2015

The Influence of Selected Demographic and Perceptual Characteristics on the Perceptions of Distance Education Among Faculty at a Research Extensive University in the Southeastern Region of the United States

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A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agriculture and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The School of Human Resource Education
and Workforce Development

by
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May 2015

ACKNOWLEDGEMENTS

I would like to acknowledge Dr. Michael Burnett who has served as my committee chair. I am indebted to you for your guidance and leadership that you have provided to me during my course of study. You have made my return to graduate school after over 20 years an enjoyable experience and I am grateful for your help.

I would also like to acknowledge Dr. Satish Verma who has served on my committee since the beginning. I am thankful for your service and for having had the opportunity to meet you and to gain the knowledge I did in your classes.

I would like to thank Dr. Geraldine Johnson for having served on my committee until illness forced her to remove herself from the committee. I thank you for your thoughtful input and for your willingness to serve.

I would like to thank Dr. Clayton Hollier and Dr. Earl Johnson for agreeing to serve on my committee as replacements at the last minute. Your willingness to serve on short notice is greatly appreciated and shows your dedication to academics and teaching.

I would like to thank my colleagues at St. Thomas More Catholic High School. Your encouragement throughout the process has been appreciated. Special thanks to Ms. Claire Bordelon, Mrs. Belinda Edwards and Dr. Cheryl Fruge for taking the time to read pages and offer suggestions.

Lastly, I would like to thank my family for their love and support during this journey. To my wife Suzanne, I am indebted to you for your love and support during my return to school. You have offered encouragement and support when needed. To my daughters Alida and Madeleine, thank you for the help you have given me when asked and thank you for being there to support my decision to return to school.

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ABSTRACT

The primary purpose of this study was to determine the influence of selected demographic and perceptual characteristics on the culture and desirability of Distance Education among faculty at a research extensive university in the southeastern region of the United States. The study was conducted using a survey research design. The electronic survey was distributed to full and part time faculty of the College of Agriculture at Louisiana State University using faculty email addresses provided by the college. The survey instrument consisted of questions concerning demographic characteristics, perception of Distance Education, culture of Distance Education, desirability of Distance Education and extent of use of electronic resources by faculty in face to face and Distance Education courses.

The overall mean culture score reported was a 3.4 placing this result into the "neither agree nor disagree" category. It was concluded that this faculty is ambivalent toward the concept of Distance Education as a viable means of instruction in a university environment. The researcher recommends that experience and expertise in Distance Education along with Distance Education instruction expectations are included in the job description for any new faculty hired within the college. It is also recommended that some form of compensation be offered to faculty responsible for Distance Education courses. This compensation should be in the form of incentives such as training, attendance at conferences or direct monetary compensation. The university must plan for the inclusion of this compensation in the budgeting process. The researcher further recommends that mandatory training programs are established within the college to allow for faculty to become more comfortable with using additional forms of technology both in their face to face and Distance Education forms of instruction. Additionally, the researcher recommends the establishment of open communication between the administration

and faculty. This can be accomplished using face to face meetings involving department heads, faculty and administrators within the college and university in order to address faculty concerns regarding Distance Education.

CHAPTER 1: RATIONALE

Importance of Higher Education

Overall, today's young college-aged population is earning a salary that is comparable to what generations before them have earned at the same point in their life. However, a difference is that young workers with college degrees are earning more than their counterparts from previous generations while those young workers who do not have a degree are earning less than their counterparts from previous generations. While the entire employment picture for young workers is not perfect, studies do suggest that having a college degree is important and potentially leads to a higher earning potential (Supiano, 2014). In addition to the possibility of increased income, the impact of a college degree may also include the areas of occupational status and prestige of the individual. A degree may offer them more opportunities for better positioned employment leading to greater occupational status and social mobility (Strange, 2014).

