifth level to the Kirkpatrick evaluation model. The fifth level determined the return on investment (ROI) of the program being evaluated. ROI addresses the question of whether the results of the evaluand are worth the costs of implementing the evaluand. ROI is similar to the older concept of cost/benefit analysis (CBA), but it is more rigorous and conservative in the financial calculations.

One of the best known models for evaluating programs and products is Scriven’s Key Evaluation Checkpoints (KEC) model. Referring to Scriven’s work with the KEC, Alkin and Christie (2004) stated, “Scriven maintains that there is a science of valuing and that is evaluation” (p. 32). The KEC has been in use world-wide for more than 30 years. It was first used for evaluating educational products, but is currently and primarily used for program evaluation. The majority of the uses of the KEC were for private clients and not published (M. Scriven, personal communication, September 30, 2005). Alkin and Christie (2004) described Scriven as “the leading theorist of the valuing perspective and provides the ‘spiritual guidance’ and direction for others . . .” (p. 34). Fox (2003) agreed, claiming that “Dr. Scriven is well known for his expertise in evaluation. He is credited with coining the terms ‘formative’ and ‘summative’ to describe different
kinds of personnel and program evaluations” (p. 201). Ramsden (1992) described Scriven’s validity standards in evaluation as “stringent” (p. 231).

Description of the KEC

Scriven’s Key Evaluation Checkpoints (KEC) “was designed primarily for application to program evaluation” (Davidson, 2005, p. 5). The KEC is a checklist of items that may be included in any evaluation. Specifically, “The KEC should be thought of both as a checklist of necessary ingredients to include in a solid evaluation and as a framework to help guide evaluation planning and reporting” (p. 5). The KEC utilizes:

A set of principles (logic) and procedures (methodology) that guides the evaluation team in the task of blending descriptive data with relevant values to draw explicitly evaluative conclusions. An explicitly evaluative conclusion is one that says how good, valuable, or important something is rather than just describing what it is like or what happened as a result of its implementation. (Davidson, 2005, p. xii)

Scriven (1991) explained, “The KEC underlies the point that evaluation is multidisciplinary in method as well as a discipline in its own right. It cannot be seen as a straightforward application of standard methods in the traditional social science repertoire” (p. 204).

Scriven (2005) condensed the KEC into table format and made the KEC available through the Evaluation Checklists Project funded by the National Science Foundation. Davidson (2005) modified the 2003 version of Scriven’s KEC into a succinct table format shown in Exhibit 1.2 of her book (See Figure 6). The 2003 version to Scriven’s work referenced by Davidson is no longer available on the Evaluation Checklists Project, but it was updated as of October 2005.
Exhibit 1.2  Key Evaluation Checklist (modified from Scriven’s 2003 version)

<table>
<thead>
<tr>
<th>Preliminaries</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Executive Summary</strong></td>
<td><strong>II. Preface</strong></td>
<td><strong>III. Methodology</strong></td>
</tr>
<tr>
<td>One- to two-page overview of the evaluand and findings</td>
<td>Who asked for this evaluation and why? What are the main evaluation questions? Who are the main audiences?</td>
<td>What is the overall design of the evaluation (e.g., quasi-experimental, participatory, goal free) and (briefly) why?</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Foundations</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Background and Context</strong></td>
<td><strong>2. Descriptions and Definitions</strong></td>
<td><strong>3. Consumers</strong></td>
</tr>
<tr>
<td>Why did this program or product come into existence in the first place?</td>
<td>Describe the evaluand in enough detail so that virtually anyone can understand what it is and what it does.</td>
<td>Who are the actual or potential recipients or impactees of the program (e.g., demographics)?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub-evaluations</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>How good, valuable, or efficient is the evaluand’s content (design) and implementation (delivery)?</td>
<td>How good or valuable are the impacts (intended and unintended) on immediate recipients and other impactees?</td>
<td>How costly is this evaluand to consumers, funders, staff, and the like, compared with alternative uses of the available resources that might feasibly have achieved outcomes of similar or greater value? Are the costs excessive, quite high, just acceptable, or very reasonable?</td>
</tr>
</tbody>
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<tbody>
<tr>
<td>Draw on all of the information in Checkpoints 6 through 10 to answer the main evaluation questions (e.g., What are the main areas where the evaluand is doing well, and where is it lacking? Is this the most cost-effective use of the available resources to address the identified needs without excessive adverse impact?).</td>
<td>A more in-depth analysis of why/how things went right/wrong, perhaps including recommendations for improvement</td>
<td>A more in-depth analysis of exactly who or what was responsible for good or bad results (Note: This is very tricky and is usually not the kind of territory you want to get into unless you are highly skilled.)</td>
</tr>
</tbody>
</table>

*Figure 6: Summary of the Key Evaluation Checkpoint. Source Davidson, 2005, p. 6-7.*
When completing a KEC, the evaluator begins with the foundations to establish the basis of the evaluation. The first two checkpoints (See Figure 6) include a description of the evaluand and an explanation of the background or context of the product to be evaluated. Evaluand is “a generic term for whatever is being evaluated—person, performance, program, proposal, product, possibility, and so on” (Scriven, 1991, p. 139). The description should be sufficient to allow anyone to read the description and understand the item being evaluated. When describing the background and context of the evaluand, the evaluation team or evaluator should specifically discuss “Why did this program or product come into existence” (Davidson, 2005, p. 6).

In the third checkpoint, the consumers are identified. Scriven (1991) defined a consumer as someone “Who is impacted by the direct or indirect effects of the evaluand” (p. 206). Information about the consumers is needed for a thorough evaluation. The fourth checkpoint explains the resources available and can be termed a “strengths assessment” (Scriven, 1991, p. 206). In contrast, the fifth checkpoint, Values, is “a needs assessment of the impacted and potentially impacted populations” (p. 207). This checkpoint takes a study from the simple accumulation of data to an evaluation, because the checkpoint provides the value component (1991). It basically identifies the criteria against which the evaluand is to be judged. The checkpoint examines not only needs, but also the wants of the consumers and what standards should be considered. Scriven (1991) stated, “Standards that must be considered include legal/ethical-
moral/political/managerial/aesthetic/hedonic/logical/scientific (or other
disciplinary)/quality of life (and environment) standards . . .” (p. 207).

The next phase of evaluation involves the sub-evaluation checkpoints of
the KEC. In checkpoint six, the evaluand’s process is evaluated. The values
identified in checkpoint five are applied to the process. Scriven (1991) explained,
“Process is here considered to cover everything associated with but not caused
by the evaluand, plus (many things caused by it that are still internal to it)” (p.
207). Checkpoint seven considers the outcomes of the evaluand. Intended and
unintended impacts are examined (Davidson, 2005). In this checkpoint, Scriven
(1991) stated, “The key methodology for this checkpoint focuses on the
determination of causation” (p. 209); the key issue is, did the evaluand actually
cause the observed results? Checkpoints eight and nine are related to each
other and compare cost effectiveness of the evaluand. What are the costs and
are they justified for the evaluand (Davidson, 2005)? This is conceptually similar
to Level 4 of Kirkpatrick’s evaluation model and Phillip’s ROI model.

Scriven (1991) originally named the tenth checkpoint generalizability, but
later updated the name of the checkpoint to exportability (Scriven, 2005). The
checkpoint refers to the external validity or utility of the evaluand and its
products. Can others use it? Can it be used in a different setting? Checkpoint
eleven speaks to the significance of the evaluation. In this checkpoint, the data
from the previous checkpoints are synthesized. Two key questions include:
Have the goals been met? Is the product cost-effective (Scriven, 1991)?
In the conclusions section of the KEC, the twelfth checkpoint involves recommendations, and the thirteenth checkpoint refers to determining who or what was responsible for the good or bad results of the evaluand. Both checkpoints are optional items in an evaluation. It may not be feasible to complete these two checkpoints based upon the available resources and the skill of the evaluator (Davidson, 2005).

The final two checkpoints involve the evaluation reporting process and a meta-evaluation. In the reporting process, the decisions of who will receive the report and the form it will take are answered. A meta-evaluation may be conducted as part of a complete KEC. A meta-evaluation is “a critical assessment of the strengths and weaknesses of the evaluation itself” (Davidson, 2005, p. 7).

Studies Utilizing the KEC

The majority of studies utilizing the KEC have been commissioned by private clients and not available to the general public. For example, a recent report was created for the Heifer Project. The Heifer Project is a 65-year-old charity that operates in more than 100 countries. The KEC was used to evaluate the program. The contents of the report are the property of the Heifer Project and not available publicly (M. Scriven, personal communication, September 30, 2005).

Another limitation in identifying evaluation studies utilizing the KEC is that most evaluators do not identify the project as an evaluation conducted using the KEC. However, all of the following were identified as evaluation studies or
guidelines for evaluation studies that referred to Scriven’s KEC or utilized his summative/formative evaluation techniques:

- Brown and Kiernan (1998) developed a model for integrating program development and evaluation.


- Henshaw (n.d.) evaluated service-learning programs in the field of Dental Education.

- Higgins (n.d.) suggested a framework for evaluating Public Health approaches to healthy weight in adolescent women of color.

- HIV Prevention Programs (2005) were evaluated with the KEC guidelines.

- PROBE Consulting (2005) utilized the KEC as one of their evaluation tools.

- Scriven (1973) evaluated higher education in California and prepared a report for the Joint Committee on the Master Plan for Higher Education California Legislature.


The present study utilized the KEC Guidelines to evaluate the Illinois Online Network’s (ION) *Self Evaluation for Potential Online Students*. This evaluation fulfilled one of the primary purposes of the study.

ION and the *Self Evaluation for Potential Online Students*

The Illinois Online Network, known as ION, is a partnership between the University of Illinois and the 49 community colleges in the state (Varvel, Lindeman, & Stovall, 2003). ION was created in the fall of 1997 with 10
community colleges as original partners in the venture. The first activities for ION included the creation of a website with public access. Within two years all 49 community colleges in the state had joined ION (2003). ION articulates its mission clearly: “ION seeks to Promote the Effective Use of Networked Information Technologies, to Enhance Traditional Classroom Instruction, and to Build the Foundation for Developing, Delivering, and Supporting Online Education Throughout the World” (Illinois Online Network: About ION, 1998 – 2005, ¶ 1).

The ION website, created in 1997, currently averages approximately 20,000 hits per day and over 85,000 pages on the site are viewed daily with approximately 2,000 return visitors each month. The average visitor spends 15 minutes viewing pages on the website (V. Varvel, et al., 2003). One page on the ION site is the Self Evaluation for Potential Online Students. The self evaluation was created in 1997 when the site was mounted. It was based upon anecdotal evidence from the faculty involved with ION (Varvel, personal communication, September 19, 2005). Judging from analysis of the content found on other self-assessments and the copyright dates of the assessments, it appears that the ION self-assessment may be one of the first assessments of its kind (cf. Are distance-learning courses for me?, 1996; Are you ready to learn online?, n.d.; Are you ready to take an online course?, n.d.; Are you suited to distance ed?, n.d.). It also appears that the subsequent assessments were based upon the ION Self Evaluation for Potential Online Students. When asked by this researcher if the assessment had been evaluated, Varvel responded, “We have
never had time to empirically validate its effectiveness, and welcome your study” (personal communication, September 19, 2005).

Survey Methodology

Many evaluations involve the use of surveys to gather data. Hutchinson (2004) defined survey research as “a means of gathering information, usually through self-report using questionnaires or interviews” (p. 285). Surveys are a simple method of gathering large quantities of data in a relatively short time. Waksberg (1995) stated, “Surveys provide a speedy and economical means of determining facts about our economy and about people’s knowledges, attitudes, beliefs, expectations, and behaviors” (¶ 12). When conducting a survey, the intent is to obtain a composite profile of a population, not to describe individuals in the sample (1995). Surveys may be deployed through the mail, telephone conversations, in-person, or electronically. “Surveys should be carried out solely to develop statistical information about a subject. They should not be designed to produce predetermined results or as a ruse for marketing and similar activities (¶ 40). Hutchinson (2004) indicated that “survey research is not a design, per se; instead, surveys are more commonly considered the medium used for data collection” (p. 285).

Assumptions of Survey Research

Hutchinson (2004) identified the overriding assumption “that survey responses reflect the reality of the respondent to the greatest extent possible” (p. 287). She indicated that it is assumed all respondents will interpret the survey questions the same way (2004). Based upon this assumption, differences in the
responses will reflect the true differences on the item being measured and not because of interpretation differences (2004).

Stages in a Survey Study

Preliminary Planning. In this stage, the researcher should identify the purpose, the research questions, and target population(s). The goal is to identify who needs the information. In this stage, a review of literature is needed to justify the need for the survey, establish the framework for the study, and identify the variables to be used (Hutchinson, 2004).

Selecting respondents. This stage is used to select the sample and the number of respondents needed. This determination will be based upon the type of study, quantitative or qualitative, and is a priori based upon the statistical analysis planned (Hutchinson, 2004).

Survey construction. The construction stage is used to determine the questions to be asked. The type(s) of questions will also be determined. Survey questions fall into two broad categories; free-response and forced-choice. The layout and organization of the study is an important part of this stage (Hutchinson, 2004). As a part of this stage and prior to dissemination of the survey, a pilot study should be conducted. A pilot study will verify that everything works as it should in the study. “Conducting a pilot test will mitigate issues” (Thomas, 2004, p. 109).

Survey dissemination. How will the survey be deployed? Hutchinson (2004) explained, “Dissemination should be conducted so that response rates
are maximized” (p. 296). Many methods are available for survey deployment. The researcher needs to determine the best method for the particular study.

  *Survey analysis.* Analysis will be dependent upon the survey construction and can include a range of tools from basic descriptive statistics to complex procedures (Hutchinson, 2004).

*Ethical Issues of Survey Research*

Survey research is bound by the same ethical standards involved with other research involving human subjects. When designing the study, care should be taken to avoid questions asking respondents to reveal illegal behavior and questions that are insensitive or highly personal unless the potential benefits outweigh potential discomfort of the participants. Along with these two factors, it is also important to construct the survey in such a way that the respondents will be able to remain anonymous and to maintain the researcher’s ability to protect confidentiality of the responses (Hutchinson, 2004).

**Conclusion**

Gallagher (2002) stated, “Fully online programs represent the dawning of a new day for higher education, and these programs will be at the core of colleges’ and universities’ efforts to expand access to post secondary education in the U.S. in decades to come” (p. 27). Distance education, online learning, e-learning, or any other term used to describe the growing numbers of students who are seeking alternative forms of education is here to stay. Online students are a diverse group of students. DeFranco and Wall (2001) described online students as needing flexibility of schedules. Dooley (2005) identified more
women, minorities, and senior citizens as online students. Halsne and Gatta (2002) identified the majority of online students as female, married, employed, and parents. Over the past few years, online learning has moved into the mainstream of education, and it is now recognized as an important part of the future of education (Allen & Seaman, 2005). One student quoted in a study by Dooley (2005) wrote, “Distance education will become an archaic term. Ubiquitous education will replace it” (p. 259). As students continue to enroll in online courses, they may find themselves unprepared for the different learning environment. Many colleges and universities provide access to online readiness assessments (cf. Are distance-learning courses for me?, 1996; Are you ready to learn online?, n.d.; Are you ready to take an online course?, n.d.; Are you suited to distance ed?, n.d.), but students are typically not required to successfully complete the assessments before enrolling in online courses in most of the institutions.

The corporate world is also using online training methods for their workforce training:

Government and the private sector should invest in research and development aimed at furthering our understanding of best practices in technology-enabled content, delivery and service approaches that are both individualized and cognitively sound . . . . The goal of R & D efforts would be to identify key factors in the success of e-learning. (A Vision of e-learning for America’s Workforce, 2001, p. 19)

Online learning provides access to education around the world. Colleges and universities find themselves competing in a global economy. Students need to be prepared for a future of diverse educational course offerings in multiple formats. Lamb (2005) listed helping students to become independent, life-long
learners as a goal for learning. “Online courses demand students take control of their own learning, ask questions, seek answers, set their own schedule, and take responsibility for their work. For many, learning becomes part of their lifestyle” (p. 200).
ASSESSING ONLINE READINESS: PERCEPTIONS OF DISTANCE LEARNING STAKEHOLDERS IN THREE OKLAHOMA COMMUNITY COLLEGES

CHAPTER THREE

METHODOLOGY

Introduction

The study was descriptive in nature, using a mixed method design for collection and analysis of data. Fraenkel and Wallen (2003a) defined a descriptive study as a study that describes “a given state of affairs as fully and carefully as possible” (p. 15). In this study, the focus was on quantifying the data received via three surveys and using these data to conduct an evaluation of the Self Evaluation for Potential Online Students using Scriven’s Key Evaluation Checkpoints evaluation methodology.

The purpose of the study was three-fold. First, the study described and compared what distance learning stakeholders, including administrators, online faculty, and online students in three Oklahoma community colleges perceived as important characteristics, traits, and skills for online students to have prior to entering the online classroom. Second, the study developed a profile of the three institutions and the stakeholders involved with distance learning at the three community colleges participating in the study. Finally, the study evaluated the ION Self Evaluation for Potential Online Students which appears to be one of the
oldest online readiness assessments and appears to serve as the basis for many of the online readiness assessments used by institutions on the United States. This evaluation used the stakeholder perception data collected from the surveys as the criteria against which the ION Self Evaluation for Potential Online Students was evaluated.

Background Research for the Survey Portion of the Study

Multiple activities were completed by the researcher to prepare for the current research study. Based upon personal experience of the researcher as a distance learning instructor and mentor to online faculty and anecdotal stories shared among online faculty from multiple institutions in the United States and abroad, a common area of concern emerged about online student readiness. The researcher observed that the majority of online faculty providing anecdotal information felt that a significant number of online students were not prepared for success in the online environment. Scientific data to support or refute the anecdotal data was difficult to find in the literature, and Swan (2004) stated that more research into this area was needed.

An extensive review of literature over a period of two years yielded little empirical data on the subject of online student readiness. In a preliminary study, the researcher asked 29 online faculty at Tulsa Community College, a metropolitan community college in northeast Oklahoma, if students were prepared for online classes. Twenty faculty responded. Of these, 90% of the respondents revealed that in their opinion, some students were unprepared for online learning. Based upon this limited information, a Delphi study was
designed as the next step. The three-round Delphi was conducted with a panel of 15 online faculty at Tulsa Community College (TCC). The panel participants represented all four campuses of the TCC system and all academic divisions of the college. Tulsa Community College granted permission for the study to be conducted. Based upon the Delphi study, online faculty identified characteristics, traits, and skills important for student success in the online environment. Data provided in the Delphi were used to create the survey questions that served as the data gathering instruments for the current research study.

Survey Questionnaires—Design and Development

Three surveys were created for this study using the survey design methodology described by Hutchinson (2004) and detailed on the following pages. The text versions of the complete surveys are available in Appendix B.

Preliminary Planning

The first step was to identify the purpose of the study. The purpose of the study was to identify the characteristics, traits, and skills that are important for student success in online classes as perceived by distance learning stakeholders at three Oklahoma community colleges. To achieve this purpose, five research questions were identified:

1. What characteristics, traits, and skills do distance learning administrators perceive as important for student readiness?

2. What characteristics, traits, and skills do distance learning faculty perceive as important for student readiness?

3. What characteristics, traits, and skills do distance learning students perceive as important for student readiness?
4. What perceptions do the three distance learning stakeholder groups have in common regarding the characteristics, traits, and skills necessary for online students?

5. What perceptions are unique to each distance learning stakeholder group regarding the characteristics, traits, and skills necessary for online students?

A second purpose of the study was to develop a demographic profile of the three stakeholder groups. To achieve this purpose, three additional research questions were required:

6. What is the demographic profile of the institutions offering online degrees in Oklahoma?

7. What is the demographic profile of the online faculty at the institutions offering online degrees in Oklahoma?

8. What is the demographic profile of the online students at the institutions offering online degrees in Oklahoma?

The research questions were addressed in various ways. Table 2 presents the details of how the various research questions were addressed.

Table 2

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Data Gathering Instrument</th>
<th>Data Analysis Method(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions 1 – 3</td>
<td>Survey</td>
<td>Content Analysis with Constant Comparison and Descriptive Statistics</td>
</tr>
<tr>
<td>Questions 4 – 5</td>
<td>Thematic Coding from Survey</td>
<td>Descriptive Statistics and Cross-Tabulation</td>
</tr>
<tr>
<td>Questions 6 – 8</td>
<td>Survey and publicly available information published by the institutions identified in the study</td>
<td>Descriptive Statistics</td>
</tr>
</tbody>
</table>
Another step in the preliminary planning involved identifying the target populations. This researcher determined that the study would be limited to undergraduate students in the State of Oklahoma. The institutions selected for the study would be limited to those public colleges recognized by the Oklahoma State Regents for Higher Education as having permission to offer online degrees, excluding institutions that offer graduate level online degrees. The purpose for this delimiter was to focus on a research objective of identifying perceptions from student stakeholders who were primarily enrolled in workforce degree programs and who were also in the early stages of a degree program, theoretically limiting responses from online students who had a great deal of experience in the online learning environment. The information from this study was made available to all participating institutions and the distance learning community at-large.