Barriers to Obtaining a College Education

The life of today's college student is much different than it was in previous decades. There are many more things that need to be considered in their life as compared to previous generations of college students. They are often juggling full-time jobs along with other responsibilities such as family commitments. Students today tend to see their time as having a monetary value. They may be able to perform better in school if they could concentrate more of their time on course work and studies and will often use work time in order to catch up on course work and assignments. This new financial responsibility is very unfamiliar to them as they have often relied on their parents for their finances. This is a new challenge that they must face even though they may not always want to (Hanson T. L., Drumheller, Mallard, Mckee, & Schlegel, 2011).

Time has become an important commodity for the average college student, and it is difficult to devote the amount of time necessary to succeed in a college environment (Hanson T. L., Drumheller, Mallard, Mckee, & Schlegel, 2011). Students today are connected in many ways. They have cell phones, computers at home and work and other electronic devices that have become very commonplace in their world. It has been shown that most students will spend a significant amount of time using technology and personal communication during the course of a normal week. The typical student uses Facebook and other social media to keep up with friends. Many times, this communication, including texting, takes place during class time (Hanson T. L., Drumheller, Mallard, Mckee, & Schlegel, 2011). Because of all of these considerations, time is a premium commodity for them. It has become harder to schedule the necessary time to become a student for even a few hours a week to pursue a college degree. Prioritizing work, course work and studying and other activities is a challenge for today's student. They tend to take short cuts when possible and only place a high priority on tasks which carry a high cost of failing (Hanson T. L., Drumheller, Mallard, Mckee, & Schlegel, 2011).

In addition to the time factor, other barriers to attending college include student motivation, family involvement and overall cost of attendance (Teran, 2007). In order to overcome these barriers, students will need to explore opportunities to access classes in more non - traditional ways including using Distance Education as a means to earn college credit.

Distance Education

In its simplest form, Distance Education is any form of instruction in which the learner and the instructor are physically separated from each other (Guri-Rosenblit, 2005). It is likely that Distance Education in the United States may have had its beginnings as early as 1873 when The Society to Encourage Studies at Home began to use correspondence materials (Wang & Liu,

2003). By 2000, 94% of universities had begun using some form of Distance Education or online courses (Stella & Gnanam, 2004). By 2001, the number of students enrolled in some form of Distance Education had increased by 100% from 1997 and the number of universities using Distance Education had shown a similar increase (Tabata & Johnsrud, 2008). While offered by institutions in Louisiana, Distance Education and online programs in Louisiana are not highly ranked among public universities as published in a 2014 report issued by U. S. News and World Report (Staff, 2014). Other states appear to have the edge over Louisiana in this regard; however, the programs that are currently being offered by public universities in Louisiana appear to be quality programs (Press, 2014). Is this a viable option? Does the student acquire the same knowledge as if he or she were physically present in the classroom with the instructor? Are the student's needs being met with this type of instructional delivery?

Advantages of Distance Education

The use of Distance Education by university students potentially has many advantages. Some of these advantages include:

Advantages to the Student

Accessible to More Students

Students who have a limited amount of time available due to work or family responsibilities may benefit from having Distance Education available to them. Less time would need to be devoted to attending class as compared to a more traditional student (Guri-Rosenblit, 2005). Another advantage would be availability to students who live in more isolated areas who are unable to easily travel to a campus for instruction. These students would then have more access to classes which makes pursuing a college degree a more feasible option for them (Milheim, 2001).

Greater Convenience

The distance form of instruction would be more convenient for the student while also allowing that student a greater degree of independent learning (Milheim, 2001). This form of education will allow for flexibility with regard to learning styles while also being appealing to those students who may not be able to attend classes regularly on campus (Tricker, Rangecroft, & Long, 2001). A focus on the learning styles of the student should become an important part of the pedagogy of the development of a Distance Education course and could possibly lead to an overall enhancement of learning (Novak, 2002).

Advantages to the University

Increased University Enrollment

A potential advantage for the university would be an increased enrollment of students. Distance Education and online learning would allow more students to have access to courses thereby expanding the reach of the university (Guri-Rosenblit, 2005).

Increased University Revenue

Consequently, any increase in student enrollment will translate into increased revenue for the university. More students and greater revenue could possibly help reduce or eliminate the need for budget cuts on campuses. Since many universities are facing the prospect of inadequate funding or reduced funding from revenue sources, the attraction of Distance Education students may be a potential way for universities to increase revenue (Ponzurick, France, & Logar, 2000).

Areas of Concern in Distance Education

As with most programs, Distance Education and online learning will have its share of concerns that will need to be addressed once a program has been implemented. Among these

concerns are quality of instruction, effectiveness of instruction, cooperation of faculty, allocation of resources and technical support.

Quality Control

The effectiveness of Distance Education instruction may not be readily and properly evaluated. There appears to be a lack of ample evaluation methods available which may possibly be a cause for concern (Berge & Muilenberg, 2001). Quality indicators will need to be referred to and addressed on a regular basis. These will help to guide and shape the course of instruction to work toward the best and most practical methods as well as maintaining a high quality with regard to instruction (Chaney, et al., 2009). It has been a long-held belief that courses administered through a Distance Education format were of lower quality than a traditional academic class offered on site at the university. Proponents of Distance Education will argue, however, that the same issues of quality will exist in the regular classroom as well. Both forms of instruction may be done poorly or done well depending on the situation (Stella & Gnanam, 2004), Is this type of instruction effective for both the learner in terms of the material presented and learned and for the institution in terms of cost effectiveness for the university (Novak, 2002)?

Willingness and Cooperation of the Faculty

Resistance to change will rank high among the barriers since most organizations will normally be resistant to change in their system and to the normal way that instruction is carried out. It will be important to have an administration that is supportive of the concept of Distance Education and its implementation into the university (Berge & Muilenberg, 2001),

At issue for many faculty members interested in Distance Education is the area of compensation. It will be extremely important for universities to consider how they implement

any compensation program for faculty participating in Distance Education (Milheim, 2001). Technology and the infrastructure to support it will be important components to any effective Distance Education program. Most instructors will not have the expertise needed to completely design their own courses and will need help in their implementation (Berge & Muilenberg, 2001). This may be especially true as teaching in a Distance Education format becomes more of an expectation for new hires and prospective members of a faculty (Chaney, et al., 2009).

Technical Support

A major concern for many participants in Distance Education appears to be a concern over a lack of technical support. This appears to be more of an inhibiting factor than most other inhibitors (Cook, Ley, Crawford, & Warner, 2009). Technology and the infrastructure to support it will be important components to any effective Distance Education program. Most instructors will not have the expertise needed to completely design their own courses and will need help in their implementation (Berge & Muilenberg, 2001).

These areas of concern will need to be continually monitored and addressed as necessary for any Distance Education or online learning course to become or remain successful.

Availability of Distance Education

During the past several years, Distance Education or online education has become more widespread. During the 1990s, there were very few opportunities for Distance Education. By the early 2000s over 1.6 million students were taking online courses. By 2007, that number had increased to over 3.9 million students. In some cases, this may account for up to 15% of enrollment in courses at the institution (Doyle W. R., 2009).

It is inevitable that the profile of the typical university student will change as advancements in technology are realized. Part of this change may result in a greater dependence on instruction delivered via a Distance Education format.

Allocation of University Resources

In order to accomplish goals in Distance Education, universities will need to carefully allocate resources in order to be most effective. These resources will be needed to overcome both perceived and real barriers to Distance Education at any institution. The barriers may be numerous and varied and cause difficulties in implementing any program (Berge & Muilenberg, 2001).

Distance Education will have a great potential for financial return as well as having the potential to become a more integral part of instruction (Milheim, 2001). While this increase in enrollment may put additional demands on the technology that is present at the institution, there will be no need for more physical space in the classrooms. The greater demand and expense for technology may be offset by the increased fees from those students who have enrolled in a Distance Education class (Gibson, Harris, & Colaric, 2008).

Objectives of the Study

The primary purpose of this study was to determine the influence of selected demographic and perceptual characteristics on the culture and desirability of Distance Education among faculty at a research extensive university in the southeastern region of the United States.