*Selecting Respondents/Population and Sample of the Study*

Initially, the population was defined as all distance learning stakeholders associated with public institutions in Oklahoma that grant undergraduate online degrees as recognized by the Oklahoma State Regents for Higher Education. The population was altered due to institutional barriers encountered by the researcher. Fourteen institutions had received permission to offer and grant online degrees in Oklahoma. Six of the institutions offered graduate degrees and were eliminated from the study because the study focused on undergraduate students only. At the time of the study, Western Oklahoma State College was in the development stage and did not have a complete online degree; Oklahoma State University—Oklahoma City denied permission for the study to be
conducted at their campus; Rogers State University, Northern Oklahoma College, and Redlands Community College did not respond to repeated requests to conduct the study. Tulsa Community College, Rose State College, and Oklahoma City Community College granted permission for the study. Thus, the study’s population was limited to these three representative institutions.

The final preliminary activity involved contacting the identified institutions for written permission to conduct the study. As indicated earlier, the written copies of the correspondence involved in this process is contained in Appendix A. Upon receipt of permission from each institution, the Oklahoma State University Institutional Review Board (IRB) procedures were completed. The IRB documentation is included in Appendix C.

The sample for the study was a self-selected, volunteer sample. All distance learning stakeholders at the participating institutions were invited to participate in the study. The findings were based upon the surveys voluntarily completed and returned. All student surveys were deployed electronically via the institutions’ classroom management tool. Faculty and administrator surveys were deployed via an e-mail sent by the distance learning contact person at each institution. At no time did this researcher have access to contact information for any of the potential participants.

Upon submission of the survey, the results were automatically added to the results database on a secure server. The researcher anticipated approximately 20 - 25 administrator surveys being returned completed, 100 – 200 faculty surveys being returned completed, and 500 or more student surveys
being returned completed. The actual number of respondents in each category was 14 administrator surveys, 137 faculty surveys, and 749 student surveys.

Survey Construction

Three surveys were created by the researcher. A rough-draft of the survey questions was evaluated by Jody Worley, Ph.D., Director of Institutional Research and Assessment. Dr. Worley knew the research questions and the goals of the study. Based on the input of this expert for alterations, removal, or addition of questions, the surveys were amended. Specifically, he identified weaknesses in the survey design. He pointed out the need to have common questions on all three surveys and made suggestions to improve continuity and quality (J. Worely, personal communication, September 2005). After revision, the director of institutional research and assessment evaluated the revised survey instruments, and concluded that the questions asked would provide the data necessary to answer the research questions of the study.

The next step allowed the dissertation committee members input into the surveys. The committee input tightened the surveys so that each question on the survey was directly related to a specific research question of this study; thereby, tightening the scope of the surveys.

Following the revision process, the surveys were sent to a group of five distance learning peers of the researcher. These experts serve as instructional designers for distance learning and as faculty mentors for distance learning at one of the participating institutions. The surveys were peer evaluated for content
and applicability of the questions. Minor revisions were suggested and incorporated into the survey design.

The next step of the construction phase was a pilot study. The surveys were piloted using the commercial, electronic survey tool, ZipSurvey, that was used for the actual survey deployment. An e-mail invitation was sent to the pilot group, following the protocol of the actual study.

The survey for distance learning administrators was sent to 15 administrators not involved with distance learning at Tulsa Community College. The administrators reported completion time of less than 15 minutes. Additional comments were in the form of telephone conversations or e-mails and identified minor typographical errors. The group did not recommend any substantive changes.

The distance learning faculty survey was sent to the faculty mentors at TCC, former online faculty who have moved to other positions at TCC, and to online faculty at institutions outside the selected institutions for the study. Approximately 15 people participated in this pilot study. Written comments that were given are provided in Appendix D. One comment led to a revision on the survey wording. The language of the survey questions was standardized for consistency.

The distance learning student survey was sent to Ph.D. candidates/ students in the Occupational Educational program at Oklahoma State University (OSU). The researcher selected those students known to her through past
coursework at OSU. The written comments are included in Appendix E. Based upon the comments, a few revisions were incorporated into the survey design:

- The background color and text color were changed from the original black/orange to white/navy;
- One set of questions was altered to ask for only one characteristic instead of three;
- The list of characteristics and traits was altered for consistency; and
- The typographical errors were corrected.

Other than demographic information, the survey questions were identical on all three surveys. Therefore, suggestions from one pilot group were incorporated into all three surveys. A few of the comments were not appropriate for inclusion or revision of the survey, i.e. Adding an “Other” category to the list of schools and using an age range versus asking for the year of birth.

Both the faculty and student groups provided separate feedback about completion time. The completion time for the surveys was reported to be less than 15 minutes for both groups. As indicated previously, text versions of the three surveys are available in Appendix B.

Survey Dissemination

Student Surveys. Rose State College and Oklahoma City Community College utilized WebCT® as the classroom management tool. WebCT® does not contain a student e-mail system within the tools, making it impossible to e-mail the student invitation as originally planned. Instead, both institutions placed an announcement on the home page of the WebCT® portal for the respective
institution. The announcement contained the informed consent and a link to the online survey. The announcement was visible for approximately two weeks.

Tulsa Community College utilized Blackboard® as the classroom management system. Blackboard® included a student e-mail system and the survey invitation/informed consent was e-mailed through the classroom management system, Blackboard® to all online students by a distance learning administrator at Tulsa Community College.

The study deployed the surveys near the end of the spring semester. The timing was after the free drop/add period, but before the final withdrawal date at all three institutions.

*Faculty/Administrator Surveys.* Each institution identified a contact person to facilitate this study. The identified contact person sent the e-mail invitation that contained the informed consent and the link to the survey to the appropriate faculty and administrators at the individual institutions. At no time did the researcher have direct contact with the survey participants.

**Survey Analysis**

Basic descriptive statistics were used on each category of surveys. Frequency tables with percentages, when appropriate, were used for the categorical data. When possible, charts and graphs were provided to facilitate visual interpretation of the data. Central tendency statistics were used for numeric data as appropriate. \( \Sigma \)Rank Point technique was used to analyze ranking questions of the surveys.
Other than demographic data unique to each stakeholder group, the three surveys asked identical questions. Thematic coding to discover commonalities in the data was used to compare and contrast the data provided to identify the similarities and differences in the opinions of the three stakeholder groups.

**Ethical Issues in Survey Research**

The study was designed with ethical issues given due consideration. Demographic questions that may have been considered too personal were eliminated from the surveys. Respondents were given the option of “I prefer to not identify the institution” on the only question that could tie the respondent to a particular school. Anonymity of the respondents was assured through the survey deployment process as describe earlier.

**Research Design for the Evaluation Portion of the Study**

The final research question in the study investigated the effectiveness and efficiency of the ION *Self Evaluation for Potential Online Students* in addressing the characteristics, traits, and skills identified by the study’s stakeholder groups. The ION *Self Evaluation for Potential Online Students* was evaluated using the Key Evaluation Checkpoint (KEC) protocol developed by Michael Scriven. The checkpoints and their appropriateness to this evaluation are described in Table 3. For a full description of the KEC, please refer to Chapter Two.
Table 3

**Key Evaluation Checkpoints Utilized in the Study**

<table>
<thead>
<tr>
<th>Checkpoint Number</th>
<th>Checkpoint Name</th>
<th>Checkpoint Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Background and Context</td>
<td>• Identify the history of ION and the <em>Self Evaluation for Potential Online Students</em></td>
</tr>
<tr>
<td>2</td>
<td>Description and Definitions</td>
<td>• A complete description of the ION <em>Self Evaluation for Potential Online Students</em> as the evaluand for this study</td>
</tr>
<tr>
<td>3</td>
<td>Consumers</td>
<td>• Identification of the consumers utilizing the ION <em>Self Evaluation for Potential Online Students</em></td>
</tr>
<tr>
<td>4</td>
<td>Resources</td>
<td>• Identification of the resources used to create and maintain the ION <em>Self Evaluation for Potential Online Students</em></td>
</tr>
</tbody>
</table>
| 5                 | Values                       | • The basis for determination of the effectiveness/appropriateness of the ION *Self Evaluation for Potential Online Students* derived from data gathered from the surveys  
  • See additional information about values following Table 3 |
| 6                 | Process Evaluation           | • Analysis of the efficiency of the ION *Self Evaluation for Potential Online Students* |
| 7                 | Outcome Evaluation           | • What is the impact of the evaluand on the recipients or others  
  o Because the ION is a voluntary evaluation for students and the results of the assessment are not reported or maintained in any way, this checkpoint could not be completed |
Table 3 (Continued)

*Key Evaluation Checkpoints Utilized in the Study*

<table>
<thead>
<tr>
<th>Checkpoint</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 8 and 9 Comparative/Cost Effectiveness | - Because the ION *Self Evaluation for Potential Online Students* is available on a public website and is part of a larger web presence, the costs to continue providing the assessment in its current format are negligible.  
- These checkpoints were not included in the evaluation. | |
| 10 Exportability | - Does the ION *Self Evaluation for Potential Online Students* have value outside ION? | |
| 11 Overall Significance | - A complete summary of the evaluation was included in this checkpoint  
  - Where was the ION *Self Evaluation for Potential Online Students* doing well?  
  - Where was the ION *Self Evaluation for Potential Online Students* lacking? | |
| 12 Recommendations and Explanations | - Conclusions about the ION *Self Evaluation for Potential Online Students* were provided | |
| 13 Responsibilities | - The purpose of this checkpoint is to identify who or what was responsible for the results  
  - This was not the purpose of this study and not included in the evaluation | |
| 14 Reporting and Follow-up | - This section of the evaluation identified the stakeholders who received a copy of the evaluation | |
| 15 Meta-evaluation | - The evaluation itself was briefly evaluated to determine areas of improvement in the process | |
In the KEC, the values checkpoint is used to establish and weight the criteria for evaluating the effectiveness or appropriateness of the evaluand. The first step is to establish the criteria and then a weighting scheme for each criteria must be determined. Finally, the evaluand must be assessed against the established criteria using the weighting scheme.

In the current study, three surveys were created to determine the values of the distance learning stakeholder groups. The criteria to evaluate the ION Self Evaluation for Potential Online Students was determined by the responses to the surveys. Those perceptions identified as important through analysis of the survey responses became the criteria basis for this evaluation. The weighting scheme for the criteria was established through frequency response and ΣRank Point technique. The criteria determined as valuable to the stakeholders were placed into rank order by either frequency of response or ΣRank Point. Once placed in rank order, the items were then divided into tiers.

To assess the Self Evaluation for Potential Online Students, the frequency response tables and the ΣRank Point tables with tiering were used. Each of the 12 questions of the Self Evaluation for Potential Online Students were compared to the values identified by the distance learning stakeholders. A 10-point system was used for the assessment, as explained below.

Evaluation Criteria for the ION Self Evaluation for Potential Online Students

The characteristics, traits, and skills identified by the distance learning stakeholders in this study were selected as the items that are valued as important for success in the online classroom. The Key Evaluation Checkpoint 5
required identification of the values perceived as important by the Oklahoma distance learning stakeholders involved in this study. To identify these values, information from the surveys was ranked in order of importance based upon either the frequency of the responses or ΣRank Point.

The stakeholders were asked to answer an open-ended question that elicited their opinion of the most important computer/technical skill needed for students to be successful in the online class environment. A frequency table was created from the responses.

*Weighting of the Evaluation Criteria*

The criteria weighting process involved two steps. Once the values of the distance learning stakeholders were identified, classified, and placed into rank order, they were placed into tiers. Two classifications of criteria were established using the data from the surveys. The two classifications were (a) Technical/Computer skills and (b) Characteristics/Traits. Within each classification of criteria, two types of data were available. Open-ended survey questions resulted in frequency of response rankings. These responses were placed into a frequency table as aggregate data from all three stakeholder groups. The stakeholders also selected and ranked the characteristics, traits, and skills from a provided list. The results of the ranking process were placed into order using ΣRank Point.

*ΣRank Point Example.* If the respondents are asked to select and rank their top two choices from a list, ΣRank Point would be calculated as shown in Figure 7.
Once all the criteria identified by the distance learning stakeholders were weighted, the items were placed into tiers. Due to the large frequency of response values and the $\Sigma$Rank Point values, the identified criteria were divided into tiers using percentages of total. Tables 34 – 37 in Chapter IV contain the aggregate data for frequency response and $\Sigma$Rank Point.

A total of 862 open-ended responses were received from the three stakeholder groups. Any response with a frequency score of five or less was eliminated from the list. The remaining items were placed into five tiers. Next, the stakeholders were asked to select and rank the top five technical/computer skills from a provided list of nine skills. The list of skills was developed from a previous Delphi study conducted by this researcher and validated through peer-review. $\Sigma$Rank Point was used to place the skills in rank order and then to divide

<table>
<thead>
<tr>
<th>Item</th>
<th>Ranked #1</th>
<th>Ranked #2</th>
<th>$\Sigma$Rank Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>16</td>
<td>5</td>
<td>37</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Items ranked 1 would receive 2 points. Items ranked 2 would receive 1 point. Items not ranked 1 or 2 would receive 0 points. In this example, 16 respondents ranked Item A first and 5 people ranked Item A second. To calculate $\Sigma$Rank Point use the formula $A = (1^{st} \text{ place votes } \times 2) + (2^{nd} \text{ place votes } \times 1)$. The $\Sigma$Rank Point for Item A would be 37. Use the same formula for the remaining items.
the skills into tiers. Four $\Sigma$Rank Point breaking points appeared in the list, creating five tiers.

Following the same format, the distance learning stakeholders were asked a second open-ended question designed to elicit an opinion of the most important characteristic or trait that would be necessary for online success. A total of 18 characteristics and traits were identified from 677 responses. Of those traits and characteristics listed, nine items were mentioned fewer than ten times each and were dropped from the list. Of the remaining nine items, three breaking points were visible, but the items were divided into five tiers instead of the four tiers observed. No items were placed into Tier 2 due to the large difference between the most frequently supplied response and the second most frequently supplied response. Next, using a list of characteristics and traits developed through the previous Delphi Study, the stakeholders were asked to select and rank the top nine characteristics and traits that they considered important for online student success from a list of 18 items. The lowest seven items on the list were eliminated due to their low $\Sigma$Rank Point value. The remaining 11 items were placed into five tiers utilizing four $\Sigma$Rank Point breaking points.

Five tiers were visible for all four sets of aggregated data values. The tiers were weighted using a five-point scale. The top tiers were assigned a value of five points and the lowest tiers were assigned a value of 1 point. To evaluate the questions from the ION Self Evaluation for Potential Online Students, each question of the Self Evaluation for Potential Online Students was identified as
either a computer/technical question or a characteristic/trait question and given a value out of a possible 10 points. The point value was assigned using five points from the appropriate frequency table and five points from the $\Sigma$Rank Point table. For example, question 4 of the ION Self Evaluation for Potential Online Students asks, “Are you a self-motivated and self-disciplined person?” This question was classified as a Characteristic/Trait question. Using the Characteristic/Trait Frequency of Response Table (Table 36) and the Characteristic/Trait $\Sigma$Rank Point table (Table 37), the values addressed by this question are self-motivation and self-discipline. These items are found on Tier 1 for both frequency and $\Sigma$Rank Point. A Tier 1 response has been assigned a point value of 5 points; therefore, this question would receive 5 points from the frequency category and 5 points from the $\Sigma$Rank Point category or a total of 10 points on a 10 point scale. Based upon the criteria, question 4 would be considered an important question to ask on an assessment for online student readiness.

Once the values of the distance learning stakeholders were identified and weighted, the ION Self Evaluation for Potential Online Students was evaluated for its process (KEC Checkpoint 6). The primary question of the evaluation asked whether or not questions that addressed the identified values of the stakeholders groups were present in the assessment tool. Following the completion of Checkpoints Five and Six, the remainder of the KEC Checkpoints were completed to create the entire evaluation report. The process evaluation involved assessing the questions found on the ION Self Evaluation for Potential Online Students against the weighted criteria. Each question of the ION Self
Evaluation for Potential Online Students was classified as either a characteristic/trait or as a computer/technical skill. Once classified, the question content was matched to the criteria identified by the distance learning stakeholders. Once the classification and criteria were identified, the tier for the criteria was determined and a point value assigned from the Frequency Response Table (Table 36) and the ΣRank Point Table (Table 37). The complete findings and the evaluation are found in Chapter 4.
ASSESSING ONLINE READINESS:  
PERCEPTIONS OF DISTANCE LEARNING  
STAKEHOLDERS IN THREE OKLAHOMA  
COMMUNITY COLLEGES  

CHAPTER FOUR  

FINDINGS  

Introduction  

The purpose of this study was three-fold. First, the study described and compared what distance learning stakeholders, including administrators, online faculty, and online students, in three community colleges located in Oklahoma perceived as important characteristics, traits, and skills for online students to have prior to entering the online classroom. Second, the study developed a profile of the stakeholders involved with distance learning at the three Oklahoma community colleges participating in the study. Finally, the study evaluated the ION Self Evaluation for Potential Online Students which currently serves as the basis for many of the online readiness assessments used by institutions in the United States. The goal of the evaluation was to determine if the ION assessment actually assessed what administrators, faculty, and students perceived as important for online success and thus represented an appropriate online readiness assessment tool.
Perceptions of the Distance Learning Stakeholders

The first purpose of the study was to identify the characteristics, traits, and skills that the distance learning stakeholders perceived as important for online student readiness. Five research questions were utilized to achieve this purpose.

1. What characteristics, traits, and skills do distance learning administrators perceive as important for student readiness?
2. What characteristics, traits, and skills do distance learning faculty perceive as important for student readiness?
3. What characteristics, traits, and skills do distance learning students perceive as important for student readiness?
4. What perceptions do the three distance learning stakeholder groups have in common regarding the characteristics, traits, and skills necessary for online students?
5. What perceptions are unique to each distance learning stakeholder group regarding the characteristics, traits, and skills necessary for online students?

From the surveys, six specific questions were asked of the distance learning stakeholders to provide the data to answer the research questions. All three stakeholder groups were asked the same questions. The survey questions for the Computer/Technical skill classification were:

1. What technical/computer skill do you consider to be the most important for students to have in order to be successful in an online class?
2. Please rank the top five items from the list. 1 should be the skill that you see as the most important and 5 should be the least important of the items selected. You do not need to do anything for those items that are not your top 5 most important skills.
   a. Conducting an Internet search for data
   b. Downloading computer programs
c. Downloading plug-ins for the computer

d. Formatting a report or paper in a word processing program

e. Opening files from a specific file folder on the computer

f. Receiving e-mail with attachments

g. Saving files to a specific file folder on the computer

h. Sending e-mail

i. Sending e-mail with attachments

3. Were any skills that you consider important left off the list? If so, what are those skills?

The survey questions for the Characteristic/Trait classification were:

4. What characteristic or trait do you consider to be the most important for students to have mastered in order to be successful in an online class?

5. Please rank the top nine characteristics and traits from the list. 1 should be the skill that you see as the most important and 9 should be the least important of the items selected. You do not need to do anything for those skills that are not your top 9 most important skills or traits.

   a. Ability to work alone

   b. Ability to work in a group

   c. An understanding of technology

   d. Being able to think through a problem before answering

   e. Being able to think through a problem before asking for help

   f. Being open-minded

   g. Being self-motivated

   h. Being task-oriented

   i. Being willing to ask questions via technology
j. Being willing to complete assignments prior to the due date
k. Patience
l. Personal organization
m. Preferring an immediate answer to class-related questions
n. Preferring to complete course work using a computer
o. Preferring to hear/listen to an instructor
p. Preferring to read course materials from a computer screen
q. Preferring to read course materials in printed form
r. Turning assignments in early

6. Were any characteristics or traits that you consider important left off the list? If so, what are those characteristics or traits?

*Research Question 1*

*What characteristics, traits, and skills do distance learning administrators perceive as important for student readiness?*

When asked to identify the most important technical/computer skill, the administrators responding to the survey identified microcomputer application proficiency and the ability to navigate the Internet as the most important skills. The administrators also listed basic computer skills. The frequency response and tier for the various skills can be seen in Table 4.
Table 4

Administrators Perceptions of Important Technical/Computer Skills (Frequency)

<table>
<thead>
<tr>
<th>Technical/Computer Skill</th>
<th>Frequency of Response</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microcomputer Application Skills</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Internet Navigation Skills</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Basic Computer Skills</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Ability to Use E-mail Effectively</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>File Management Skills</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Keyboarding Skills</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Ability to Navigate the Classroom Management System</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Although only a small number of responses were provided, the administrators clearly believe that students need to have the ability to use microcomputer applications and Internet navigation skills. Fewer administrators listed basic computer skills as the most important skill needed for student success, but students who are comfortable with microcomputer applications and Internet navigation should already possess basic computer skills. Administrators did not value the ability to navigate the classroom management system as an important skill for online student readiness.