The following objectives were used in conducting this study:

1. Describe university faculty at a research extensive university in the southeastern region of the United States on the following demographic characteristics:

    a. age

b. gender

c. degree held

d. years' experience

e. academic rank

2. Determine the culture of Distance Education programs within the institution as perceived by faculty at a research extensive university in the southeastern region of the United States

3. Determine the extent to which electronic resources are used in the instructional activities of faculty at a research extensive university in the southeastern region of the United States

4. Determine the perceptions of Distance Education among faculty at a research extensive university in the southeastern region of the United States

5. Determine the desirability of teaching by Distance Education as perceived by faculty at a research extensive university in the southeastern region of the United States

6. Compare Distance Education with Traditional Face-to-Face delivery of instruction on the following selected measures:

a. Selected Process and Outcome Measures of the Learning Environment.

b. Expected Input and Process Traits of Distance Education

c. Appropriateness of Distance Education for Selected Program and Process Measures

d. Importance of Selected Learning Environment Components.

7. Determine if relationships exists between perceptions of Distance Education and selected demographics

8. Determine if relationships exists between perceptions of Distance Education and the following other perceptual factors among faculty at a research extensive university in the southeastern region of the United States:

a. Culture of Distance Education programs within the institution

b. Extent to which electronic resources are used in instructional activities

c. Desirability of teaching by Distance Education

9. Determine if a model exists explaining a significant portion of the variance in the perceptions of Distance Education as perceived by the faculty at a research extensive university in the southeastern region of the United States from selected demographics and other perceptions

a. age

b. gender

c. degree held

d. years of experience

e. academic rank

f. Culture of Distance Education programs within the institution

g. Extent to which electronic resources are used in the instructional activities

h. Desirability of teaching by Distance Education

Significance of the Study

This study will identify the culture and desirability of Distance Education among faculty at a research extensive university in the southeastern region of the United States. Once identified, the university can begin to explore ways to address the concerns of faculty regarding culture and desirability in order to implement and/or expand course offerings using Distance Education as a mode of instruction.

Once completed, if the survey results indicate that the faculty support a culture and desirability of Distance Education courses and programs within the university, the burden will lie with the administration to put a plan in place that will make more courses available through a Distance Education instructional method. Additionally, this survey may indicate specific concerns regarding Distance Education as perceived by the faculty. Those concerns identified by the faculty can then be used as a guide to the administrators of the college to help in the planning and effective implementation of Distance Education courses and programs. If these concerns include financial resources, a budgeting process will need to be used by the administration of the university to determine revenue sources which may offset any increase in costs that may be associated with the implementation and/or expansion of courses offered via a Distance Education format. If concerns are identified regarding the effectiveness of Distance Education, then the administration of the university will need to formulate a plan that will address and alleviate the concerns of the faculty by using quality control measures in order to move forward with the implementation and/or expansion of Distance Education. The plans may include faculty in-service and individual professional development opportunities along with effective faculty evaluation methods.

CHAPTER 2: REVIEW OF LITERATURE

The lives of today's college students are much different than in previous decades and there are many more things that need to be considered in their lives. Students are often juggling full time jobs along with other responsibilities such as family commitments. They are also "connected" in many ways: they have cell phones, computers at home and work and other electronic devices which have become commonplace in their world. Because of all of these considerations, time has become a premium commodity for them, and it has become harder to schedule time to be a student for a few hours a week to pursue a college degree. That being said, there are options that could make life easier and the prospect of obtaining a degree more accommodating for more individuals. One of those options may be Distance Education, whereby the student "attends" class via a web cam and live video feed from the university. Is this a viable option? Does the student acquire the same knowledge as someone who is physically present in the classroom with the instructor? Are the student's needs being met with this type of instructional delivery?

History of Distance Education

Over the course of time, education has undergone many changes with regard to delivery. Many times the change has revolved around methodological changes in the form of instruction. One of these changes has been to use the technological advancements that have been made to deliver instruction via a Distance Education format (Ponzurick, France, & Logar, 2000). Distance Education as a means of instruction has become more commonplace in recent years taking on several forms including forum-based classes, e-instruction and live video feeds from classrooms (Guri-Rosenblit, 2005). As this becomes more commonplace, universities may be allowed to make systemic changes to the ways that courses are taught (Charr - Chellman, 2000).