Following the opinion question about the technical/computer skill that the administrators considered most important for online student success, the survey asked the administrators to select and rank the top five skills from a list of the nine skills derived from previous studies. ΣRank Point was used to order the skills, and the list was divided into four tiers based upon the ΣRank Point. Tiers
were defined based on distance between $\Sigma$Rank Point scores within and between clusters. Table 5 details the results.

Table 5

*Administrators Rankings of Important Technical/Computer Skills ($\Sigma$Rank Point)*

<table>
<thead>
<tr>
<th>Skill</th>
<th>$\Sigma$Rank Point</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving Files to a Specific File Folder</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>Formatting a Paper in a Word Processing Program</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>Conducting an Internet Search for Data</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>Opening Files from a Specific File Folder on the Computer</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>Sending an E-Mail with Attachments</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Receiving E-Mail with Attachments</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Downloading Plug-ins for the Computer</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Downloading Computer Programs</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Sending E-Mail</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

When provided with a list of skills to select and rank, the administrators responses were slightly different from the frequency of response data provided in Table 4. When ranking skills, basic computer skill tied with a microcomputer application skill, possibly indicating that the administrators were thinking in generic terms when asked to provide an opinion on the survey.

Administrators were also asked to identify any technical/computer skills that may have been excluded from the survey. The following technical/computer skills were listed:
• Understanding and applying ethical methods of documentation;

• Knowledge of spyware and how to protect the computer from viruses;

• How to find the course website and navigate the classroom management system; and

• File management.

Next, the administrators were asked to identify the characteristic or trait they considered most important for student success in the online environment. Self-discipline/self-motivation were the most often identified traits required. Table 6 shows the frequency response rate and tiers for the identified characteristics and traits.

Table 6

<table>
<thead>
<tr>
<th>Characteristic/Trait</th>
<th>Frequency of Response</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Discipline</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Confidence</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Independence in Learning</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Clearly, the administrators felt that self-discipline and self-motivation were the most important traits that students need in order to be successful in online classes. Only two responses were different and both of those responses are related to self-discipline and self-motivation. Confidence can be related to self-motivation and independence in learning can be related to self-discipline.
Eighteen characteristics and traits were provided to the administrators for ranking. They were asked to select and rank their top nine traits from the provided list. ΣRank Point was used to place the characteristics and traits into order of importance. Six tiers were created based upon the ΣRank Point values. Table 7 presents the details. Once again, self-motivation was considered the most important trait that students can possess with a fairly large gap in ΣRank Point between self-motivation and the second ranked item identified.

Only one item was identified by the administrators as missing from the list supplied in the survey. The administrators identified reading comprehension as an important skill required for success in the online learning environment.
Table 7

Administrators Rankings of Important Characteristics and Traits (ΣRank Point)

<table>
<thead>
<tr>
<th>Characteristic/Trait</th>
<th>Tier</th>
<th>ΣRank Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Self-Motivated</td>
<td>1</td>
<td>86</td>
</tr>
<tr>
<td>An Understanding of Technology</td>
<td>2</td>
<td>63</td>
</tr>
<tr>
<td>Ability to Work Alone</td>
<td>2</td>
<td>54</td>
</tr>
<tr>
<td>Being Task-Oriented</td>
<td>2</td>
<td>52</td>
</tr>
<tr>
<td>Personal Organization</td>
<td>3</td>
<td>41</td>
</tr>
<tr>
<td>Being Willing to Ask Questions</td>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>Preferring to Complete Coursework Using a Computer</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Asking for Help</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Ability to Work in a Group</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Patience</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Answering</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Being Willing to Complete Assignments Prior to the Due Date</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Turning in Assignments Early</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Being Open-Minded</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Preferring to Read Course Materials in Printed Form</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Preferring an Immediate Answer to Class Related Questions</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Preferring to Hear/Listen to An Instructor</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Preferring to Read Course Materials from a Computer Screen</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>
Research Question 2

*What characteristics, traits, and skills do distance learning faculty perceive as important for student readiness?*

Faculty reported that the most important technical/computer skill for student success was basic computer skill followed closely by the ability to navigate the Internet. Frequency of response was used to place the technical/computer skills in order of importance and tiers. Table 8 presents the details of the faculty perceptions.

Table 8

*Faculty Perceptions of Important Technical/Computer Skills (Frequency)*

<table>
<thead>
<tr>
<th>Technical/Computer Skill</th>
<th>Frequency of Response</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Computer Skills</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>Internet Navigation Skills</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>Ability to Use E-Mail</td>
<td>28</td>
<td>2</td>
</tr>
<tr>
<td>File Management Skills</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>Knowledge of Word Processing/Microcomputer Application Software</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>Ability to Navigate the Classroom Management System</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Internet Research Skills</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Typing/Keyboarding Skills</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Access to a Computer</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Knowledge of Computer Security</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Ability to Troubleshoot Technical Problems</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
Faculty perceptions placed value on basic computer skills and Internet navigation skills. In addition, faculty valued the ability to use e-mail and file management skills. The clusters of items that appeared were fairly uniform with faculty valuing the basic technical skills.

Faculty were also asked to rank the set of technical/computer skills. The faculty were asked to select and rank the top five skills from a list of nine skills derived from previous studies. \(\Sigma\)Rank Point was used to order the skills and to place the skills into four tiers. Table 9 details the results.

Table 9

*Faculty Rankings of Important Technical/Computer Skills (\(\Sigma\)Rank Point)*

<table>
<thead>
<tr>
<th>Skill</th>
<th>(\Sigma)Rank Point</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sending an E-Mail with Attachments</td>
<td>306</td>
<td>1</td>
</tr>
<tr>
<td>Formatting a Paper in a Word Processing Program</td>
<td>279</td>
<td>2</td>
</tr>
<tr>
<td>Opening Files from a Specific File Folder on the Computer</td>
<td>265</td>
<td>2</td>
</tr>
<tr>
<td>Conducting An Internet Search For Data</td>
<td>235</td>
<td>2</td>
</tr>
<tr>
<td>Saving Files to a Specific File Folder on the Computer</td>
<td>179</td>
<td>3</td>
</tr>
<tr>
<td>Receiving E-Mail with Attachments</td>
<td>169</td>
<td>3</td>
</tr>
<tr>
<td>Sending E-Mail</td>
<td>147</td>
<td>3</td>
</tr>
<tr>
<td>Downloading Computer Programs</td>
<td>113</td>
<td>4</td>
</tr>
<tr>
<td>Downloading Plug-Ins for the Computer</td>
<td>101</td>
<td>4</td>
</tr>
</tbody>
</table>
When provided with a selection list, faculty selected the ability to send e-mail with attachments as more important than basic computer skills and Internet navigation skills, the two most important items from the opinion question on the survey. Located within Tier 2 were the skills required to successfully research and write a paper or complete an assignment. Tier 3 dealt with file management, specifically in the area of e-mail. Faculty did not value the ability to download computer programs or plug-ins for the computer. The tiers were obvious for this question with approximately 30 or more $\Sigma$Rank Points between each tier.

The faculty identified several technical/computer skills that they felt should have been included in the ranking list. These skills included:

- The ability to navigate the classroom management system
- Not being afraid of the technology
- Composing online messages
- Typing/keyboarding skills
- The ability to read from a computer screen
- The ability to multi-task/the ability to have multiple programs or files open on the computer at the same time
- The ability to follow directions
- Software skills such as image editing or web page design
- An understanding of pop-up blocker software
- Critical thinking
- The ability to cite online sources.

Next, the faculty were asked to identify the characteristic or trait they considered most important for student success in the online environment. Self-
discipline/self-motivation were the most often identified traits required. Table 10 shows the frequency response rate and tiers for the identified characteristics and traits. Then 18 characteristics and traits were provided to the faculty for ranking, and they were asked to select and rank the top nine traits. SumRank Point was used to place the characteristics and traits into order of perceived importance. Six tiers were created based upon the SumRank Point values. Table 11 shows the details.

Table 10

*Faculty Perceptions of Important Characteristics or Traits (Frequency)*

<table>
<thead>
<tr>
<th>Characteristic/Trait</th>
<th>Frequency of Response</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Discipline</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Time Management</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Independence in Learning</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Ability to Follow Directions</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Personal Responsibility</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Self-Direction</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Personal Organization</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Patience/Adaptability</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Confidence</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Faculty clearly valued self-discipline and self-motivation when asked about important characteristics or traits required for success in online classes. The next tier cluster focuses on organizational skills, and the information indicates
that time management and independence are important organizational skills.

The third tier items relate to personal attributes or skills.

Table 11

*Faculty Rankings of Important Characteristics and Traits (ΣRank Point)*

<table>
<thead>
<tr>
<th>Characteristic/Trait</th>
<th>ΣRank Point</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Self-Motivated</td>
<td>892</td>
<td>1</td>
</tr>
<tr>
<td>Ability to Work Alone</td>
<td>653</td>
<td>2</td>
</tr>
<tr>
<td>Personal Organization</td>
<td>563</td>
<td>2</td>
</tr>
<tr>
<td>An Understanding of Technology</td>
<td>516</td>
<td>2</td>
</tr>
<tr>
<td>Being Task-Oriented</td>
<td>451</td>
<td>3</td>
</tr>
<tr>
<td>Being Willing to Ask Questions</td>
<td>382</td>
<td>3</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Asking for Help</td>
<td>325</td>
<td>3</td>
</tr>
<tr>
<td>Patience</td>
<td>196</td>
<td>4</td>
</tr>
<tr>
<td>Preferring to Complete Course Work from a Computer</td>
<td>193</td>
<td>4</td>
</tr>
<tr>
<td>Being Willing to Complete an Assignment Prior to the Due Date</td>
<td>192</td>
<td>4</td>
</tr>
<tr>
<td>Preferring to Read Course Materials from a Computer Screen</td>
<td>151</td>
<td>4</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Answering</td>
<td>148</td>
<td>4</td>
</tr>
<tr>
<td>Being Open-Minded</td>
<td>107</td>
<td>5</td>
</tr>
<tr>
<td>Preferring to Read Course Materials in Printed Form</td>
<td>103</td>
<td>5</td>
</tr>
<tr>
<td>Ability to Work in a Group</td>
<td>73</td>
<td>5</td>
</tr>
<tr>
<td>Turning in Assignments Early</td>
<td>35</td>
<td>6</td>
</tr>
<tr>
<td>Preferring an Immediate Answer to Class Related Questions</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Preferring to Hear/Listen to an Instructor</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
When asked to select and rank from a provided list, the faculty clearly felt that self-motivation was the most important trait that characteristics could possess for success in an online class.

The faculty identified a few characteristics and traits that were missing from the ranking list. The missing items included:

- Reading comprehension
- Writing skill
- Critical thinking skill
- Problem-solving skill
- A willingness to take personal responsibility
- The ability to follow written directions
- A natural curiosity
- A basic understanding of what online learning means.

*Research Question 3*

What characteristics, traits, and skills do distance learning students perceive as important for student readiness?

Students reported in an open-ended question that the most important technical/computer skill for student success was an ability to navigate the Internet proficiently followed closely by basic computer skills. Frequency of response was used to place the technical/computer skills in order of importance. See Table 12 for details.
The student stakeholders placed the greatest emphasis on Internet navigation and basic computer skills. In addition, the students ranked keyboarding skills as an important skill for success in an online class.

Student stakeholders were also asked to select and rank the top five items from the set of nine technical/computer skills. ΣRank Point was used to order the skills and to place the skills into five tiers. Table 13 details the results.
Table 13

<table>
<thead>
<tr>
<th>Skill</th>
<th>ΣRank Point</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting an Internet Search for Data</td>
<td>1378</td>
<td>1</td>
</tr>
<tr>
<td>Formatting a Paper in a Word Processing Program</td>
<td>1303</td>
<td>1</td>
</tr>
<tr>
<td>Opening Files from a Specific File Folder on the Computer</td>
<td>1106</td>
<td>2</td>
</tr>
<tr>
<td>Sending an E-Mail with Attachments</td>
<td>1045</td>
<td>2</td>
</tr>
<tr>
<td>Saving Files to a Specific File Folder on the Computer</td>
<td>917</td>
<td>3</td>
</tr>
<tr>
<td>Downloading Computer Programs</td>
<td>705</td>
<td>4</td>
</tr>
<tr>
<td>Receiving E-Mail with Attachments</td>
<td>597</td>
<td>4</td>
</tr>
<tr>
<td>Sending E-Mail</td>
<td>499</td>
<td>5</td>
</tr>
<tr>
<td>Downloading Plug-Ins for the Computer</td>
<td>497</td>
<td>5</td>
</tr>
</tbody>
</table>

Similar to the frequency response data, the students ranked conducting an Internet search for data as the number one skill from the list as well. In addition, file management skills which were listed in Tier 4 based upon the frequency of response were placed in Tier 2 when using the ΣRank Point technique.

The students identified several technical/computer skills that they felt should have been included in the ranking list. These skills included:

- The ability to navigate the classroom management system and understand its jargon
• E-mail etiquette

• Knowing the difference between programs (i.e. Microsoft Word and Word Perfect)

• Knowledge of anti-virus software, spyware, and adware

• The ability to read from a computer screen

• The ability to follow directions

• Netiquette

• How to save files so that they are portable between computers

• Trouble-shooting technical problems

• Analyzing web sites for validity

• A knowledge of computer security

• Common sense

• How to compress files

• Typing/keyboarding skills.

Next, the students were asked to identify the characteristic or trait they considered most important for student success in the online environment. Self-discipline was the most often identified trait required. Table 14 shows the frequency of response and tiers for the identified characteristics and traits.

Eighteen characteristics and traits were provided to the students for selection and ranking of their top nine characteristics and traits. \( \Sigma \text{Rank Point} \) was used to place the characteristics and traits into order of importance. Five tiers were created based upon the \( \Sigma \text{Rank Point} \) values. Table 15 presents the details.
Students placed the most value on self-discipline as an important characteristic for success in an online class environment, selecting this characteristic almost twice as often as time management which was the second most highly ranked characteristic. Self-motivation was also selected frequently. After the top three items reported, a large gap was visible before the next cluster of characteristics or traits. Students were also given the list of characteristics and traits to rank. Table 15 details their selections.
Table 15

*Student Rankings of Important Characteristics and Traits (ΣRank Point)*

<table>
<thead>
<tr>
<th>Characteristic/Trait</th>
<th>ΣRank Point</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Self-Motivated</td>
<td>3716</td>
<td>1</td>
</tr>
<tr>
<td>Ability to Work Alone</td>
<td>3217</td>
<td>1</td>
</tr>
<tr>
<td>An Understanding of Technology</td>
<td>2365</td>
<td>2</td>
</tr>
<tr>
<td>Personal Organization</td>
<td>2188</td>
<td>2</td>
</tr>
<tr>
<td>Being Task-Oriented</td>
<td>2070</td>
<td>2</td>
</tr>
<tr>
<td>Being Willing to Ask Questions</td>
<td>1331</td>
<td>3</td>
</tr>
<tr>
<td>Being Willing to Complete an Assignment Prior to the Due Date</td>
<td>1141</td>
<td>3</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Asking for Help</td>
<td>1041</td>
<td>3</td>
</tr>
<tr>
<td>Patience</td>
<td>946</td>
<td>4</td>
</tr>
<tr>
<td>Preferring to Complete Course Work from a Computer</td>
<td>849</td>
<td>4</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Answering</td>
<td>848</td>
<td>4</td>
</tr>
<tr>
<td>Preferring to Read Course Materials from a Computer Screen</td>
<td>590</td>
<td>5</td>
</tr>
<tr>
<td>Being Open-Minded</td>
<td>485</td>
<td>5</td>
</tr>
<tr>
<td>Turning in Assignments Early</td>
<td>381</td>
<td>5</td>
</tr>
<tr>
<td>Preferring to Read Course Materials in Printed Form</td>
<td>338</td>
<td>5</td>
</tr>
<tr>
<td>Ability to Work in a Group</td>
<td>316</td>
<td>5</td>
</tr>
<tr>
<td>Preferring to Hear/Listen to an Instructor</td>
<td>97</td>
<td>6</td>
</tr>
<tr>
<td>Preferring an Immediate Answer to Class Related Questions</td>
<td>88</td>
<td>6</td>
</tr>
</tbody>
</table>
A wide variety of rankings were present in the ΣRank Point table for the important characteristics and traits. The tiering process for the first three tiers was divided in units of 1,000 due to the variability. The second three tiers were divided with smaller units of approximately 400 responses with any item receiving a ΣRank Point of less than 100 being placed in a 6th tier. Based upon the tiering, most students valued self-motivation and the ability to work alone much more than any other of the supplied characteristics or traits.

The students identified a few characteristics and traits they felt were missing from the ranking list. The missing items included:

- Reading comprehension
- Critical thinking skill
- A willingness to take personal responsibility
- The ability to follow written directions
- Personal communication skills
- Honesty
- Common sense.

Research Question 4

*What perceptions do the three distance learning stakeholder groups have in common regarding the characteristics, traits, and skills necessary for online students?*

Common Themes

Multiple questions from the survey were used to gather data for this question. Common themes throughout the responses to the survey included the
need for basic computer skills, the ability to navigate the Internet, and self-discipline/self-motivation for student success in the online classroom environment.

When asked to rank the technical/computer skills provided on the surveys, the three stakeholder groups disagreed about the most important skill required for online success, but it is interesting to note that all three stakeholder groups ranked the ability to format papers using a word processing program as the second most important technical/computer skill. All three distance learning stakeholder groups were in agreement concerning the top five skills in this category, only the order was different. The top five technical/computer skills identified by all three stakeholder groups included: the ability to conduct an Internet search for data, formatting papers using a word processing program, opening files that had been saved to a specific folder on the computer, sending e-mails that contained attachments, and saving files to a specific folder on the computer.

Both when listing the single most important learner characteristic and when ranking the characteristics/traits from the provided list on the surveys, all three groups agreed about that the most important trait for online success was self-motivation/self-discipline by a relatively large margin. Students and faculty were more adamant with their ranking based upon $\Sigma$Rank Point scores than the administrators. All three groups ranked the same five characteristics and traits as the top five items. These characteristics and traits were the need for self-motivation/self-discipline, the ability to work alone, an understanding of
technology, personal organization, and the ability to be task-oriented. All three stakeholder groups also place a willingness to ask questions as the sixth characteristic or trait needed for success. Outside the top six items, little agreement could be found between the three stakeholder groups.

Perceptions of Areas of Least Preparation

The three groups were also asked the area where students are least prepared for success in the online learning environment. All three groups listed a lack of self-motivation or self-discipline as the area where most students were least prepared. Frequency tables were used to order the responses provided by the administrators, faculty, and students. These data are shown in Tables 16 – 18 for all three stakeholder groups.

Table 16

Administrators’ Opinions of Areas Where Students are Least Prepared (Frequency)

<table>
<thead>
<tr>
<th>Area</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Discipline/Self-Motivation</td>
<td>3</td>
</tr>
<tr>
<td>Basic Computer Skills</td>
<td>3</td>
</tr>
<tr>
<td>File Management Skills</td>
<td>2</td>
</tr>
<tr>
<td>Technical Skills</td>
<td>1</td>
</tr>
<tr>
<td>Initiative</td>
<td>1</td>
</tr>
<tr>
<td>Time Management</td>
<td>1</td>
</tr>
<tr>
<td>Math Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

One interesting note is that basic computer skills was listed as a Tier 2 technical/computer skill when the administrators were asked to provide the most
important technical skill needed for online student success, while naming it as one of the areas where they see students as the least prepared.