This form of education will allow for flexibility with regard to learning styles while also being appealing to those students who may not be able to attend classes on a regular basis on campus (Tricker, Rangecroft, & Long, 2001).

The concept of Distance Education at the university level has existed since the nineteenth century. Simply stated, Distance Education involves physically separating the learner from the instructor in the course (Guri-Rosenblit, 2005). The distance between the instructor and the student will almost certainly mean that the college experience will be different from that of the traditional student (Richardson, Morgan, & Woodley, 1999). Other researchers have described distance learning as delivering instructional opportunities to potential learners who are not located at traditional locations such as institutions or on site (Wang & Liu, 2003). No matter the form, it is generally agreed that the need to expand access to higher education is real. The ongoing debate is about how this might be most effectively accomplished (Novak, 2002).

Many of the early studies concerning Distance Education have been mainly descriptive studies and offer little in the way of application for the process (Bray, Harris, & Major, 2007). There is evidence that Distance Education evolved as early as the 1700s with mail or correspondence material being used (Walker & Fraser, 2005). In the United States, Distance Education probably had its beginning when correspondence materials were used in 1873 by The Society to Encourage Studies At Home located in Boston (Wang & Liu, 2003). By 2000, 94% of all US universities were engaged or planned to engage in some form of Distance Education for their students (Stella & Gnanam, 2004). By 2001, enrollment in Distance Education courses had risen to over 2.9 million students, an increase of over 100% from just four years earlier. In that same time span, the number of universities offering Distance Education had doubled (Tabata & Johnsrud, 2008). By 2007, the number of students enrolled in at least one online course had risen

to 3.9 million students (Doyle W. R., 2009). Generally, some sort of educational organization, most often a university, is involved and has a direct influence on the process. A form of student evaluation can often be present as a part of the course. Additionally, there is usually some sort of technology that will be used along with a form of two-way communication between the student and the instructor of the course (Hamzaee, 2005). This may be in the form of computers, satellites or some other technological means (Stella & Gnanam, 2004).

During the early 20th century, radio became a medium by which Distance Education courses were delivered, and by the middle of the century, Distance Education had begun to garner more wide-spread support (Wang & Liu, 2003). There may be additional separation of time, as the student may view lectures or participate in other forms of instruction at a time that is different from the instructor in a course (Guri-Rosenblit, 2005). Many times this form of education is utilized more by older students who live in more remote areas and do not have easy access to campus and a traditional form of instruction would not have been feasible (Milheim, 2001). As suggested in the literature, this may be termed the "educating Rita or Nanook" approach whereby students can take college courses who might not otherwise attend because of their geographical location (Powell & Keen, 2006). However, studies have also shown that most students enrolled in some sort of Distance Education program are actually quite close to the campus from which the course is offered (Doyle W. R., 2009).

In order to successfully implement any sort of Distance Education format, one would need to identify the clientele that this type of instruction would serve and establish a target population (Guri-Rosenblit, 2005). Those students would be identified as students who may have difficulty in attending classes in the traditional setting of a campus classroom. Even so, the profile of a Distance Education student would not normally be much different than the profile of

a traditional student who participates in a normal classroom setting (Guri-Rosenblit, 2005). However, many students enroll in online courses simply as a complement to the traditional courses that they are taking, not as a substitute for traditional instruction (Doyle W. R., 2009). This is in contrast to earlier studies which suggest that some forms of Distance Education are being used as a substitute for being on campus and enrolled in traditional courses (Powell & Keen, 2006). A general trend is seen in those students enrolled in some form of Distance Education program. They are generally students who hold a full time job and many have family responsibilities which limit time that can be devoted to attending class in a traditional setting (Guri-Rosenblit, 2005). In addition to the time factor, other barriers to attending college may include student motivation, family involvement and overall cost of attendance (Teran, 2007). Distance Education classes may also involve students who are interested in broadening their education or self-enrichment rather than seeking additional degrees (Hamzaee, 2005). This form of learning also differs from traditional instruction in that it is more learner-centered and the student becomes a more active participant in the learning process (Milheim, 2001). However, many conventional courses already require a substantial amount of independent study, so it is unclear whether there will be a difference in the academic learning by the student (Richardson, Morgan, & Woodley, 1999). The learner will assume greater responsibility in the learning process and exhibit greater control (Stella & Gnanam, 2004).

At the outset, many Distance Education programs were established to provide instruction to more people at a reduced cost. These programs allowed universities to absorb more students by providing access outside of the traditional classroom (Guri-Rosenblit, 2005) (Bray, Harris, & Major, 2007). The literature is unclear about whether this is actually being accomplished by universities and even if it is, is it being accomplished within the overall mission of the

university? By attracting more Distance Education students, the university has the potential to increase its revenue (Bray, Harris, & Major, 2007). Since many universities are facing the prospect of inadequate funding or reduced funding from revenue sources, especially state dollars, the addition of Distance Education students may be a potential way for universities to increase revenue (Ponzurick, France, & Logar, 2000). However, there is a flip side to this interpretation. Many universities have no need or desire to increase enrollment or broaden access to their classes desiring instead to remain more selective in their enrollment process and retain an elite status. Many colleges and universities may offer courses to persons outside of their university, but the courses are generally not for credit or they are offered for philanthropic purposes (Guri-Rosenblit, 2005). Additionally, many critics of Distance Education see this form of instruction as nothing more than a cash cow for the institution and fear that these types of courses will become nothing more than a means of dispensing information. This is in contrast to more traditional courses which are seen as more interactive, project-based or problem-solving all of which would be harder to incorporate into a Distance Education format (Charr - Chellman, 2000).

Changes Within Education

It has been shown that there exists a positive relationship between earning a college degree and earning potential. Those students who have completed college and earned degrees typically earn higher wages than both high school dropouts and high school graduates. The National Governors Association has suggested the driving force of the economy in the 21st century will be knowledge and that higher education will play a pivotal role by offering opportunities for educational advancement (Goetz & Rupasingha, 2003). In addition to the increase that may be realized with regard to income, the impact of a college degree may

additionally affect occupational status and prestige of the individual. A degree may offer college graduates more opportunities for better positioned employment leading to greater occupational status and social mobility (Strange, 2014).

Until very recently, higher education has been considered as the main provider of degree programs and adult learning. That began to change in the late 1900s with the inception of online universities, for-profit universities and corporate learning institutions. These online learning formats have begun to challenge the more traditional form of instruction as to when, where and how learning takes place (Swail & Kampits, 1999). In many instances, these particular forms of instruction have lacked accountability, quality assurance, and evaluation. However, the general public recognizes their presence, and people are aware of the conceptual change to learning anywhere, anytime, anyhow (Swail & Kampits, 1999). This awareness and ease of availability of Distance Education in many areas has led to a more complex system of higher education and one that is less compartmentalized and generally more and more difficult to describe (Swail & Kampits, 1999).

Contrary to some critics is a view held by administrators that technological advances are a necessary requirement for the delivery of the product of education in a market that is very competitive for students. It is acknowledged that organizational change is difficult, whether it is in business or education and fear of the unknown elements of Distance Education may still lead to criticism of the process (Gibson, Harris, & Colaric, 2008). As the appeal of Distance Education grows, it appears that older students will continue to be attracted to this form of instruction. In coming years, younger students may become more drawn to this form of education as well. With this additional interest, it is very likely that Distance Education will continue to expand. It will allow students to pursue not only degree programs, but also to

continue with a desire for life-long learning (Guri-Rosenblit, 2005). The success of any program will have to rely on collaboration among many different bodies including other universities, intergovernmental bodies and private corporations (Guri-Rosenblit, 2005). Additionally, educators should rely on the American theory of equivalence. This theory places emphasis on the educator to provide an equal experience for the distance learner that produces the same experiences and values of the instruction which they are receiving as compared to the instruction received in a more traditional setting (Wang & Liu, 2003). In order to comply, instructors may have to artificially create a shared experience with the student by making learning materials dialogical and by implementing several different communication techniques (Wang & Liu, 2003).