Table 17

*Faculty’s Opinions of Areas Where Students are Least Prepared (Frequency)*

<table>
<thead>
<tr>
<th>Area</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Discipline/Self-Motivation</td>
<td>37</td>
</tr>
<tr>
<td>Time Management</td>
<td>30</td>
</tr>
<tr>
<td>Basic Computer Skills</td>
<td>28</td>
</tr>
<tr>
<td>Reading/Writing Competency</td>
<td>15</td>
</tr>
<tr>
<td>Critical Thinking Skills</td>
<td>11</td>
</tr>
<tr>
<td>Expectation of the Online Class</td>
<td>11</td>
</tr>
<tr>
<td>Ability to be an Independent Learner</td>
<td>9</td>
</tr>
<tr>
<td>Organization Skills</td>
<td>6</td>
</tr>
<tr>
<td>Responsibility</td>
<td>5</td>
</tr>
<tr>
<td>Ability to Follow Directions</td>
<td>4</td>
</tr>
<tr>
<td>A Willingness to Ask Questions</td>
<td>2</td>
</tr>
<tr>
<td>Study Habits</td>
<td>2</td>
</tr>
<tr>
<td>Lazy</td>
<td>1</td>
</tr>
<tr>
<td>Understanding the Classroom Management System</td>
<td>1</td>
</tr>
</tbody>
</table>

Faculty indicated that time management was one of the most important skills that students are lacking for success. In addition, the faculty introduced a lack of critical thinking, expectations of the requirements of an online class, and reading/writing competency as important areas where students are struggling in their preparation for online classes.
Table 18

*Students’ Opinions of Areas Where Students are Least Prepared (Frequency)*

<table>
<thead>
<tr>
<th>Area</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Motivation/Self-Discipline</td>
<td>133</td>
</tr>
<tr>
<td>Time Management</td>
<td>96</td>
</tr>
<tr>
<td>Expectation of the Online Class</td>
<td>51</td>
</tr>
<tr>
<td>Ability to be an Independent Learner</td>
<td>44</td>
</tr>
<tr>
<td>Computer Skills</td>
<td>32</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>30</td>
</tr>
<tr>
<td>Organization Skills</td>
<td>22</td>
</tr>
<tr>
<td>Basic Communication Skills</td>
<td>21</td>
</tr>
<tr>
<td>Understanding of the Classroom Management System</td>
<td>20</td>
</tr>
<tr>
<td>Responsibility</td>
<td>10</td>
</tr>
<tr>
<td>Maturity</td>
<td>7</td>
</tr>
<tr>
<td>Math Skills</td>
<td>6</td>
</tr>
<tr>
<td>Patience</td>
<td>5</td>
</tr>
<tr>
<td>Study Skills</td>
<td>4</td>
</tr>
<tr>
<td>Access to a Computer</td>
<td>3</td>
</tr>
<tr>
<td>Ability to Follow Written Directions</td>
<td>3</td>
</tr>
<tr>
<td>Attention Span</td>
<td>2</td>
</tr>
<tr>
<td>E-mail Skills</td>
<td>2</td>
</tr>
<tr>
<td>Grammar</td>
<td>2</td>
</tr>
<tr>
<td>Typing/Keyboarding Skills</td>
<td>1</td>
</tr>
<tr>
<td>Ability to Adapt to Change</td>
<td>1</td>
</tr>
</tbody>
</table>
Students strongly felt that the area of least preparation was the area of self-motivation/self-discipline, but interestingly, the students placed time management as the second skill where students are lacking in preparation. The students also indicated that reading comprehension was an important area where additional preparation may be needed.

All three stakeholder groups agreed that the area where students are the least prepared for the online learning environment was in the area of self-motivation/self-discipline. Faculty and student stakeholders also listed an inability to manage time as the second area where the most improvement was needed for students to be prepared for the online learning environment.

Perceptions of Areas of Greatest Preparation

The stakeholders were also asked to identify the areas where students were the most prepared for online learning. Of those who responded to the question, technology skills were listed as the area where students appear to be the most prepared. Of the 85 faculty who responded to the question, 68 listed technology skills as the area of least concern, and 5 of the 8 administrators responding agreed. The majority of the students used this question to make unrelated comments, but those responding to the question also listed technology skills as the area where students were most prepared.

Factors Contributing to a Lack of Success

Finally, the participants were asked, “When a student has not been successful in an online course, what do you believe were the factors that contributed to the lack of success in the course”?
The administrators provided responses that were consistent with their previous answers. Five of the 14 administrators stated that lack of self-discipline or a lack of self-motivation were the primary causes for the students’ lack of success in the online environment. The faculty agreed, naming a lack of self-discipline or self-motivation as the main reason for student failure in the online classes. Table 19 details the complete list provided by the faculty.

Table 19

*Faculty Perceptions of Why Students Have Been Unsuccessful in Online Classes (Frequency)*

<table>
<thead>
<tr>
<th>Perceived Reason</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Self-Discipline/Self-Motivation</td>
<td>44</td>
</tr>
<tr>
<td>Poor Time Management Skills</td>
<td>29</td>
</tr>
<tr>
<td>Procrastination</td>
<td>14</td>
</tr>
<tr>
<td>Not Reading the Material Provided for the Class</td>
<td>12</td>
</tr>
<tr>
<td>Technology Problems</td>
<td>12</td>
</tr>
<tr>
<td>Misunderstanding of the Expectations for Online Classes</td>
<td>12</td>
</tr>
<tr>
<td>Disorganization</td>
<td>9</td>
</tr>
<tr>
<td>Not Being Willing to Ask for Help</td>
<td>8</td>
</tr>
<tr>
<td>Lack of Responsibility</td>
<td>6</td>
</tr>
<tr>
<td>Being a Dependent Learner</td>
<td>5</td>
</tr>
<tr>
<td>Taking too Many Classes</td>
<td>5</td>
</tr>
<tr>
<td>Laziness</td>
<td>4</td>
</tr>
<tr>
<td>Not Following Written Directions</td>
<td>2</td>
</tr>
<tr>
<td>Lack of Patience</td>
<td>1</td>
</tr>
<tr>
<td>A Feeling of Being Disconnected from the Instructor or Classmates</td>
<td>1</td>
</tr>
<tr>
<td>Inadequate Computer Access</td>
<td>1</td>
</tr>
</tbody>
</table>
The faculty were also consistent in responding that a lack of self-discipline/self-motivation were the main reasons for students to be unsuccessful in online classes, and listing a lack of time management as the second skill where students have been unsuccessful in the past. Procrastination could be considered part of a lack of time management, but enough faculty specifically listed procrastination as a separate skill in the survey responses, justifying placing it as a separate category in the frequency table. Based upon the responses, it was unclear as to whether or not faculty felt that the students were not reading the class materials or were not able to read and comprehend the class materials. Faculty responses to previous questions indicated that faculty felt reading comprehension was a missing skill for some students. One interesting note was that faculty recognized that students may not have the proper expectations of the requirements of an online class, a trait that the administrators did not indicate in their responses.

The students also listed a lack of self-discipline or self-motivation as the primary reason for a lack of success in online classes. The students agreed with the faculty in that poor time management skills was the second most common cause for a lack of success in the online classes for students. Table 20 contains the complete list of student responses.
**Table 20**

*Student Perceptions of Why Students Have Been Unsuccessful in Online Classes (Frequency)*

<table>
<thead>
<tr>
<th>Perception</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Self-Discipline/Self-Motivation</td>
<td>165</td>
</tr>
<tr>
<td>Poor Time Management Skills</td>
<td>76</td>
</tr>
<tr>
<td>Falling Behind in the Work</td>
<td>55</td>
</tr>
<tr>
<td>Being a Dependent Learner</td>
<td>39</td>
</tr>
<tr>
<td>The Instructor Did Not Know How to Teach Online</td>
<td>38</td>
</tr>
<tr>
<td>Not Being Willing to Ask for Help</td>
<td>36</td>
</tr>
<tr>
<td>Procrastination</td>
<td>34</td>
</tr>
<tr>
<td>Disorganization</td>
<td>26</td>
</tr>
<tr>
<td>Inadequate Technical Skills</td>
<td>24</td>
</tr>
<tr>
<td>Misunderstanding of the Expectations for Online Classes</td>
<td>22</td>
</tr>
<tr>
<td>Not Reading the Material Provided for the Class</td>
<td>18</td>
</tr>
<tr>
<td>Laziness</td>
<td>17</td>
</tr>
<tr>
<td>Poor Study Habits</td>
<td>16</td>
</tr>
<tr>
<td>Lack of Responsibility</td>
<td>7</td>
</tr>
<tr>
<td>Immaturity</td>
<td>4</td>
</tr>
<tr>
<td>Not Completing the Pre-requisites for the Class</td>
<td>3</td>
</tr>
</tbody>
</table>

Students agreed with the administrators and faculty that the main reason for lack of success in an online class was a lack of self-discipline or self-motivation. The students also agreed that time management was an area where students needed additional preparation in order to be successful. The third item
listed by students, falling behind in the work, is closely related to the 
procrastination issue identified by faculty as the third area where students were 
unsuccessful in online classes. One disturbing note provided by the students 
was that a relatively large number of students placed the blame for a lack of 
success on the instructor’s ability to teach in the online environment. Future 
research into the reasons for this comment may be appropriate.

All three stakeholder groups agreed on the main issue. The agreement 
was that the most important characteristic, trait, or skill that a student needs to be 
successful in the online class is that of self-motivation or self-discipline, followed 
by adequate skills in time management. All three stakeholder groups listed 
technology skills as important for success, but felt that this was the area where 
students, in general, were the most prepared.

Research Question 5

What perceptions are unique to each distance learning stakeholder group 
regarding the characteristics, traits, and skills necessary for online students?

Based upon the data provided by the three stakeholder groups, all three 
groups agreed that self-discipline/self-motivation, time management skills, and 
basic technology skills were the most important characteristics, traits, and skills 
that students should possess in order to be ready for the online environment and 
that a deficiency in any of these areas was perceived as being a reason for 
students not being successful in the online environment.

Areas of differences can be seen in the area of technical/computer skills. 
Faculty and students listed Internet research as an important skill, placing it in
Tier 4 (See Tables 4, 8, and 12), but this skill was not mentioned by the administrators surveyed. Students and faculty also placed more importance on the ability to navigate the classroom management system, ranking it near the middle of their lists in Tier 3 while administrators placed this skill at the bottom of their list in Tier 4. Although not mentioned often, faculty and students recognized a need for an understanding of computer security as an important skill. Students also listed the need to understand netiquette rules.

When comparing the ΣRank Point tables for the three distance learning stakeholder groups (Tables 5, 9, and 13), more variance can be seen in the students’ responses when compared to the administrators and faculty. The students’ responses were divided into five tiers, while only four tiers were required in the other two groups. Faculty valued the ability to send an e-mail with an attachment as the most important technical/computer skill. The administrators and students ranked this skill as fifth and fourth respectively, placing it in the second tier of importance. Administrators ranked the ability to save files to a specific folder as the most important skill, but faculty and students ranked the same skill as fifth, placing it in the third tier. Instead, the faculty and students placed more value on the ability to open files from a specific folder ranking it third and in Tier 2, while administrators ranked this skill as fourth on the ΣRank Point list, it was still in their second tier. Administrators also valued the ability to download plug-ins for the computer more than faculty and students who ranked this skill as the least important from the provided list, although all three groups ranked this skill in the lowest tier for that group.
Possibly due to the low number in the administrator’s sample, the administrators only provided four important characteristics and traits when asked what characteristics and traits were most important in their opinion. The faculty and students provided a more comprehensive list. Administrators and faculty listed confidence as an important characteristic, placing it in Tier 3 out of 3 tiers, but students did not list confidence as a needed trait. Additional comparisons between the administrators and the faculty and students were difficult due to a lack of data from the administrators.

Although tier rankings were very similar between the groups, areas of unique perceptions between students and faculty can be seen in the data when comparing the ranking of the items. Students responded that time management was more important than self-motivation, ranking self-motivation as a distant third on the list of characteristics and traits behind self-discipline and time management. Students also listed personal organization much higher on the list than faculty, placing it near the middle of the frequency response list. The faculty placed personal organization near the bottom of their frequency response list. Concerning critical thinking as a skill, faculty placed this skill near the middle of their list, and students ranked it near the bottom. The ability to follow directions was also valued more by faculty than by students. Faculty ranked this skill in the top half of importance while students ranked following directions near the bottom of their list. Faculty also listed self-direction as an important characteristic, an item that was not mentioned by the students. Students placed a greater importance on understanding and patience than did the faculty. The students
also listed a few characteristics and traits that were not mentioned by either the faculty or administrators. The students felt that study skills, maturity, commitment, and flexibility were important along with honesty, ethical work standards, and a lack of fear of technology.

When comparing the $\Sigma$Rank Point values between the three stakeholder groups, the top six skills listed by the groups were the same (Tables 7, 11, and 15). Faculty and students placed more value on the ability to work alone than the administrators. Beyond the top six characteristics and traits, more differences can be seen between the three groups. Students ranked a preference for using a computer to complete coursework lower than the faculty and administrators although they did rank the item in the top ten. Students ranked a willingness to complete an assignment prior to the due date as the seventh characteristic and trait while faculty ranked the same skill tenth and the administrators ranked the skill as 12th.

The student stakeholders were also asked to provide unique information in the form of the reason that they may have withdrawn from an online class. Of the 143 students reporting that they had withdrawn from an online class, only seven students reported that the reason for the withdrawal was a lack of self-discipline.

An interesting piece of data from responses was that 28 of the students placed the reason for their withdrawal from the online class onto the instructor. Based upon comments provided on the survey, these students were specific in their criticism of the faculty, and the comments included:
- Slow response time when sending the instructor a question via e-mail and receiving an answer in return;
- A class environment that was difficult to navigate; and
- A question about the faculty member’s level of technology skill.

Table 21 provides the complete list of reasons for student withdrawal.

Although many of the reasons for withdrawal can be applied to traditional classes, the students perceived these items as their reasons for withdrawal from online classes. Two of the top three reasons for student withdrawal from an online class were related to time management. Health issues and personal issues were also listed in the top five reasons for withdrawal. The second reason provided for withdrawal was to blame the instructor. A potential future research study may be to investigate why students listed this as a reason for withdrawal.

Table 21

**Why Students Withdrew from Online Classes (Frequency)**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fell Behind in Class Work/More Work than was Expected</td>
<td>29</td>
</tr>
<tr>
<td>Blamed the Instructor</td>
<td>28</td>
</tr>
<tr>
<td>Lack of Time</td>
<td>11</td>
</tr>
<tr>
<td>Health Issues</td>
<td>10</td>
</tr>
<tr>
<td>Personal Issues</td>
<td>10</td>
</tr>
<tr>
<td>Class Not Suitable for the Online Environment (Math, Accounting,</td>
<td>9</td>
</tr>
<tr>
<td>Computer Programming)</td>
<td></td>
</tr>
<tr>
<td>Enrolled in too many Classes</td>
<td>8</td>
</tr>
<tr>
<td>Could not Understand the Material/Received a Low Grade</td>
<td>8</td>
</tr>
<tr>
<td>Lack of Self-Discipline</td>
<td>7</td>
</tr>
</tbody>
</table>
Table 21 (Continued)

**Why Students Withdrew from Online Classes (Frequency)**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Issues</td>
<td>7</td>
</tr>
<tr>
<td>Work Issues</td>
<td>5</td>
</tr>
<tr>
<td>Lost Interest in the Material</td>
<td>4</td>
</tr>
<tr>
<td>Felt Disconnected from the Teacher or the Other Students</td>
<td>4</td>
</tr>
<tr>
<td>Did not Like the Structure of the Grading Scale</td>
<td>3</td>
</tr>
<tr>
<td>Computer Issues</td>
<td>3</td>
</tr>
<tr>
<td>Procrastination</td>
<td>3</td>
</tr>
<tr>
<td>Schedule Changed</td>
<td>3</td>
</tr>
<tr>
<td>Could not Meet the On-campus Requirements</td>
<td>3</td>
</tr>
<tr>
<td>Changed Major</td>
<td>2</td>
</tr>
<tr>
<td>Class had Strict Time Requirements</td>
<td>2</td>
</tr>
<tr>
<td>Did not Like the Class</td>
<td>2</td>
</tr>
<tr>
<td>Needed a Tutor</td>
<td>2</td>
</tr>
<tr>
<td>Forgot to Work on the Class</td>
<td>2</td>
</tr>
<tr>
<td>Needed to Complete a Pre-Requisite First</td>
<td>2</td>
</tr>
<tr>
<td>Instructor Withdrew the Student</td>
<td>1</td>
</tr>
<tr>
<td>Could not Understand the Class Management System</td>
<td>1</td>
</tr>
<tr>
<td>Military Obligation</td>
<td>1</td>
</tr>
<tr>
<td>Not Ready for the Online Environment</td>
<td>1</td>
</tr>
<tr>
<td>Thought that the Syllabus was too Long</td>
<td>1</td>
</tr>
<tr>
<td>Did not Communicate with the Teacher</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 21 (Continued)

**Why Students Withdrew from Online Classes (Frequency)**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confused</td>
<td>1</td>
</tr>
<tr>
<td>Could not Find the Required Course Materials</td>
<td>1</td>
</tr>
<tr>
<td>Did not have the Money to Purchase the Textbook</td>
<td>1</td>
</tr>
<tr>
<td>Class was too Difficult</td>
<td>1</td>
</tr>
<tr>
<td>Class would not Transfer</td>
<td>1</td>
</tr>
</tbody>
</table>

**Additional Points of Agreement/Disagreement among the Stakeholder Groups**

Additional survey questions were utilized to compare the common and unique perceptions between the three stakeholder groups. All three groups were asked if they believed that some students were not ready for online learning. Table 22 compares the responses.
Faculty and administrators appeared to agree, with over 90% of both groups perceiving that some students are not prepared for online learning. The majority of students, 65%, also agreed with this position, but 24% of the students did not believe that they had access to this information or they did not know the answer. The low disagreement percentages indicate that most stakeholders believe that some students are not ready for the online learning environment.

The three groups were also asked if high-quality learning could take place outside the traditional classroom. The majority of faculty and students strongly agreed that high-quality learning could take place outside the traditional classroom and 100% of the administrators strongly agreed. Thus, there was strong agreement among the stakeholder groups in this issue. Table 23 contains the complete data for this question.
Table 23

Can High Quality Learning Take Place Outside the Traditional Classroom?

<table>
<thead>
<tr>
<th></th>
<th>Administrators</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>100%</td>
<td>76%</td>
<td>69%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>22%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>1%</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2%</td>
<td></td>
<td>2%</td>
</tr>
</tbody>
</table>

Strong agreement can be seen among and between the stakeholder groups. Only 3% of the faculty disagree with the statement that high-quality learning can take place outside the traditional classroom and 5% of the students disagreed with the statement.

The three stakeholder groups were also asked about the need for online readiness assessments. Four survey questions addressed this area. Table 24 contains the results of these four questions.
Table 24

Need for Readiness Assessments

<table>
<thead>
<tr>
<th>Should an online readiness assessment be available to students prior to enrollment into online classes?</th>
<th>Administrators</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>89%</td>
<td>80%</td>
<td>62%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>11%</td>
<td>17%</td>
<td>32%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>0%</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Should an online readiness assessment be required before students enroll in online classes?</th>
<th>Administrators</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>67%</td>
<td>64%</td>
<td>42%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>22%</td>
<td>29%</td>
<td>30%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>0%</td>
<td>3%</td>
<td>18%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>11%</td>
<td>4%</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Should students be required to perform at a proficient level (to be determined by the institution) on a readiness assessment before they enroll into online classes?</th>
<th>Administrators</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>44%</td>
<td>63%</td>
<td>28%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>44%</td>
<td>22%</td>
<td>35%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>11%</td>
<td>9%</td>
<td>22%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
<td>7%</td>
<td>15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>An online readiness assessment accompanied by an improvement plan would increase online student readiness.</th>
<th>Administrators</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>67%</td>
<td>57%</td>
<td>36%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>22%</td>
<td>36%</td>
<td>47%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>11%</td>
<td>5%</td>
<td>14%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
<td>2%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Over 90% of the respondents agreed that an online readiness assessment should be available to students prior to their enrollment into online classes. Strong agreement was evident between all three stakeholder groups. A higher
Percentage of administrators and faculty felt that an online readiness assessment should be required prior to enrollment although over 70% of the students also agreed that an online readiness assessment should be required. Almost half of the students disagreed with the statement that an online readiness should be required and that students should perform at a proficient level, but a majority of administrators and faculty felt that a required proficiency level should be a requirement prior to enrollment into an online class. Over 80% of all three stakeholder groups agreed that an online readiness assessment with an improvement plan would result in an increase in online student readiness.

Research Question 6

*What is the demographic profile of the institutions offering online degrees in Oklahoma?*

Respondents were asked to identify the institution where they were affiliated. Table 25 provides the breakdown of respondents.

Table 25

<table>
<thead>
<tr>
<th>Institutional Affiliation of Respondents</th>
<th>Students</th>
<th>Faculty</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td>Oklahoma City Community College</td>
<td>34</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5%</td>
<td>23%</td>
<td>29%</td>
</tr>
<tr>
<td>Rose State College</td>
<td>49</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>7%</td>
<td>17%</td>
<td>7%</td>
</tr>
<tr>
<td>Tulsa Community College</td>
<td>629</td>
<td>80</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>87%</td>
<td>58%</td>
<td>57%</td>
</tr>
<tr>
<td>Prefer to not identify the institution</td>
<td>14</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>1%</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>726</td>
<td>137</td>
<td>14</td>
</tr>
</tbody>
</table>
The majority of respondents were from Tulsa Community College, with a large group of students responding from Oklahoma City Community College and almost one-fourth of the faculty responding also from Oklahoma Community College. A larger percent of faculty from Rose State College responded to the survey than students from Rose. The percentages of student respondents did not correspond to the potential percentages from the three schools. Oklahoma City Community College enrollments represented 37% of the potential population, Rose State College enrollments represented 18% of the potential population, and Tulsa Community College enrollments represented 44% of the potential population. Administrator and faculty percentages could not be computed because the individual institutions did not provide the number of potential respondents to this researcher due to privacy issues.

The actual number of online students enrolled at each institution was provided by the distance learning department of the college. Oklahoma City Community College reported approximately 3,400 online students during the spring semester, Rose State College reported 1,635 online students enrolled during the spring semester, and Tulsa Community College reported approximately 4,000 online students enrolled during the spring semester. The number of administrators and faculty involved with distance learning were not reported to this researcher to protect the privacy of the faculty and administrators.
The administrators reported data based upon the Spring 2006 semester.

Figures 8 – 10 contain the aggregate demographic data for the institutions as reported by the administrators.

**Figure 8:** Percentages of Administrators, in Aggregate, Reporting on the Number of Online Faculty Teaching at the Participating Institutions.

Based upon the information provided, the majority of the school administrators responding to this survey reported that the number of online faculty exceeds 50. Individual institution faculty numbers were not provided to this research to maintain anonymity of the faculty.
Figure 9: Percentages of Administrators, in Aggregate, Reporting on the Number of Online Students Enrolled at the Participating Institutions.

Two-thirds of the administrators reported more than 2,500 students enrolled in online classes, indicating that the students at these three institutions are seeking this enrollment format as an option for their education.

Figure 10: Percentages of Administrators, in Aggregate, Reporting on the Number of Unique Online Courses at the Participating Institutions.

The administrators at the three institutions indicated that the students have a large variety of online course options with three-fourths of the
administrators reporting that over 50 unique online courses are available to the students.

Research Question 7

What is the demographic profile of the online faculty at the community colleges offering online degrees in Oklahoma?

Faculty were asked to provide background information about their teaching experience, teaching status with the institution, and training received in preparation for online learning. Forty-three percent of the faculty responding considered themselves to be full-time faculty at the institution, 53% considered themselves to be adjunct faculty, and 4% responded that their teaching status was other and identified the status as staff, administration, or other professional staff.

Table 29 provides the data from the question that asked the faculty about teaching experience at any level of the educational system and in any delivery format. Table 30 provides the data from the question that asked the faculty about teaching experience in the online environment.
Table 26

*Teaching Experience in Years*

<table>
<thead>
<tr>
<th>Experience Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 3 years</td>
<td>12%</td>
</tr>
<tr>
<td>4 – 6 years</td>
<td>14%</td>
</tr>
<tr>
<td>7 – 9 years</td>
<td>11%</td>
</tr>
<tr>
<td>10 – 15 years</td>
<td>15%</td>
</tr>
<tr>
<td>16 – 20 years</td>
<td>17%</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>31%</td>
</tr>
</tbody>
</table>

The faculty at the three institutions indicated that they had been teaching for a significant number of years with almost two-thirds of the faculty having taught for 10 or more years.

Table 27

*Online Teaching Experience in Semesters*

<table>
<thead>
<tr>
<th>Experience Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 4 semesters</td>
<td>48%</td>
</tr>
<tr>
<td>5 – 8 semesters</td>
<td>26%</td>
</tr>
<tr>
<td>9 – 12 semesters</td>
<td>12%</td>
</tr>
<tr>
<td>More than 12 semesters</td>
<td>15%</td>
</tr>
</tbody>
</table>

The faculty also indicated through the survey responses that over one-half of them have taught in the online environment for 2 or more years. Next the faculty were asked if they had received training for the online environment prior to teaching in the online format. Fifty-four percent of the faculty reported that
they had received some type of training while 46% reported that they did not receive any training. Table 31 presents a complete list of the training received.

Table 28

*Type of Faculty Training (Frequency)*

<table>
<thead>
<tr>
<th>Training Type</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop about the Class Management System</td>
<td>37</td>
</tr>
<tr>
<td>One-on-One with a Mentor</td>
<td>16</td>
</tr>
<tr>
<td>Self-Training</td>
<td>9</td>
</tr>
<tr>
<td>College Provided Training (Type Unspecified)</td>
<td>8</td>
</tr>
<tr>
<td>Online Orientation</td>
<td>6</td>
</tr>
<tr>
<td>8th Floor (A Tulsa County Training Facility that TCC Employees can Utilize)</td>
<td>5</td>
</tr>
<tr>
<td>Handouts</td>
<td>4</td>
</tr>
<tr>
<td>Informal Instruction</td>
<td>4</td>
</tr>
<tr>
<td>National/Regional Conferences</td>
<td>4</td>
</tr>
<tr>
<td>Best Practices Instruction</td>
<td>2</td>
</tr>
<tr>
<td>Training at Another Institution</td>
<td>2</td>
</tr>
<tr>
<td>Shadow Program</td>
<td>1</td>
</tr>
<tr>
<td>A Way to Access Help</td>
<td>1</td>
</tr>
<tr>
<td>Teletraining Institute</td>
<td>1</td>
</tr>
<tr>
<td>Co-taught with Another Instructor Prior to Teaching Alone</td>
<td>1</td>
</tr>
</tbody>
</table>

The majority of the faculty received training in the classroom management system or one-on-one training from a mentor, but few if any of the faculty reported any training in the basics of instructional design for the online environment. The faculty reported being very experienced based upon the years
that they had been teaching, but many reported limited experience in the online learning environment and they perceived that additional training may be needed.

Research Question 8

What is the demographic profile of the online students at the colleges offering online degrees in Oklahoma?

Only students 18 years or older were allowed to complete the survey. Because the participating institutions allow high school students who meet strict entrance criteria to concurrently enroll in college credit courses, the first question on the student survey asked the students if they were at least 18 years old. Nine students provided a negative response to the question and were exited from the survey without the opportunity to see any additional questions.

The basic profile of the online students responding to the survey identified gender, age, access to a home computer, work status, and children living in the home. Seventy-eight percent of the students participating in the study were female, 54% of the students worked full-time, 28% worked part-time, and 18% did not work in addition to attending college. Fifty-one percent of the students had children who lived in the home. Ninety-five percent of the students had a home computer, but only 70% of the students used the home computer as the primary access portal for online classes. Eleven percent accessed their classes from the college campus lab, 4% used a computer at a parent’s house, 3% used a computer at the public library, and 12% used a computer at another location such as a work computer. Seventy-four percent of the students had access to DSL or a cable modem for high speed access with an additional 7% accessing
their courses through another high-speed access device. Fourteen percent of the students were using a dial-up connection and 2% only used the campus computer labs as the only access to the online class.

The ages of the online students ranged from 76 years old to 18 years old with the mean age 27 years old. Figure 7 presents a visual breakdown of the birth years reported by the students.

When asked if they believed that they were ready for the online classroom environment prior to enrolling in the first online class, only 15% of the students responded no and 29% of the students responded that they were taking their first online class during the time of this study. See Table 32 for a complete list of the number of classes that students reported successfully completed. Successful completion was defined in the survey question as completion of the class with a grade of C or better.

Table 29

*Number of Classes Completed Successfully (Percentage of Students)*

<table>
<thead>
<tr>
<th>Number of Classes</th>
<th>Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>None, This Is the First Online Class</td>
<td>29%</td>
</tr>
<tr>
<td>0 Classes</td>
<td>9%</td>
</tr>
<tr>
<td>1 Class</td>
<td>14%</td>
</tr>
<tr>
<td>2 Classes</td>
<td>12%</td>
</tr>
<tr>
<td>3 Classes</td>
<td>11%</td>
</tr>
<tr>
<td>4 Classes</td>
<td>7%</td>
</tr>
<tr>
<td>5 Classes</td>
<td>5%</td>
</tr>
<tr>
<td>6 Or More Classes</td>
<td>14%</td>
</tr>
</tbody>
</table>
Just over one-third of the students reported that they had not successfully completed an online class and almost one-fifth of the students had completed five or more online classes successfully.

**Figure 11:** Birth Years of Students attending online classes at the participating institutions.
The students were also asked to provide the number of online classes from which they had withdrawn (See Table 33).

Table 30

Number of Online Class Withdrawals (Percentage of Students Reporting)

<table>
<thead>
<tr>
<th>Number of Classes</th>
<th>Percentage of Students Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Classes</td>
<td>73%</td>
</tr>
<tr>
<td>1 Class</td>
<td>19%</td>
</tr>
<tr>
<td>2 Classes</td>
<td>5%</td>
</tr>
<tr>
<td>3 Classes</td>
<td>1%</td>
</tr>
</tbody>
</table>

Of the students responding to this survey, the vast majority of the students have never withdrawn from an online class, indicating an attrition rate of only 27% at the three participating institutions.

The basic profile of the online student at the three participating community colleges in Oklahoma indicated that the majority of the students were female, with an average age of 27 years. Over 80% of the students were employed at least part-time and approximately half the students had at least one child living in the home. Ninety-five percent of the students had a home computer and over 75% of those had access to a high-speed Internet connection. Almost 1/3 of the students were taking their first online class, with half of all students taking either their first or second online class. Less that 20% of the students felt that they were not ready to be successful in the online environment prior to enrolling in their first online class, and yet almost 65% of the students believed that some students were not prepared for the online environment. This basic profile is similar to the demographic profile reported in the literature (cf. Compora, 2003;
Research Question 9

How effective is the ION Self Evaluation for Potential Online Students in addressing the characteristics, traits, and skills identified by the study’s stakeholder groups?

Introduction

The Illinois Online Network’s Self Evaluation for Potential Online Students was created in 1997 from anecdotal data provided by faculty involved with ION (V. Varvel, personal communication, September 19, 2005). Based upon extensive review of dozens of online readiness assessments (cf. Are distance-learning courses for me?, 1996; Are you ready to learn online?, n.d.; Are you ready to take an online course?, n.d.; Are you suited to distance ed?, n.d.), it appeared to this researcher that the majority of assessments contained the same basic questions. The ION Self Evaluation for Potential Online Students was one of the first assessments of its kind, and may have been the first according to Mac Adkins, the co-founder of Decade Consulting, a commercial provider of online readiness testing (personal communication, March 2005).

ION was created in 1997 when “there were few online courses offered by institutions of higher education in Illinois, and knowledge of the technologies and pedagogical approaches needed to teach and learn online was not widespread” (ION, 1998 – 2006, ¶ 1). The Illinois Online Network was created primarily for faculty and professional development (ION, 1998 – 2005). In addition to the
resources for faculty, the network website also contained a self-evaluation for potential online students.

Because of its historical role as the apparent model and foundation for most currently used assessments, this researcher determined that the ION Self Evaluation for Potential Online Students would be the appropriate online readiness assessment for this evaluation study. ION was contacted electronically to discuss this project. Varvel, Director of University Outreach and Public Service at the University of Illinois (the home of the Illinois Online Network), replied that the ION Self Evaluation for Potential Online Students had never been evaluated, was based upon anecdotal data provided prior to its creation, and had been updated very little since it was first published. Varvel stated that ION would welcome this study and requested a copy of the evaluation (V. Varvel, personal communication, September 19, 2005).

A major purpose of this study was to determine if the ION Self Evaluation for Potential Online Students actually assessed what the distance learning stakeholders from the three community colleges in Oklahoma perceived as important characteristics, traits, and skills for online success and thus represented an appropriate online readiness assessment tool. Two primary evaluation questions were addressed by this study. The first question asked if the ION Self Evaluation for Potential Online Students contained the questions that were required to truly assess student readiness. This question addressed the content validity of the instrument: Did it ask the right questions? The second question was to determine if the self evaluation was effective in its assessment of
online student readiness. The main audience for this evaluation was the
distance learning stakeholders at the three community colleges in Oklahoma, the
staff and stakeholders of ION, and the distance learning community at large.

Methodology

The evaluation project was descriptive in nature and based upon the
perceptions of the distance learning stakeholders from the three community
colleges in Oklahoma. The evaluation was goals-free in nature. This researcher
did not investigate the goals or outcomes that ION intended when the ION Self
Evaluation for Potential Online Students was first created. The evaluation was
conducted and is reported here in the framework established in Sriven’s KEC
model.

Background and Context

The need for an online readiness assessment was originally established
by ION through anecdotal data from the faculty teaching in the online
environment at the member schools in Illinois. This anecdotal data suggested
that students were entering online classes unprepared or under-prepared for the
rigors of the online environment. The Illinois Online Network created the ION
Self Evaluation for Potential Online Students in 1997 to address the need
identified anecdotally by the faculty (V. Varvel, personal communication,
September 19, 2005).

Description

The Self Evaluation for Potential Online Students contained a list of 12
yes/no questions that were available publicly on the Internet. Appendix F
contains a copy of the document. Anyone with access to the Internet can complete the *Self Evaluation for Potential Online Students* by answering yes or no on each question. When the assessment is submitted, a score with a general explanation opens in a pop-up window. The score is not saved nor transmitted in any way.

**Consumers**

Currently, the only consumers of the *Self Evaluation for Potential Online Students* are those who voluntarily complete the assessment. Potentially, the consumers could include students, faculty, administrators, and businesses. Students would complete the readiness assessment to determine if they meet the minimum criteria (as determined by the individual institutions) to be successful in the online environment.

Faculty could be consumers of the online readiness assessment by requiring students to complete a readiness assessment as part of an orientation to the class or to an online program. Based upon the results of an effective readiness assessment, faculty can more accurately determine the needs of the students in the class, potentially resulting in greater satisfaction for both faculty and students.

Distance learning administrators also hold a potential stake in the readiness of students as well. With accurate knowledge of the readiness level of the students, administrators may be able to more accurately determine the level of support required to help online students. Resources of the distance learning
budget would be more efficiently allocated based upon more complete data. The result could mean a greater return on investment of distance learning dollars.

Business establishments can be considered consumers of this product as well. Many businesses utilize online environments for human resource development (Horton, 2000), and students from online educational programs may eventually enter the work force where the work force members may be trained using online methods.

Resources

The *Self Evaluation for Potential Online Students* was created nine years ago as a part of the overall Illinois Online Network. Minimal, if any, resources have been used to update the site. No changes have been made to the assessment in at least two years as observed by prints of the assessment during this period of time.

Values or Assessment Criteria

In order to evaluate the ION *Self Evaluation for Potential Online Students* against the criteria indicated by the stakeholders in this study, a procedure was developed to quantify the criteria. Using a 10-point scale, each question on the ION *Self Evaluation for Potential Online Students* was matched to a characteristic, trait, or skill identified by the Oklahoma distance learning stakeholders. Points were assigned to each question based upon the formula described in Chapter 3. Each question was evaluated using the 10-point scale and the appropriate value tier. Tables 34 – 37 show the characteristics, traits,
and skills valued by the Oklahoma distance learning stakeholders as aggregated from the data reported previously in this chapter.

Table 31

*Frequency and Tiers of the Technical/Computer Skills Valued by the Distance Learning Stakeholders in Oklahoma*

<table>
<thead>
<tr>
<th>Technical/Computer Skill</th>
<th>Frequency</th>
<th>Percent</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Skills</td>
<td>236</td>
<td>27%</td>
<td>1</td>
</tr>
<tr>
<td>Basic Computer Skills</td>
<td>192</td>
<td>22%</td>
<td>2</td>
</tr>
<tr>
<td>Microsoft® Office Applications</td>
<td>130</td>
<td>15%</td>
<td>3</td>
</tr>
<tr>
<td>Typing/ Keyboarding</td>
<td>89</td>
<td>10%</td>
<td>4</td>
</tr>
<tr>
<td>E-mail Skills</td>
<td>71</td>
<td>8%</td>
<td>5</td>
</tr>
<tr>
<td>File Management</td>
<td>65</td>
<td>7%</td>
<td>5</td>
</tr>
<tr>
<td>Classroom Management Skills</td>
<td>50</td>
<td>6%</td>
<td>5</td>
</tr>
</tbody>
</table>

When the data were combined, the three stakeholder groups valued Internet skills as the most important skill for online students. The tier ranking system for this data was created using the percentages as the tier breaking points based upon units of five.
### Table 32

**ΣRank Point and Tiers of the Technical/Computer Skills Valued by the Distance Learning Stakeholders in Oklahoma**

<table>
<thead>
<tr>
<th>Technical/Computer Skill</th>
<th>ΣRank Point</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting an Internet Search for Data</td>
<td>1639</td>
<td>1</td>
</tr>
<tr>
<td>Formatting a Paper in a Word Processing Program</td>
<td>1613</td>
<td>1</td>
</tr>
<tr>
<td>Opening Files from a Specific File Folder on the Computer</td>
<td>1397</td>
<td>2</td>
</tr>
<tr>
<td>Sending E-Mail with Attachments</td>
<td>1376</td>
<td>2</td>
</tr>
<tr>
<td>Saving Files to a Specific File Folder on the Computer</td>
<td>1127</td>
<td>3</td>
</tr>
<tr>
<td>Downloading Computer Programs</td>
<td>821</td>
<td>4</td>
</tr>
<tr>
<td>Receiving E-Mail with Attachments</td>
<td>782</td>
<td>4</td>
</tr>
<tr>
<td>Sending E-Mail (General Use)</td>
<td>648</td>
<td>5</td>
</tr>
<tr>
<td>Downloading Plug-Ins for the Computer</td>
<td>603</td>
<td>5</td>
</tr>
</tbody>
</table>

Based upon the aggregate data from the ΣRank Point table, the three stakeholder groups ranked Internet skills as the most important, but the second most important skill was different from the frequency response table. The stakeholders reported basic computer skills as the second most important skill when asked for the stakeholder opinions, but they ranked formatting a paper in a word processing program as the second most important skill.
Table 33

*Frequency and Tiers of the Characteristics/Traits Valued by the Distance Learning Stakeholders in Oklahoma*

<table>
<thead>
<tr>
<th>Characteristic/Trait</th>
<th>Frequency</th>
<th>Percent</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Discipline</td>
<td>241</td>
<td>36%</td>
<td>1</td>
</tr>
<tr>
<td>Time Management</td>
<td>128</td>
<td>19%</td>
<td>3</td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>117</td>
<td>17%</td>
<td>3</td>
</tr>
<tr>
<td>Independence</td>
<td>47</td>
<td>7%</td>
<td>4</td>
</tr>
<tr>
<td>Organization</td>
<td>32</td>
<td>5%</td>
<td>4</td>
</tr>
<tr>
<td>Responsibility</td>
<td>22</td>
<td>3%</td>
<td>5</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>20</td>
<td>3%</td>
<td>5</td>
</tr>
<tr>
<td>Patience</td>
<td>16</td>
<td>2%</td>
<td>5</td>
</tr>
<tr>
<td>Following Directions</td>
<td>13</td>
<td>2%</td>
<td>5</td>
</tr>
</tbody>
</table>

The stakeholders reported self-discipline as the most important characteristic for student success in the online environment by almost two-to-one over time management, the second most important skill. Self-motivation was a close third.
Table 34

\[ \Sigma \text{Rank Point and Tiers of the Characteristics/Traits Valued by the Distance Learning Stakeholders in Oklahoma} \]

<table>
<thead>
<tr>
<th>Characteristics/Traits</th>
<th>( \Sigma \text{Rank Point} )</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Self-Motivated</td>
<td>4694</td>
<td>1</td>
</tr>
<tr>
<td>Ability to Work Alone</td>
<td>3924</td>
<td>1</td>
</tr>
<tr>
<td>An Understanding of Technology</td>
<td>2944</td>
<td>2</td>
</tr>
<tr>
<td>Personal Organization</td>
<td>2792</td>
<td>2</td>
</tr>
<tr>
<td>Being Task-Oriented</td>
<td>2573</td>
<td>2</td>
</tr>
<tr>
<td>Being Willing to Ask Questions</td>
<td>1749</td>
<td>3</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Asking for Help</td>
<td>1385</td>
<td>4</td>
</tr>
<tr>
<td>Being Willing to Complete an Assignment Prior to the Due Date</td>
<td>1338</td>
<td>4</td>
</tr>
<tr>
<td>Patience</td>
<td>1157</td>
<td>5</td>
</tr>
<tr>
<td>Preferring to Complete Coursework Using a Computer</td>
<td>1069</td>
<td>5</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Answering</td>
<td>1002</td>
<td>5</td>
</tr>
</tbody>
</table>

The stakeholders valued self-motivation and the ability to work alone the most. Although an understanding of technology was the number three skill listed by the stakeholders, it received almost 1,000 fewer \( \Sigma \text{Rank} \) points than the number two skill. Another gap occurred between the fifth ranked skill, being task-oriented, and the sixth ranked skill, being willing to ask questions. The items ranked in the bottom two tiers were closely clustered when compared to the
Rank point values of the items in the top two tiers, indicating that the stakeholders held stronger opinions of the characteristics, traits, and skills that are most valuable than they held about the less important skills.

**Process Evaluation**

The process evaluation is depicted graphically in Figure 8. The design of the *Self Evaluation for Potential Online Students* questions was addressed on a question-by-question basis.

**LOGIC MODEL**

![Logic Model](image)

*Figure 12: Logic Model Depicting the Process Evaluation of the ION Self Evaluation for Potential Online Students.*

**Question 1. Do you have (or are you willing to obtain) access to a computer and phone line at home?** This question is primarily a question of access to a computer and the Internet. Based upon the data provided by the Oklahoma distance learning student stakeholders, 95% of the students indicated
that they have access to a home computer, and 81% of the students reported that they had access to a high-speed Internet connection. Access to a computer and a telephone line, although critical for completion of the course, does not address a value identified by the Oklahoma distance learning stakeholders. The score for this question is zero. At this time, this question appears to be outdated and perceived as unnecessary by the distance learning stakeholders in this study.