In order to successfully implement any sort of Distance Education program, it will be necessary to have the cooperation and willingness of the faculty of the university. In order to accomplish this, it may become necessary to provide motivation to key members of the faculty. It appears that faculty participation in a Distance Education program may be linked directly to several factors such as their perceived skill in using technology, their overall attitude toward technology, age, and institutional affiliation among others (Tabata & Johnsrud, 2008). The variable of gender may also enter the picture with regard to acceptance of Distance Education instruction at a university (Gibson, Harris, & Colaric, 2008). Early studies found that many university faculty members were inherently interested in Distance Education. However, later studies may seem to suggest a difference in findings regarding motivation and interest (Cook, Ley, Crawford, & Warner, 2009). Cook et al have identified five motivators and inhibitors regarding acceptance of Distance Education by university faculty. The ability to reach a new audience and the opportunity to develop new ideas for presentation were among the top

motivators for faculty. Among the inhibitors, concerns about technical support along with an increased workload were cited as major drawbacks (Cook, Ley, Crawford, & Warner, 2009). Benchmarks will need to be developed to ensure that faculty have the necessary resources to deal with technical problems associated with student access to the course offered. Instructors will have to have the proper training and assistance to transition from a traditional teaching approach to one that involves Distance Education methods (Chaney, et al., 2009). Differences were also noted between deans and members of the faculty. It appears that concerns of the faculty regarding inhibitors were not as great of a concern to the deans because they did not perceive some inhibitors to have the effect which they did. There was also less motivation among newer non tenured faculty concerning this form of instruction. Extrinsic motivators such as merit pay did not significantly affect participation in Distance Education. Intrinsic motivation such as intellectual challenges and a personal motivation appeared to have a more significant impact in participation on distance learning (Cook, Ley, Crawford, & Warner, 2009). Ultimately, the success of a Distance Education program appears to be the presence of a critical and core resource which is faculty involvement in the program. Teachers must be willing and motivated to provide quality instruction to the student which may lead to implications within the program (Tabata & Johnsrud, 2008).

Technology Concerns

A major concern for many participants in Distance Education appears to be a concern over a lack of technical support. This appears to be more of an inhibiting factor than most other concerns. A second major inhibitor is the increased amount of time that may be needed to successfully teach a course via distance education. Many faculty members tend to express concern over time constraints which may occur. It is apparent that the university will need to be

fully supportive in order for a program of this type to succeed (Cook, Ley, Crawford, & Warner, 2009). Even though motivators and inhibitors have been identified, it is important to note that these may change with time. What were once considered inhibitors may not exist far into the future, and what once served as motivation for a faculty member to engage in Distance Education may not serve as motivation in the future (Cook, Ley, Crawford, & Warner, 2009). It seems that Distance Education is becoming a plan that will be incorporated into more and more universities in the future. If this is the case, universities will need to incorporate planning and conduct further research to identify problems and solutions to those problems. Factors such as attrition, loss of motivation and possibly even sabotage by some faculty members will need to be considered (Cook, Ley, Crawford, & Warner, 2009).

Technology will be an important part of any Distance Education program that is established. Any established form of technology will help the instructor to effectively deliver the information to the student in a Distance Education format. The technology has changed over the years from mail to email to video (Milheim, 2001). A survey conducted by the National Education Association in 1998, found that nearly all faculty had access to computers, email and the internet at work. Additionally, 70% indicated that they had access to a computer both at home and at work. (Tabata & Johnsrud, 2008). By this time, nearly two-thirds of faculty had begun using email to correspond with students and approximately one-fourth of faculty had created web sites for their courses. It has also been noted that many faculty members had begun using technology as a means of communication with colleagues and as a means of conducting research and sharing information (Tabata & Johnsrud, 2008). Technology and the infrastructure to support it will be important components of any effective Distance Education program. Most instructors will not have the expertise needed to completely design their own courses and will

need help in their implementation (Berge & Muilenberg, 2001). This may be especially true as teaching in a Distance Education format becomes more of an expectation for new hires and prospective members of a faculty (Chaney, et al., 2009).