**Question 2. Do you feel that high quality learning can take place without having face to face interaction?** The attitude of potential students about online learning was addressed with this question. The same question was asked of all the Oklahoma distance learning stakeholders and is addressed in many articles about distance learning. The majority of administrators, faculty, and students believe that high-quality learning can take place in any delivery format (cf. Allen & Seaman, 2005; Ausburn, 2005b; Blocher, Montes, Willis, & Tucker, 2002; Halsne & Gatta, 2002; Mayadas, 2001). A positive attitude about the delivery format falls into the category of self-motivation, which was extremely important to the stakeholders in this study. Based upon the rating scale defined in Chapter Three, this question scored 8 points.

**Question 3. Can you dedicate 4 to 6 hours a week (anytime during the day or night) to participate in the learning process?** This question addressed multiple values identified by the stakeholders found in multiple tiers on the rating scale. The values addressed by the question included time management, responsibility, independence, self-motivation, self-discipline, the ability to work
alone, and personal organization. Included in the values addressed are Tier 1 items, resulting in a score of 10 on this question.

**Question 4. Are you a self-motivated and self-disciplined person?**
This question is easily identified as addressing self-motivation and self-discipline, Tier 1 items for the stakeholders in this study. The score for this question is 10.

**Question 5. When it comes to schoolwork and deadlines, are you a procrastinator?** This question addressed several of the values from the stakeholder lists, including time management, responsibility, self-motivation, and begin willing to complete assignments prior to the due date. The score for this question is 8 points.

**Question 6. Are you comfortable communicating in writing?**
Addressing the values of communication and a willingness to ask questions, this question scored 3 points. Although communication skills were valued by the stakeholders in this study, communication was in the lower tiers indicating that communication skills were of lesser importance than self-discipline, time management, and basic technical skills.

**Question 7. Do you enjoy reading?** Reading was listed as a value by the stakeholders and is related to a willingness to think through problems before asking for help. The score for this question was 3.

**Question 8. Are class discussions helpful to you?** Class discussions relate to communication, but this question is not clear in its intent. Does the question refer to verbal discussions in a traditional face-to-face classroom? Does it refer to synchronous conversations in the online classroom?
refer to asynchronous conversations in the online classroom? Because its intent is unclear, the score for this question is 0.

Question 9. **Do you subscribe to the value of introducing critical thinking into the learning process?** Critical thinking is an ambiguous term for many students. Although critical thinking was listed as a value by a few of the Oklahoma distance learning stakeholders in the surveys, it fell in the bottom grouping of values that were eliminated by the researcher. However, critical thinking can be considered a part of the value listed as thinking through a problem before asking for help, a Tier 4 item for the stakeholders in this study. The question score was 2 points.

Question 10. **Do you think increased learning will take place through sharing your work, life, and educational experiences as part of the learning process?** This question did not address any of the values provided by the Oklahoma distance learning stakeholders. The score for this question was 0 points.

Question 11. **Are you comfortable with email, computers, and new technologies?** This is the only question that addressed technology skills, and it lumps all of the skills into a single question. In this study, understanding technology is a Tier 2 value, and basic computer skill is a Tier 2 value as well. The score for this question is 8 points, but it would better serve the needs of the Oklahoma distance learning stakeholders if it were rewritten into several questions to reflect specific skills they perceive as valuable in online student success.
**Question 12. Does your lifestyle (family, work, or personal schedule) make it difficult for you to attend courses during the day?** This question is related to self-motivation and responsibility, highly valued by the study’s stakeholders. The score for this question is 8 points.

The questions asked on the ION *Self Evaluation for Potential Online Students* touched on most of the characteristics and traits perceived as important by the Oklahoma distance learning stakeholders. Table 38 presents a listing of the values perceived important by the Oklahoma distance learning stakeholders and whether or not they were addressed by the ION *Self Evaluation for Potential Online Students.*
<table>
<thead>
<tr>
<th>Tier 1: Technology/Computer</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting an Internet Search for Data</td>
<td>NO</td>
</tr>
<tr>
<td>Formatting a Paper in a Word Processing Program</td>
<td>NO</td>
</tr>
<tr>
<td>Tier 1: Characteristics/Traits</td>
<td></td>
</tr>
<tr>
<td>Self-Discipline</td>
<td>YES</td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>YES</td>
</tr>
<tr>
<td>Ability to Work Alone</td>
<td>YES</td>
</tr>
<tr>
<td>Tier 2: Technology/Computer</td>
<td></td>
</tr>
<tr>
<td>Opening Files from a Specific File Folder on the Computer</td>
<td>NO</td>
</tr>
<tr>
<td>Sending E-Mail with Attachments</td>
<td>NO</td>
</tr>
<tr>
<td>Basic Computer Skills</td>
<td>YES</td>
</tr>
<tr>
<td>An Understanding of Technology</td>
<td>YES</td>
</tr>
<tr>
<td>Tier 2: Characteristics/Traits</td>
<td></td>
</tr>
<tr>
<td>Personal Organization</td>
<td>YES</td>
</tr>
<tr>
<td>Being Task-Oriented</td>
<td>NO</td>
</tr>
<tr>
<td>Tier 3: Technology/Computer</td>
<td></td>
</tr>
<tr>
<td>Ability to Use Microsoft® Office Applications</td>
<td>NO</td>
</tr>
<tr>
<td>Ability to Save Files to a Specific File Folder on the Computer</td>
<td>NO</td>
</tr>
<tr>
<td>Tier 3: Characteristics/Traits</td>
<td></td>
</tr>
<tr>
<td>Being Willing to Ask Questions</td>
<td>YES</td>
</tr>
<tr>
<td>Time Management</td>
<td>YES</td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>YES</td>
</tr>
<tr>
<td>Tier 4: Technology/Computer</td>
<td></td>
</tr>
<tr>
<td>Typing/Keyboarding Skill</td>
<td>NO</td>
</tr>
<tr>
<td>E-Mail (General Use)</td>
<td>YES</td>
</tr>
<tr>
<td>Downloading Computer Programs</td>
<td>NO</td>
</tr>
<tr>
<td>Tier 4: Characteristics/Traits</td>
<td></td>
</tr>
<tr>
<td>Being Willing to Complete Assignments Prior to the Due Date</td>
<td>YES</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem Before Asking for Help</td>
<td>YES</td>
</tr>
<tr>
<td>Independence</td>
<td>YES</td>
</tr>
<tr>
<td>Organization</td>
<td>YES</td>
</tr>
<tr>
<td>Tier 5: Technology/Computer</td>
<td></td>
</tr>
<tr>
<td>File Management</td>
<td>NO</td>
</tr>
<tr>
<td>Ability to Use the Classroom Management System</td>
<td>NO</td>
</tr>
<tr>
<td>Sending E-Mail</td>
<td>YES</td>
</tr>
<tr>
<td>Downloading Plug-Ins</td>
<td>NO</td>
</tr>
<tr>
<td>Tier 5: Characteristics/Traits</td>
<td></td>
</tr>
<tr>
<td>Patience</td>
<td>NO</td>
</tr>
<tr>
<td>Preferring to Complete Coursework Using a Computer</td>
<td>NO</td>
</tr>
<tr>
<td>Being Able to Think Through a Problem before Answering</td>
<td>YES</td>
</tr>
<tr>
<td>Responsibility</td>
<td>YES</td>
</tr>
<tr>
<td>Reading</td>
<td>YES</td>
</tr>
</tbody>
</table>

Numerous values of the Oklahoma distance learning stakeholders were not addressed by the ION Self Evaluation for Potential Online Students, primarily
in the area of technology skills. Based upon the formula applied to the ION Self Evaluation for Potential Online Students, 60 points were awarded to the 12 questions. Questions 1, 8, and 10 received 0 points and Questions 6, 7, and 9 scored 3 points or less.

The delivery format utilized for the ION Self Evaluation for Potential Online Students is the Internet. Using the Internet for delivery of this type of assessment is reasonable and effective, but a way to either print the results or e-mail the results would be beneficial to the Oklahoma distance learning stakeholders. In addition, an aggregate score is provided with the assessment currently. Potential students do not know where they need to adjust or improve if the score is unsatisfactory. Providing a question-by-question analysis would be more beneficial for potential online students.

Exportability

By its very nature, anything on the Internet is portable. The website is open to the public; therefore, exportability is accomplished easily. A well-designed Internet-based online readiness assessment that covers general characteristics, traits, and skills would be readily accessible to any institution with beginning online students.

Overall Significance

This evaluation asked two questions. Did the ION Self Evaluation for Potential Online Students assess the values perceived by the Oklahoma distance learning stakeholders by asking the proper questions, and was the assessment effective for its intended purpose? Overall, three of the 12 questions did not
address any of the characteristics, traits, and skills perceived important by the
distance learning stakeholders, and three questions addressed low-level tier
values. Six questions did address important characteristics, traits, and skills as
perceived by the Oklahoma distance learning stakeholders. Many of the
characteristics, traits, and skills that the Oklahoma distance learning
stakeholders perceived as important were not addressed by the assessment. No
specific technology or computer skills were addressed by the ION Self Evaluation
for Potential Online Students, although the majority of the computer and technical
skills were addressed in general terms. Only the characteristics/traits of task-
orientation and patience were not addressed in any way by the ION Self
Evaluation for Potential Online Students.

Recommendations

Normally, in a KEC format evaluation report, the recommendations of the
evaluator would be presented in this section. For purposes of this study, the
recommendations are incorporated into Chapter Five.

Reporting/Follow-up

This research project will be made available to the distance learning
community at large, the three participating community colleges in Oklahoma, and
to the Illinois Online Network. An executive summary of the evaluation can be
found in Appendix G.
CONCLUSIONS AND RECOMMENDATIONS

Introduction

Online learning is a viable delivery format for many courses. Hofmann (2003) wrote, “It’s hard to find a subject that isn’t in some form and at some level, taught online” (¶ 1). With such a variety of choices, it is not surprising that the number of students enrolling into online classes is growing at a phenomenal rate (Allen & Seaman, 2005; Swenson & Myer, 2005). In addition, we live in a global economy at a time when technology is part of the daily fabric of our lives and where knowledge is a commodity (Huff, 2002). The online educational format is growing and it is gaining acceptance as a learning option (Allen & Seaman, 2005; Maeroff, 2003).

Many articles are available about online learning and student satisfaction with the delivery format. Literature has indicated that online classes require a great deal of student self-direction (Clements, 2002). Additional articles have addressed online student readiness and the skills that students need to be successful. Lorenzi, MacKeogh, and Fox (2004) advocated a support system for online students that combined training in the delivery system along with the
academic content. But what should be included in the training and support system? This question provides the basis for the current research project.

As an online professor and mentor for others who are building online classes, this researcher has spent the past nine years working with the alternative delivery format of online courses. Through that experience, it became obvious that some students were not prepared for the unique learning environment of online education. Adding to this direct experience of the researcher was anecdotal data gathered from online faculty in Oklahoma, other parts of the United States, and even internationally. Based upon the experiences of online faculty, some students were not ready for the online environment. Data from this study confirms the anecdotal data. Ninety-three percent of the administrators and 92% of the faculty participating in this study responded that some students are not prepared for the online learning environment. A more conservative figure of 65% of the students participating felt that some students were not ready for this learning environment.

Grounded in the theoretical perspective of learning readiness, this study sought to address learning readiness principles as they related to adults in the online learning environment. The working hypotheses was that online student readiness requirements could be identified by practitioners and learners, that the requirements could be measured, and that the requirements were a factor in learner success in the online class environment. Only the first two components of this theory were addressed by this study. It was beyond the scope of this project to determine if online readiness factored into online student success.
The first step was to determine what characteristics, traits, and skills were perceived as needed for success in the online learning environment. The second step was to evaluate an established online readiness assessment to determine if it effectively evaluated the identified characteristics, traits, and skills. To identify the characteristics, traits and skills that distance learning stakeholders consider important, a multi-step process was involved.

Methodology Summary

The current research project started several years ago with a simple, one question survey to the faculty at Tulsa Community College West Campus. As the online mentor, this researcher had listened to many faculty members question the readiness of some of their students involved in online classes. Twenty-nine faculty were surveyed and 20 faculty responded. Ninety percent of those responding felt that many of their students were not prepared for the online learning environment. From this information, a Delphi Study was designed and implemented with the permission of the Institutional Research and Assessment Division of Tulsa Community College. Faculty from all four campuses and all divisions participated in the Delphi Study. The purpose of that study was to create a list of characteristics, traits, and skills students needed to be more prepared for online learning. A list of nine computer/technology skills and 18 characteristics/traits was created and reported in a manuscript presented to faculty at Oklahoma State University—Stillwater in a poster session as partial requirements for a class. Using the lists created during the project, a set of surveys was written for use in the present study. The survey development and
validation process included consultation with the director of institutional research at a major metropolitan college, dissertation committee review, peer review, and finally a pilot study. To answer the current research questions, demographic information geared to the identified stakeholder groups of administrators, faculty, and students was added to the surveys. The population of the study was determined to be the stakeholder groups at public institutions in Oklahoma offering online degrees. The population was refined to include only the stakeholder groups at three Oklahoma community colleges agreeing to participate in the research project. The sample for the surveys was a self-selected convenience sample from the identified population. All stakeholders at the three participating colleges were invited to participate in the surveys. Fourteen administrators, 137 faculty, and 749 students completed the surveys. Due to the limited number of institutions participating in the study, and the nature of the sample, the results being reported reflect only the current sample and should not be projected to the distance learning community at large.

Summary of Findings

Few differences were found in the perceptions of the distance learning stakeholder groups, administrators, faculty, and students, concerning the most important skills, characteristics, and traits required for student readiness and success in the online learning environment. Based upon the data provided by the three stakeholder groups, all three groups agreed that self-discipline/self-motivation, time management skills, and basic technology skills were the most important characteristics, traits, and skills that students should possess in order
to be ready for the online environment, and that a deficiency in any of these areas was perceived as being a reason for students not being successful in the online environment. The student stakeholders were also asked to provide the reason that they may have withdrawn from an online class. An interesting finding was that the 143 students reporting that they had withdrawn from an online class, only seven students reported that the reason for the withdrawal was a lack of self-discipline. The most common reasons for withdrawal as reported by the students included:

- Falling behind with the course work
- The course was more work than expected
- Blaming the instructor
- A lack of time
- Health and personal issues.

A future line of research may be a study into actual self-discipline as it compares to perceived self-discipline.

The distance learning stakeholders identified several characteristics, traits, and skills as important for online student readiness. These items were divided into tiers of importance. The characteristics, traits, and skills in the top two tiers included:

1. Conducting an Internet search for data
2. Formatting a paper in a word processing program
3. Self-discipline
4. Self-motivation
5. The ability to work alone
6. Opening files from a specific file folder
7. Sending e-mail with attachments
8. Basic computer skills
9. A general understanding of technology
10. Personal organization
11. Being task-oriented

These characteristics, traits, and skills, along with the items in Tiers 3 – 5, were used as a basis to determine the values of the Oklahoma distance learning stakeholders at the three institutions. The values were then used as part of an evaluation of the ION Self Evaluation for Potential Online Students utilizing the evaluation methodology of Scriven’s Key Evaluation Checkpoints (KEC). The ION Self Evaluation for Potential Online Students was selected because it appeared to be one of the oldest online readiness assessments available and many other online readiness assessments utilized the questions presented on the ION Self Evaluation for Potential Online Students. Based upon the evaluation, the ION Self Evaluation for Potential Online Students had merit, but was in need of updating and revision to be effective for the Oklahoma distance learning stakeholders in this study.

Over 90% of the stakeholders responded that an online readiness assessment should be available to students prior to enrollment into online classes, (Table 24 presents the details). In addition, almost 90% of all administrators and faculty participating in this study reported that an online
readiness assessment should be required prior to enrollment into online classes, but only 72% of the students felt that an online readiness assessment should be required. When asked if students should be required to perform at a proficient level on an online readiness assessment, less than two-thirds of the students agreed with this statement. Faculty and administration support for performance at a proficient level exceeded 80%. Over 80% of all stakeholders reported that an online readiness assessment accompanied by an improvement plan would increase student readiness for the online environment.

Conclusions

Conclusion 1. **A single assessment of online readiness can address the requirements of online administrators, faculty, and students.**

Based upon the data in this study, administrators, faculty, and students perceive the same basic characteristics, traits, and skills as important. The common themes that were evident between the three stakeholder groups included the need for basic computer skills, the ability to navigate the Internet, and self-discipline/self-motivation for student success in the online classroom environment. Included in the necessary computer/technical skills were the ability to format papers using a word processing program, the ability to conduct an Internet search for valid data, basic computer file management, and the ability to send/receive e-mail that contained attachments. The three stakeholder groups also perceived the same characteristics/traits as important, naming self-motivation and self-discipline as critical for online success. In addition, personal organization, the ability to be task-oriented, the ability to work alone, and an
understanding of technology were considered important characteristics and traits. An online readiness assessment that effectively measured these characteristics, traits, and skills would be valuable to all stakeholder groups.

**Conclusion 2.** The Illinois Online Network’s *Self Evaluation for Potential Online Students* has served in the capacity of an online readiness assessment for many potential online students over the past nine years. This assessment tool can serve as the basis for a useful assessment of online learning readiness, but to increase its usefulness to the distance learning stakeholders in this study the assessment needs to be modernized and validated.

If the ION *Self Evaluation for Potential Online Students* were to be expanded and revised so that it addressed more of the values of the Oklahoma distance learning stakeholders specifically, it would be a more effective document for the stakeholders participating in this study. In addition, through the use of basic scripting language, the results of the ION *Self Evaluation for Potential Online Students* could be transmitted to an appropriate person or office for use in advising students appropriately. This is not currently possible with the ION instrument. Recommendations to update the ION *Self Evaluation for Potential Online Students* are presented later in this chapter.

**Conclusion 3.** An updated online readiness assessment would be used in several ways by the stakeholders in this study. Not only could this assessment be beneficial to online students, but any student in a
blended/hybrid classroom or in a technology enhanced classroom may find the assessment beneficial.

An online readiness assessment and the need for the assessment can be judged from the perspective of self-interest. Administrators and faculty may support the implementation of a readiness assessment to increase job efficiency. Students may be less favorable of a required online readiness assessment because it may reduce enrollment flexibility and limit enrollment options.

Over 90% of the respondents in the three surveys agreed that an online readiness assessment should be available to students prior to enrollment into online classes. Eighty-nine percent of administrators and 80% of the faculty responded that they strongly agreed with the need to have a readiness assessment available to the students, with an additional 11% and 17% respectively stating that they somewhat agreed. The students strongly agreed 62% of the time with this statement and 32% somewhat agreed that a readiness assessment should be available prior to enrollment into the online classroom environment. The students were not as agreeable that a readiness assessment should be required before enrollment into an online class. Over 25% of the students disagreed with requiring a readiness assessment. Faculty were much more adamant with the need to require a readiness assessment before enrollment into online classes. Almost two-thirds of the faculty strongly agreed that a readiness assessment should be required with an additional 29% somewhat agreeing with the need to require a readiness assessment. Administrators were also in agreement with the need to require a readiness
assessment. Only 11% of the administrators stated that they strongly disagreed with the need to require a readiness assessment. Administrators and faculty favor requiring a readiness assessment in greater numbers than students who appear to prefer to have a readiness assessment available for self-assessment. Faculty and administrators also favor requiring students to perform at a proficient level on a readiness assessment with over 85% of the two stakeholder groups agreeing with the need to perform at a proficient level before enrollment into an online class. Thirty-seven percent of the students disagreed with the need to require proficiency on a readiness assessment. Students also disagreed in higher numbers with the statement that an online readiness assessment with an improvement plan would improve online student readiness, disagreeing 17% of the time. Faculty and administrators strongly agreed that an improvement plan and online readiness assessment would be beneficial 57% and 67% of the time. Based upon the opinions of the responding administrators, faculty, and students, administrators and faculty appeared to favor requiring students to complete at a proficient level an online readiness assessment before enrollment into an online class, while the students appeared to favor offering an online readiness assessment for student self-assessment over requiring the assessment prior to enrollment into online classes.

Educational institutions recognize that the future of education will include online learning components (Allen & Seaman, 2004). By utilizing a valid online readiness assessment, student success rates in online learning could be higher as evidenced through increased grades, lower attrition rates, maximization of
distance learning investment dollars, increased satisfaction for all stakeholders, and expanded potential for life-long learning.

Students could use an online readiness assessment to self-assess their readiness to interact with technology required for the online classroom, and they could determine if they had the necessary self-discipline along with the other characteristics, traits, and skills required for online success. Another benefit for the students would be in the area of expectations for the online class. An effective online readiness assessment would provide the students with an understanding of the expectations of online learning. Students may be reluctant to view a required online readiness assessment as a positive element. Some students enrolled at community colleges may have found formal testing a barrier to their goals.

Faculty would be able to review the readiness of their students for the online classroom through the results of an effective online readiness assessment. With accurate knowledge of the level of skill that the students possess, the faculty could provide the necessary support to help the students become more successful.

Administrators could use the online readiness assessment to schedule technical help desk personnel to assist students during peak periods of the semester. In addition, the administration could make more informed decisions about the staffing requirements for online faculty.
Recommendations for the
ION Self Evaluation for Potential Online Students

Updating the questions on the ION Self Evaluation for Potential Online Students would be beneficial to all of the consumers provided that a question-by-question analysis was included and a way to transmit the results to an appropriate person or office. Based upon the values as perceived by the Oklahoma distance learning stakeholders, additional questions are needed and revision of the current questions would be appropriate. The questions should be developed through additional research and testing using the perceptions of the distance learning stakeholders as the starting basis. The following questions are suggested as the starting point for an updated online readiness assessment.

Online classes are a unique learning environment that requires specific skills in addition to the basic study skills required for any college classes. Online students must have daily access to a computer and Internet access in order to complete the course work.

1. In an online class, the student does not have scheduled class time with the professor. Can you commit to completing the coursework without the physical presence of the teacher and other students?

1. Are you willing to work from written instructions?

2. If you encounter problems understanding course materials, are you willing to initiate communication with the professor?

3. Are you willing to wait 24 – 48 hours before receiving a response to questions you may have?

4. Are you willing to use multiple resources to find answers to questions?

5. Do you believe that high-quality learning can take place without having face-to-face interaction?
6. Can you dedicate 6 or more hours per week (at any time during the day or night) to participate in the learning process?

7. Do you possess college-level reading skills?

8. When it relates to class deadlines, are you a procrastinator?

9. Are you willing to communicate in writing to ask questions and to participate in class discussions?

10. Can you use e-mail to communicate and share files or documents?

11. Do you know how to use the Internet to search for quality data?

12. Do you know how to evaluate a resource for validity and accuracy?

13. Do you know how to use a word processing program to create and format scholarly documents?

14. Do you know how to type/keyboard efficiently?

15. Are you familiar with the institution's classroom management system (i.e. Blackboard®, WebCT®)?

Additional Comments for Consideration

The surveys asked for comments or observations from the three stakeholder groups concerning online learning. Many of the comments were insightful and worth noting.

Administrator Comments

Comments from administrators at the participating institutions focused on the institutional picture of implementation. One administrator wrote that an online readiness assessment with an improvement plan "holds the key to students being successful in on-line classes and would improve retention rates". Another administrator felt that an online readiness assessment with an improvement plan, might increase online student readiness, but this administrator felt that it would
be prohibitive due to staffing issues and student enrollment patterns at the particular institution. This administrator noted that many students enroll into online classes at the last minute and would not have the time to improve their online skills prior to the start of the semester.

Faculty Comments

Faculty comments reflected the diversity of academic disciplines and teaching experience, and the personal experiences represented by the faculty at the three institutions, and their comments were interesting. Most of the comments provided spoke to education in general and were not actually specific to the online learning environment. One faculty member wrote that “[Computer proficiency] is a skill that they [the students] must have to succeed in this day and age and it is our responsibility to push them in that direction, not enable them to stay ignorant about computers”. Another faculty wrote, “I do not believe that an assessment is necessary. Students should be required to undergo an [sic] general orientation about online courses, student expectations, faculty expectations, and how to utilize the functions of the delivery system”. In today’s technology age, one faculty member wrote, “It is a modern myth that today’s young people have very good computer skills. In my experience, many of them are proficient at playing games on the computer, and/or participating in chat rooms, but do not have the basic computer skills (word processing, file saving, navigating the hard drive, etc.) necessary for participating in an online college course”. But possibly the faculty comment that summarizes this study most
succinctly stated, “Quality instruction plus dedicated students will always equal successful learning regardless of the medium”.

Student Comments

The student comments were also meaningful and reflected the diversity present in the educational arena. “Adults should take responsibility for themselves”, wrote one student as the basis for arguing against a required online readiness assessment. Another student asked that schools offer an optional online training class for those who need the information, but a requirements would be detrimental to the schedule of busy working adult students. Several students wrote that, in general, students do not know what to expect in the online environment and that an online readiness assessment would be valuable for students. One student felt that “The teacher was expecting way too much, about three hours a day for the class”. One student emphatically stated, “DON’T REQUIRE ANOTHER TEST”, while another student wanted to eliminate self-paced courses as an option because self-paced courses just “don't work”. The need for communication was a common theme from the student comments. “Teacher participation and availability is critical” was written by one student and echoed by several other students. Finally, leading to a potential area for future research, students and faculty commented that instructors need readiness assessments as well as the students.

Recommendations for Future Research

This study was limited to three Oklahoma community colleges and those who chose to participate in the study. Areas of future research could include:
- Expanding the study to a nationwide or international study using scientific sampling methods to allow for generalization to a larger population of online learning

- Developing and evaluating an accepted online readiness assessment to facilitate meaningful research and information exchange based upon a common data source

- Investigating the need for online faculty certification programs. Are faculty prepared to teach in the online environment or is it assumed that faculty can create successful courses in various modalities?

- Conducting a Return on Investment analysis of any program that includes readiness assessment

- Investigating actual student self-discipline as it compares to the students' perceived self-discipline

- Conducting a formal study into institutional barriers of access to information about and from online students

- Conducting a formal study to compare the reasons for withdrawal from online classes to the reasons for withdrawal from traditional classes.

- Conducting a formal study into the changing responsibilities of faculty at colleges and universities

- Investigating the concept of student expectations that access to faculty and institutional services should be 24/7

- Investigating the concept of education being available on the open-market and the use of a “business model” for education and the philosophical implications of such

- Conducting a formal study into generational perceptions concerning the quality and acceptance of online learning

- Conducting a formal study into personality types concerning the quality and acceptance of online learning

- Conducting a formal study into the challenges of online learning for English as a Second Language students

- Investigating the possibility of additional stakeholders, such as business and employers
• Investigating additional demographics of the online population

• Conducting a formal study into the use of technology in education. Does technology drive education or does education purposefully use technology?

• Investigating the timing of any surveys asking for online student perceptions. Does the point in the semester affect the results?

• Conducting a formal investigation into student expectations of online learning.

Conclusion

The significance of this study is its provision of evidence from distance learning stakeholders regarding what ought to be pre-assessed in a valid online student readiness assessment tool. A valid online readiness assessment could result in higher student success rates as evidenced by increased grades in online classes, lower attrition rates in online classes, maximization of investment in distance learning funding, increased student and faculty satisfaction, and expanded potential for life-long learning. It could also serve an important function in distance learning research by providing a common data source for studies of online readiness. Distance learning research has suffered from an inconsistency and lack of comparability of conceptualizations and instrumentation. A commonly accepted online readiness instrument could improve this situation for readiness studies.

This study was the first step in determining what should be included in an online student readiness assessment. Its findings could lead to development of a valid and useful online student readiness assessment tool for users of Internet-based courses.
REFERENCES


Are you ready to learn online? (n.d.). Retrieved February 1, 2005, from the Cerro Coso College of California Website: http://www.cvc4.org/heather/cvc4survey1.asp

Are you ready to take an online course? (n.d.). Retrieved February 1, 2005, from Rochester Community and Technical College of Minnesota Website: http://www.rctc.edu/online/html/assessment.html

Are you suited to distance ed? (n.d.). Retrieved April 4, 2005, from the University of Alaska Online Website: http://uaaonline.alaska.edu/printer.cfm [Note: This site is no longer available to the general public].


Retrieved December 30, 2005, from [http://siop.org/tip/backissues/October02/06Davidson.htm](http://siop.org/tip/backissues/October02/06Davidson.htm)


Meeting of the Eastern Educational Research Association, Clearwater, FL.

ERIC No. ED 441000.


http://www.probeconsulting.com


http://iteslj.org/Articles/Queiroz-OnlineTeachers.html


Routledge.


[Reference format stipulated by the U.S. Department of Education].


APPENDICES
APPENDIX A

Communication Requesting Permission to Conduct Research
December 20, 2005

To Whom It May Concern:

I am writing to formally request permission to conduct a research project at your institution. I am a Ph.D. Candidate in the Occupational Education Studies program at Oklahoma State University. I have selected 7 institutions to contact for participation in this project. All public institutions that offer a complete undergraduate online degree as identified by the Oklahoma Online College were selected.

The primary purpose of this study will be to describe and compare what distance learning administrators, online faculty, and online students perceive as important characteristics, traits, and skills for online students to have prior to entering the online classroom. A secondary purpose of the study will be to evaluate the ION Self-evaluation for Potential Online Students which currently serves as the basis for many of the instruments used by institutions in the United States. The intent of the evaluation will be to determine if the ION assessment actually evaluates what administrators, faculty, and students perceive as important for online success.

The significance of the study is to provide evidence from Distance Learning stakeholders as to what ought to be pre-assessed in a valid online readiness assessment tool. A valid assessment should have intended results of higher student success rates as evidenced by increased grades, lower attrition rates, maximization of investment in Distance Learning funding, increased student and faculty satisfaction, and expanded potential for lifelong learning. This study is the first step in determining what should be included in an online readiness assessment leading to the development of a valid online readiness assessment.

There are no risks associated with participation in this study. It is estimated that the survey will take approximately 15 minutes or less to complete. Participants will be contacted via e-mail through the e-mail system of the individual institutions online course management tool. The researcher will not have access to any e-mail addresses of any participants at any time. The e-mail invitation to participate in the surveys will be sent to the Distance Learning Administrator identified as the contact person at each institution. This person will then forward the e-mail invitation to the Distance Learning Stakeholders at that institution. The researcher will not have access to the individual e-mail addresses of any participants at any time.

The survey invitations will be sent to the appropriate administrator at each institution in January or February 2006 after the Oklahoma State University Institutional Review Board approves the full project. Approval is pending based upon acceptance of the institutions to participate in the study.

If your institution approves the research project, I will need written confirmation from the institution and the contact information of the Distance Learning Administrator. If you have any questions, I can be reached at 918.246.0650 (home) or 918.906.6574 (cell). I can also be reached via e-mail at tamra@cox.net.

Thank you for your consideration.

Tamra S. Davis
335 E. 44th St.
Sand Springs, OK 74063
Tamara,

I just received word from President Cook that your request to conduct a research project on the Rose State College campus related to online degree programs has been approved. The College WebCT administrator and Online Instructional Designer is Mr. Chris Meyer. He may be reached at his e-mail address cmeyer@rose.edu.

Dr. Ric H. Baser
Vice President for Academic Affairs

Sent: Tuesday, December 20, 2005 3:36 PM
To: Baser, Ric
Subject: Request from Tamra Davis for permission to conduct research at your institution

Dr. Baser

Thank you for your time this morning. I am attaching the formal request letter and providing links to the actual surveys. I will follow-up with a hard copy request as discussed. If permission is granted for the survey to be conducted at your institution, I will need contact information for the appropriate distance learning administrator to contact to begin the process. My timeline is fluid currently. OSU requires that I have permission from all participating institutions before full approval of the project will be granted. I anticipate that I will be ready to approach OSU by early January, allowing the study deployment to be in late January or early February 2006.

Thank you for your time and consideration.

Links to surveys:
Survey of Online Faculty link:
Survey of Online Students link:
Survey of Online Administrators link:

(See attached file: Letter to schools requesting permission.doc)

Tamra S. Davis, Assistant Professor
Tulsa Community College--West
BITs Division
7505 W. 41st St.
Tulsa, OK 74107
(918) 592-8064
(918) 592-8198 FAX
Written permission from Tulsa Community College to conduct research

John Kontogianes/execvpchiefacad officer/tcc
01/23/2006 10:40 AM

To: Tamra Davis/BusServ/tcc@tcc
cc: Janetha Fleetwood/ExecVP/tcc@tcc
bcc:

Subject: Re: Fw: Request for Scholarly Investigation at TCC

Tamra, I have reviewed your request to conduct the research at TCC. You have my permission, and I will send you a formal notice asap. Good luck with your research. Keep me posted on your progress. John

John T. Kontogianes, Ph. D.
Executive Vice-President and Chief Academic Officer
Tulsa Community College
6111 E. Skelly Drive
Tulsa, OK 74135-6198

Telephone: 918-595-7980
Fax: 918-595-7935
email: jkontogi@tulsacc.edu
I apologize for the delay in my response. I have reviewed the document and believe as long as it is voluntary, then there is no problem with conducting the research at OCCC.

Let me know how I can help.

Brenda Harrison, Ed.D.
Acting Vice President for Academic Affairs
Oklahoma City Community College
7777 South May Avenue
Oklahoma City, OK 73159
405-682-7534
BHarrison@okccc.edu

Re: Request to conduct research

Recently, I asked permission to conduct research at your institution. I have not had a response and I am attaching the request again. If possible, please respond even if the request is denied so that I may move forward with my dissertation. In order to meet my deadlines, I must move forward by the end of this week.

Sincerely,

Tamra S. Davis, Assistant Professor
Tulsa Community College--West
BITS Division
7505 W. 41st St.
Tulsa, OK 74107
(918) 595-8064
(918) 595-8198 FAX

(See attached file: Letter to schools requesting permission.doc)
APPENDIX B

Surveys
**Informed Consent**

Text of e-mail invitation

Dear ___ (Administrator, Faculty, Student)

You are invited to participate in an exciting research project about online learning. Your participation should take less than 15 minutes and involves completing a single questionnaire. The questions will ask about your experiences and opinions about online learning. Your responses are anonymous and cannot be traced back to you in any way. All data from this research will be maintained in electronic form only on a password protected server for a period of 6 months only. All data will be reported in aggregate form only; no responses will be reported for, or attributed to, any individual participant. Several institutions in Oklahoma have been invited to participate. Your responses will help provide valuable information that can be used to create resources that may benefit online students in the future. Your participation in this research is voluntary and you can discontinue participation at any time without penalty or negative consequence. If you have questions about this research or your participation you can contact Ms. Tamra Davis by phone at 918-246-0660 or by email at fxdl2k2@cox.net. You can also contact Dr. Sue C. Jacobs, Oklahoma State University IRB Chair, at 405-744-1676 or irb@okstate.edu

Please click the link below to start the survey. Thank you for your time.

<<<Link to online survey>>>

Sincerely,

Tamra S. Davis
Survey of Administrators

Perceptions of Administrators Concerning the Readiness of Students for Online Learning

This question is for demographic purposes only and will not be cross-tabbed with any other data. At which institution are you an administrator?

- Oklahoma City Community College
- Rose State College
- Tulsa Community College
- I prefer to not identify the institution

As of the Fall 2005 semester, how many faculty were teaching online at your institution?
- 0 – 10
- 11 – 25
- 26 – 50
- 51 – 100
- More than 100

As of the Fall 2005 semester, how many students were enrolled in online classes at your institution?
- 0 – 100
- 101 – 250
- 251 – 500
- 501 – 1,000
- 1,001 – 2,500
- 2,501 – 5,000
- More than 5,000

As of the Fall 2005 semester, how many unique courses were offered online at your institution?
- 0 – 10
- 11 – 25
- 26 – 50
- 51 – 100
- More than 100

Please rate the following statement based upon your personal opinion. I believe that a significant number of students are not prepared for online learning.

- 1—Strongly agree
- 2—Somewhat agree
- 3—I don’t know/do not have access to this information
- 4—Somewhat disagree
- 5—Strongly disagree
Please rate the following statement based upon your personal opinion. I believe that some students are not prepared for online learning.

1—Strongly agree  
2—Somewhat agree  
3—I don’t know/do not have access to this information  
4—Somewhat disagree  
5—Strongly disagree

Please rate the following statement based upon your personal opinion. I believe that most students are prepared for online learning.

1—Strongly agree  
2—Somewhat agree  
3—I don’t know/do not have access to this information  
4—Somewhat disagree  
5—Strongly disagree

What technical/computer skill do you consider to be the most important for students to have mastered in order to be successful in an online class?

Please rank the top five items from the list. 1 should be the skill that you see as the most important and 5 should be the least important of the items selected. You do not need to do anything for those items that are not your top 5 most important skills.

- Conducting an Internet search for data  
- Downloading computer programs  
- Downloading plug-ins for the computer  
- Formatting a report or paper in a word processing program  
- Opening files from a specific file folder on the computer  
- Receiving e-mail with attachments  
- Saving files to a specific file folder on the computer  
- Sending e-mail  
- Sending e-mail with attachments

Were any skills that you consider important left off the list? If so, what are those skills?

What characteristic or trait do you consider to be the most important for students to have mastered in order to be successful in an online class?

Please rank the top nine characteristics and traits from the list. 1 should be the skill that you see as the most important and 9 should be the least important of the items selected. You do not need to do anything for those items that are not your top 9 most important skills or traits.

- Ability to work alone  
- Ability to work in a group  
- An understanding of technology
Being able to think through a problem before answering
Being able to think through a problem before asking for help
Being open-minded
Being self-motivated
Being task-oriented
Being willing to ask questions via technology
Being willing to complete assignments prior to the due date
Patience
Personal organization
Preferring an immediate answer to class-related questions
Preferring to complete course work using a computer
Preferring to hear/listen to an instructor
Preferring to read course materials from a computer screen
Preferring to read course materials in printed form
Turning assignments in early

Were any characteristics or traits that you consider important left off the list? If so, what are those characteristics or traits?

In your opinion, in what areas are the students least prepared for online learning?

In your opinion, in what areas are the students most prepared for online learning?

When a student has not been successful in an online course, what do you believe were the factors that contributed to the lack of success in the course?

Does your institution have a help desk for online students?

Does your institution have a readiness assessment of student preparedness for online classes?

If your institution has a readiness assessment for online classes, is it required before enrollment into an online class?

If your institution has a readiness assessment for online classes, do faculty see the results of the assessment?

Please rate the following statement based upon your personal opinion: High-quality learning can take place outside the traditional classroom.
1—Strongly agree
2—Somewhat agree
3—Somewhat disagree
4—Strongly disagree
Please rate the following statement based upon your personal opinion: Should an online readiness assessment be available to all students prior to enrollment in an online class?

1—Strongly agree  
2—Somewhat Agree  
3—Somewhat Disagree  
4—Strongly disagree

Please rate the following statement based upon your personal opinion: Should completion of an online readiness assessment be required prior to a student enrolling in an online class?

1—Strongly agree  
2—Somewhat Agree  
3—Somewhat Disagree  
4—Strongly disagree

Please rate the following statement based upon your personal opinion: Should students be required to score at a proficient level (as determined by the institution) on an online readiness assessment prior to enrollment in an online class?

1—Strongly agree  
2—Somewhat Agree  
3—Somewhat Disagree  
4—Strongly disagree

Please rate the following statement based upon your personal opinion: An online readiness assessment accompanied by an improvement plan would increase online student readiness.

1—Strongly agree  
2—Somewhat Agree  
3—Somewhat Disagree  
4—Strongly disagree

Additional comments: Please provide any additional comments or observations in this area.
Survey of Faculty

Perceptions of Online Faculty Concerning the Readiness of Students for Online Learning

This question is for demographic purposes only and will not be cross-tabbed with any other data. At which institution are you faculty?
   Oklahoma City Community College
   Rose State College
   Tulsa Community College
   I prefer to not identify the institution

How long have you been teaching at any level (elementary, secondary, post-secondary, university) and in any delivery format (online, traditional classroom)?
   1 – 3 years
   4 – 6 years
   7 – 9 years
   10 – 15 years
   16 – 20 years
   21 or more years

What is your teaching status for this institution?
   Full-time faculty
   Adjunct faculty

How long have you been teaching online?
   0 – 4 semesters
   5 – 8 semesters
   9 – 12 semesters
   13 or more semesters

Did you receive training before teaching in the online environment?
   Yes
   No

What type of training did you receive?

Please rate the following statement based upon your personal opinion. I believe that a significant number of students are not prepared for online learning.
   1—Strongly agree
   2—Somewhat agree
   3—I don’t know/do not have access to this information
   4—Somewhat disagree
   5—Strongly disagree
Please rate the following statement based upon your personal opinion. I believe that some students are not prepared for online learning.

1—Strongly agree
2—Somewhat agree
3—I don’t know/do not have access to this information
4—Somewhat disagree
5—Strongly disagree

Please rate the following statement based upon your personal opinion. I believe that most students are prepared for online learning.

1—Strongly agree
2—Somewhat agree
3—I don’t know/do not have access to this information
4—Somewhat disagree
5—Strongly disagree

What technical/computer skill do you consider to be the most important for students to have mastered in order to be successful in an online class?

Please rank the top five items from the list. 1 should be the skill that you see as the most important and 5 should be the least important of the items selected. You do not need to do anything for those items that are not your top 5 most important skills.

- Conducting an Internet search for data
- Downloading computer programs
- Downloading plug-ins for the computer
- Formatting a report or paper in a word processing program
- Opening files from a specific file folder on the computer
- Receiving e-mail with attachments
- Saving files to a specific file folder on the computer
- Sending e-mail
- Sending e-mail with attachments

Were any skills that you consider important left off the list? If so, what are those skills?

What characteristic or trait do you consider to be the most important for students to have mastered in order to be successful in an online class?

Please rank the top nine characteristics and traits from the list. 1 should be the skill that you see as the most important and 9 should be the least important of the items selected. You do not need to do anything for those items that are not your top 9 most important skills or traits.

- Ability to work alone
- Ability to work in a group
- An understanding of technology
Being able to think through a problem before answering
Being able to think through a problem before asking for help
Being open-minded
Being self-motivated
Being task-oriented
Being willing to ask questions via technology
Being willing to complete assignments prior to the due date
Patience
Personal organization
Preferring an immediate answer to class-related questions
Preferring to complete course work using a computer
Preferring to hear/listen to an instructor
Preferring to read course materials from a computer screen
Preferring to read course materials in printed form
Turning assignments in early

Were any characteristics or traits that you consider important left off the list? If so, what are those characteristics or traits?

In your opinion, in what areas are the students least prepared for online learning?

In your opinion, in what areas are the students most prepared for online learning?

When a student has not been successful in an online course, what do you believe were the factors that contributed to the lack of success in the course?

Does your institution have a help desk for online students?

Does your institution have a readiness assessment of student preparedness for online classes?

If your institution has a readiness assessment for online classes, is it required before enrollment into an online class?

If your institution has a readiness assessment for online classes, do faculty see the results of the assessment?

Please rate the following statement based upon your personal opinion: High-quality learning can take place outside the traditional classroom.

1—Strongly agree
2—Somewhat agree
3—Somewhat disagree
4—Strongly disagree
Please rate the following statement based upon your personal opinion: Should an online readiness assessment be available to all students prior to enrollment in an online class?
   1—Strongly agree  
   2—Somewhat Agree  
   3—Somewhat Disagree  
   4—Strongly disagree

Please rate the following statement based upon your personal opinion: Should completion of an online readiness assessment be required prior to a student enrolling in an online class?
   1—Strongly agree  
   2—Somewhat Agree  
   3—Somewhat Disagree  
   4—Strongly disagree

Please rate the following statement based upon your personal opinion: Should students be required to score at a proficient level (as determined by the institution) on an online readiness assessment prior to enrollment in an online class?
   1—Strongly agree  
   2—Somewhat Agree  
   3—Somewhat Disagree  
   4—Strongly disagree

Please rate the following statement based upon your personal opinion: An online readiness assessment accompanied by an improvement plan would increase online student readiness.
   1—Strongly agree  
   2—Somewhat Agree  
   3—Somewhat Disagree  
   4—Strongly disagree

Additional comments: Please provide any additional comments or observations in this area.
Survey of Students
Perceptions of Online Students Concerning the Readiness of Students for Online Learning

I am at least 18 years old and willingly complete this survey (Required)
Yes
No

This question is for demographic purposes only and will not be cross-tabbed with any other data. At which institution are you an student?
Oklahoma City Community College
Rose State College
Tulsa Community College
I prefer to not identify the institution

Why did you enroll in an online class?

Do you believe that you were ready to take an online class prior to enrollment in your first online class?
Yes
No

How many online classes have you successfully completed? (Successfully completed means with a grade of C or better)
None, this is my first online class
0
1
2
3
4
5
6 or more

From how many online classes have you withdrawn?
0
1
2
3
4
5
6 or more

If you have withdrawn from an online class, what was the reason?
What is your gender?
  Male
  Female

Please use the 4-digit year. Example: 1986.
What is your year of birth?

Do you have a home computer?
  Yes
  No

Where do you normally access your online course?
  Home computer
  Parent’s house
  Computer lab on campus
  Public library
  Other (please specify)

How do you most often access your online course?
  Dial-up connection
  DSL or Cable Modem
  Other high speed connection
  On-campus only
  Other (please specify)

Do you work in addition to being a student?
  Yes
  No

Do you have children at home?
  Yes
  No

Please rate the following statement based upon your personal opinion. I believe that a significant number of students are not prepared for online learning.
  1—Strongly agree
  2—Somewhat agree
  3—I don’t know/do not have access to this information
  4—Somewhat disagree
  5—Strongly disagree
Please rate the following statement based upon your personal opinion. I believe that some students are not prepared for online learning.
   1—Strongly agree
   2—Somewhat agree
   3—I don't know/do not have access to this information
   4—Somewhat disagree
   5—Strongly disagree

Please rate the following statement based upon your personal opinion. I believe that most students are prepared for online learning.
   1—Strongly agree
   2—Somewhat agree
   3—I don't know/do not have access to this information
   4—Somewhat disagree
   5—Strongly disagree

What technical/computer skill do you consider to be the most important for students to have mastered in order to be successful in an online class?

Please rank the top five items from the list. 1 should be the skill that you see as the most important and 5 should be the least important of the items selected. You do not need to do anything for those items that are not your top 5 most important skills.
   Conducting an Internet search for data
   Downloading computer programs
   Downloading plug-ins for the computer
   Formatting a report or paper in a word processing program
   Opening files from a specific file folder on the computer
   Receiving e-mail with attachments
   Saving files to a specific file folder on the computer
   Sending e-mail
   Sending e-mail with attachments

Were any skills that you consider important left off the list? If so, what are those skills?

What characteristic or trait do you consider to be the most important for students to have mastered in order to be successful in an online class?
Please rank the top nine characteristics and traits from the list. 1 should be the skill that you see as the most important and 9 should be the least important of the items selected. You do not need to do anything for those items that are not your top 9 most important skills or traits.

Ability to work alone
Ability to work in a group
An understanding of technology
Being able to think through a problem before answering
Being able to think through a problem before asking for help
Being open-minded
Being self-motivated
Being task-oriented
Being willing to ask questions via technology
Being willing to complete assignments prior to the due date
Patience
Personal organization
Preferring an immediate answer to class-related questions
Preferring to complete course work using a computer
Preferring to hear/listen to an instructor
Preferring to read course materials from a computer screen
Preferring to read course materials in printed form
Turning assignments in early

Were any characteristics or traits that you consider important left off the list? If so, what are those characteristics or traits?

In your opinion, in what areas are the students least prepared for online learning?

In your opinion, in what areas are the students most prepared for online learning?

When a student has not been successful in an online course, what do you believe were the factors that contributed to the lack of success in the course?

Does your institution have a help desk for online students?

Does your institution have a readiness assessment of student preparedness for online classes?

If your institution has a readiness assessment for online classes, is it required before enrollment into an online class?

If your institution has a readiness assessment for online classes, do faculty see the results of the assessment?
Please rate the following statement based upon your personal opinion: High-quality learning can take place outside the traditional classroom.

1—Strongly agree
2—Somewhat agree
3—Somewhat disagree
4—Strongly disagree

Please rate the following statement based upon your personal opinion: Should an online readiness assessment be available to all students prior to enrollment in an online class?

1—Strongly agree
2—Somewhat Agree
3—Somewhat Disagree
4—Strongly disagree

Please rate the following statement based upon your personal opinion: Should completion of an online readiness assessment be required prior to a student enrolling in an online class?

1—Strongly agree
2—Somewhat Agree
3—Somewhat Disagree
4—Strongly disagree

Please rate the following statement based upon your personal opinion: Should students be required to score at a proficient level (as determined by the institution) on an online readiness assessment prior to enrollment in an online class?

1—Strongly agree
2—Somewhat Agree
3—Somewhat Disagree
4—Strongly disagree

Please rate the following statement based upon your personal opinion: An online readiness assessment accompanied by an improvement plan would increase online student readiness.

1—Strongly agree
2—Somewhat Agree
3—Somewhat Disagree
4—Strongly disagree

Additional comments: Please provide any additional comments or observations in this area.
Appendix C

IRB Approval Documentation
Oklahoma State University Institutional Review Board

Date: Monday, March 13, 2006
IRB Application No: ED06105
Proposal Title: The Perceptions of Distance Learning Stakeholders in Oklahoma Concerning Online Student Readiness
Reviewed and Processed as: Exempt
Status Recommended by Reviewer(s): Approved Protocol Expires: 3/12/2007

Principal Investigator(s)
Tamra Sue Butler Davis Lynna Ausburn
335 E. 44th St. 217 Willard
Sand Springs, OK 74063 Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research, and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McIeman in 415 Whitehurst (phone: 405-744-5705, beth.mcIeman@okstate.edu).

Sincerely,

Sue C. Jacobs, Chair
Institutional Review Board
Text of e-mail invitation

Dear ___ (Administrator, Faculty, Student)

You are invited to participate in an exciting research project about online learning. Your participation should take less than 15 minutes and involves completing a single questionnaire. The questions will ask about your experiences and opinions about online learning. Your responses are anonymous and cannot be traced back to you in any way. All data from this research will be maintained in electronic form only on a password protected server for a period of 6 months only. All data will be reported in aggregate form only; no responses will be reported for, or attributed to, any individual participant. Several institutions in Oklahoma have been invited to participate. Your responses will help provide valuable information that can be used to create resources that may benefit online students in the future. Your participation in this research is voluntary and you can discontinue participation at any time without any penalty or negative consequence. If you have questions about this research or your participation you can contact Ms. Tamra Davis by phone at 918-246-0660 or by email at Fxdl2k2@cox.net. You can also contact Dr. Sue C. Jacobs, Oklahoma State University IRB Chair, at 405-744-1676 or irb@okstate.edu

Please click the link below to start the survey. Thank you for your time.

<<<Link to online survey>>>

Sincerely,

Tamra S. Davis
Appendix D

Written Comments from Faculty

Survey Pilot Study
Text Box Responses

Perceptions of Online Faculty Concerning the Readiness of Students for Online Learning

19. You have completed my pilot survey for Faculty Members. Please make any comments about the survey in this area. I want to know if you found typographical errors (and where they were), if the questions make sense, if the order needs to be changed, or anything else you would like to tell me about the survey. Your comments will be evaluated and incorporated into the final version of the survey. The answers you actually submitted will be destroyed.

1. Error: believe spelled belive two questions up. For questions with multiple answers (like this one) consider a large box for response. Where you ask for three traits, consider three boxes. Best of luck.

2. There were some misspelled words—characteristics instead of characteristics, a few questions were unclear in the way they were worded (at least for me), and I can't remember what page, but it dealt with some of the questions about what do you think is the most important skill. All around, the survey was clear to me.

3. On the list of schools, you should have an "other" category

4. It would be easier to evaluate a paper (emailed) copy.

5. On the list of skills needed, some were 'comfortable with' and some were 'prefer to' and made them apples and oranges. Otherwise, works for me.
Appendix E

Written Comments from

Student Survey Pilot Study
Perceptions of Online Students Concerning the Readiness of Students for Online Learning

25. You have completed my pilot survey for Students. Please make any comments about the survey in this area. I want to know if you found typographical errors (and where they were), if the questions make sense, if the order needs to be changed, or anything else you would like to tell me about the survey. Your comments will be evaluated and incorporated into the final version of the survey. The answers you actually submitted will be destroyed.

1. Typos - characteristic on one page and believe (spelled believe)

2. The question that asked At which institution are you a student? OSU Stillwater and OSU Tulsa were not an option and that is where I go to school. Maybe there should be an other category.

3. Tamra, this looks really good. I just have a couple of suggestions. First, the orange on black is pretty tough to read. I think Dr. Floyd said the best combination was navy text on white (as I recall). If it’s not easy to read then that can reduce response rate for the survey. The other thing is the question that reads “In your opinion, do you believe that a significant number of students are not prepared for online learning? Can this be reworded so as not to predispose the answer? Maybe something like “Which of the following most represent your opinion about the preparedness of students for online learning? Then, have the three choices - not prepared... or maybe a likert scale. Looks good! Great to hear from you. Keep me posted please. - Dana Gray

4. The survey was fine. I think most students need to meet on ground to discuss the class assignments.

5. you made it pretty easy, I almost stopped at the 3 additional characteristics question. I had already given you two and you made me think of 3 more. I honestly didn’t want to have to stop and think for 3 or 4 minutes about it.

6. First of all this paragraph with what to look for should have been up front- perhaps it was and I missed it - on reason I don’t totally rely on online coursework.... there is a lot about the students responsibility and being prepared- but when the question is asked about the reason a student has been successful in an online course--- it seems to have come with any responsibility on the part of the faculty or the school support system etc. being addressed anywhere. But then, perhaps that has no part in what you are looking for- student readiness. So perhaps the question needs to be clearer to ask what the student was lacking to succeed in the class.

7. Good questions.

8. Good job Tamra. I want to know what program you used to do this. Tonya

9. instructions not clear for fill-in the blanks question do we get the answer from those listed from previous question. Don’t like filling the blanks, just give me several items to choose from, need to ask about degree being pursued.

10. Regarding the question: In your opinion, do you believe that a significant number of students are not prepared for online learning? Is the third choice correct or do you mean to say “I believe that most students are not prepared for online learning” or “are” words to prevent misreading the statement. Regarding the question: Which of the following characteristics and traits are important for student success in an online class? Three of the choices in the list do not seems consistent with the question: Waiting until he last day to complete an assignment; misplacing assignments; preferring to listen to the instructor. Do you mean “not” waiting until the last day to complete an assignment, etc. I found one misspelled word in the question: When a student has not been successful in an online course, what do you believe were the factors that contributed to the lack of success in the course? Correct the spelling of “believe.” Good luck with your research!

11. Would like to see an age range for selection instead of Year -- typo on willingly (1st or 2nd ques)? - Some of the selections on the answer selections seemed rather immature --and at one point I just wasn’t focused enough to think of three characteristics. Overall, it appears to be a good survey. Maybe it would help to identify what you mean by online (if you did, I missed it.) Good luck!

Appendix F

ION Self-Evaluation for Potential Online Students
Self Evaluation for Potential Online Students

Will online learning fit your circumstances, lifestyle, and educational needs? Here are some basic questions to ask yourself in deciding if an online program is right for you. You must have Javascript enabled for this quiz to work. Your evaluation will be given in a pop up window

1. Do you have (or are you willing to obtain) access to a computer and phone line at home?
   - Yes
   - No

2. Do you feel that high quality learning can take place without having face to face interaction?
   - Yes
   - No

3. Can you dedicate 4 to 6 hours a week (anytime during the day or night) to participate in the learning process?
   - Yes
   - No

4. Are you a self-motivated and self-disciplined person?

http://www.ion.illinois.edu/resources/tutorials/pedagogy/ondllval.asp (1 of 3)5/27/2004 10:00:46 PM
5. When it comes to schoolwork and deadlines, are you a procrastinator?
   - [ ] Yes
   - [ ] No

6. Are you comfortable communicating in writing?
   - [ ] Yes
   - [ ] No

7. Do you enjoy reading?
   - [ ] Yes
   - [ ] No

8. Are class discussions helpful to you?
   - [ ] Yes
   - [ ] No

9. Do you subscribe to the value of introducing critical thinking into the learning process?
   - [ ] Yes
   - [ ] No

10. Do you think increased learning will take place through sharing your work, life, and educational experiences as part of the learning process?
    - [ ] Yes
    - [ ] No

11. Are you comfortable with email, computers, and new technologies?
    - [ ] Yes
    - [ ] No

12. Does your lifestyle (family, work, or personal schedule) make it difficult for you to attend courses during the day?

http://www.ioi.uillinois.edu/resources/tutorials/pedagogy/reflective1.asp (2 of 3) 8/25/2004 10:00:14 PM
Yes

No

Evaluates Answers  Clear Answers

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http://www.ion.uiuc.edu/resources/tutorials/pedagogy/selfEval.asp (3 of 3)
Appendix G

Evaluation of Illinois Online Network

Self-Evaluation for Potential Online Students

Executive Summary
Executive Summary

The Illinois Online Network’s *Self Evaluation for Potential Online Students* was created in 1997 from anecdotal data provided by faculty involved with ION (V. Varvel, personal communication, September 19, 2005). The ION *Self Evaluation for Potential Online Students* was one of the first assessments of its kind. The Illinois Online Network was created primarily for faculty and professional development when few online courses were being offered by higher education institutions in Illinois (ION, 1998 – 2005). In addition to the resources for faculty, the network website also contained a self-evaluation for potential online students. Because of its historical role as the apparent model and foundation for most currently used assessments, the ION *Self Evaluation for Potential Online Students* was determined to be the appropriate online readiness assessment for this evaluation study.

Two primary evaluation questions were addressed by this study. The first question asked if the ION *Self Evaluation for Potential Online Students* contained the questions that were required to truly assess student readiness. The second question was to determine if the self evaluation was effective in its assessment of online student readiness. The main audience for this evaluation was the distance learning stakeholders at the three community colleges in Oklahoma, the staff and stakeholders of ION, and the distance learning community at large.
Methodology

The evaluation project was descriptive in nature and based upon the perceptions of the distance learning stakeholders from the three community colleges in Oklahoma. The evaluation was goals-free in nature.

Values or Assessment Criteria

In order to evaluate the ION *Self Evaluation for Potential Online Students* against the criteria indicated by the stakeholders in this study, a procedure was developed to quantify the criteria. Using a 10-point scale, each question on the ION *Self Evaluation for Potential Online Students* was matched to a characteristic, trait, or skill identified by the Oklahoma distance learning stakeholders.

Process Evaluation

The design of the *Self Evaluation for Potential Online Students* questions was addressed on a question-by-question basis. The questions asked on the ION *Self Evaluation for Potential Online Students* touched on most of the characteristics and traits perceived as important by the Oklahoma distance learning stakeholders, but numerous values of the Oklahoma distance learning stakeholders were not addressed by the ION *Self Evaluation for Potential Online Students*, primarily in the area of technology skills. Based upon the formula applied to the ION *Self Evaluation for Potential Online Students*, questions 1, 8, and 10 received 0 points and Questions 6, 7, and 9 scored 3 points or less.

The delivery format utilized for the ION *Self Evaluation for Potential Online Students* is the Internet. Using the Internet for delivery of this type of
assessment is reasonable and effective, but a way to either print the results or e-mail the results would be beneficial to the Oklahoma distance learning stakeholders. In addition, an aggregate score is provided with the assessment currently. Potential students do not know where they need to adjust or improve if the score is unsatisfactory. Providing a question-by-question analysis would be more beneficial for potential online students.

Recommendations

This assessment tool can serve as the basis for a useful assessment of online learning readiness, but to increase its usefulness to the distance learning stakeholders in this study the assessment needs to be modernized and updated. By updating the questions and providing a question-by-question analysis of the results, the ION Self Evaluation for Potential Online Students could benefit all of the distance learning consumers. The revised questions should be developed through additional research and testing using the perceptions of the distance learning stakeholders as the starting basis.
VITA

Tamra Sue Butler Davis

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE PERCEPTIONS OF DISTANCE LEARNING STAKEHOLDERS IN THREE OKLAHOMA COMMUNITY COLLEGES CONCERNING ONLINE STUDENT READINESS

Major Field: Education

Biographical:

Education: Oklahoma State University, Stillwater, OK
Bachelor of Science in Business Administration. Major: Business Education, Degree Conferred: July 1986
Master of Science. Major: Business Education, Degree Conferred: July 1988
Completed the Requirements for the Doctor of Philosophy degree at Oklahoma State University in July 2006.

Experience:
Tulsa Community College—Assistant Professor
Business and Information Technology Services Division
2000 – present

Oklahoma State University—Okmulgee—Instructor
Computer Systems Technology Division
1997 – 2000


Professional Memberships:
International Society for Business Education/National Business Education Association
Omicron Tau Theta (Phi Chapter)
Delta Pi Epsilon (Beta Chapter)
Name: Tamra Sue Butler Davis                      Date of Degree: July 2006
Institution: Oklahoma State University          Location: Stillwater, Oklahoma
Title of Study: THE PERCEPTIONS OF DISTANCE LEARNING STAKEHOLDERS IN THREE OKLAHOMA COMMUNITY COLLEGES CONCERNING ONLINE STUDENT READINESS
Pages in Study: 233                               Candidate for the Degree of Doctor of Philosophy
Major Field: Education

Scope and Method of Study:

Distance learning research has suffered from an inconsistency and lack of comparability of conceptualizations and instrumentation. A commonly accepted online readiness instrument could improve this situation for readiness studies. The significance of this study is its provision of evidence from distance learning stakeholders regarding what ought to be pre-assessed in a valid online student readiness assessment tool. A valid online readiness assessment could result in higher student success rates as evidenced by increased grades in online classes, lower attrition rates in online classes, maximization of investment in distance learning funding, increased student and faculty satisfaction, and expanded potential for life-long learning. The study was descriptive in nature, using a mixed method technique for collection and analysis of data. The focus was on quantifying the data received via three surveys and using these data to conduct an evaluation of the Self Evaluation for Potential Online Students using Scriven’s Key Evaluation Checkpoints evaluation methodology.

Findings and Conclusions:

This study was the first step in determining what should be included in an online student readiness assessment. It was concluded that although the ION Self Evaluation for Potential Online Students is a useful tool for self-assessment, modernization of the instrument is needed. It was also concluded that an updated assessment instrument would be used in a variety of ways. The findings of this study could lead to development of a valid and useful online student readiness assessment tool for users of Internet-based courses, a tool that could also serve an important function in distance learning research by providing a common data source for studies of online readiness.

ADVISER’S APPROVAL: Lynna J. Ausburn, Ph.D.