Advantages of Distance Education

For the students, Distance Education will have several advantages. These will include convenience for the student, reduced travel cost to attend class, and a potential for increased learning through independent study. Distance Education will allow most students to study at their own pace while allowing them to choose the time when they will study. In order for students to be able to accomplish this, materials will need to be developed specifically for the Distance Education learner. Class materials have changed dramatically over the years from ones developed for correspondence courses to other instructional material developed for delivery over the internet or other technology (Milheim, 2001).

Faculty Concerns

An issue for many faculty members interested in Distance Education is the area of compensation. It will be extremely important for universities to consider how they implement any compensation program for faculty participating in Distance Education. Consideration will need to be given as to how and when compensation will be given. It may be necessary to compensate faculty for their time in developing a course for Distance Education in addition to compensation for delivery of a course via Distance Education (Milheim, 2001). Any instructor who is developing a course for delivery via a Distance Education format will need to document the time spent on this development. This documentation will help administrators know the actual cost of the course and may also provide a guide to compensation for faculty. It is likely that any faculty member who is developing a course to fit a Distance Education format will

spend more time on that development versus developing a course that will be taught by traditional instructional methods (Charr - Chellman, 2000). Universities will also need to develop timelines within which they will negotiate compensation with faculty members. Many times this will result in a renegotiation of contracts for those involved (Milheim, 2001). There may be times where compensation may not be in the form of direct payment. Compensation may include additional release time, payment to attend conferences on Distance Education and absorbing the cost for proper training of faculty members (Milheim, 2001). Often times, without grant money to fund start-up, it may not be possible to implement any type of compensation program for distance learning faculty (Berge & Muilenberg, 2001).

A change in instructional style may be necessary for delivery of a course via Distance Education methods. For some faculty, this may be a major paradigm shift from their usual method of instruction (Milheim, 2001). A great number of students have expressed the opinion that while many professors are knowledgeable with regard to their subject matter, they often know little about teaching and even less about learning (Novak, 2002). Distance Education will need to be more than a simple transfer of a traditional lecture into an electronic format. There will need to be a social structure developed and a social connection made unlike what occurs in traditional classrooms (Walker & Fraser, 2005). Instructors may have to develop different methods of student evaluation as well as learn new technologies in order to be successful in their courses (Milheim, 2001). Faculty must recognize that Distance Education is unique pedagogically and that it does provide a sound educational experience for the student (Buchanan, 2004). It is no longer just a convenience for the student but a part of their university experience. It will be important to listen to the students and learn from the experiences that they have in Distance Education courses. This data will allow universities to gain a greater level of

understanding about the experiences of Distance Education learners (Buchanan, 2004). It is likely that universities will encounter problems as Distance Education courses are implemented. However, research has shown that problems encountered by one university may not always be generalized to other institutions. These problems may exist only within that university or department and possibly stem from a poorly managed process of implementation (Charr - Chellman, 2000).

Any training that is done will need to be undertaken as a long- term project. One would not expect training to be accomplished in a short period of time. Faculty will need to be trained in the use of technology to help ease anxiety both in themselves and in students who are enrolled in their course, in the development of new course materials for use in a Distance Education format and in humanizing the course to reach all students (Milheim, 2001).

If all of these things continue to happen, it appears that Distance Education will be a field of instruction that will continue to grow over the years. It will have a great potential for financial return as well as having the potential to become a more integral part of instruction (Milheim, 2001). While this increase in enrollment may put additional demands on the technology that is present at the institution, there will be no need for more physical space in the classrooms. The greater demand and expense for technology may be offset by the increased fees from those students who have enrolled in a Distance Education class (Gibson, Harris, & Colaric, 2008).

Allocation of Resources

In order for institutions to succeed when offering courses via Distance Education, there must be sufficient planning by the institution. Also, the plan must include both delivery and assessment to help ensure the success of the program. Universities need to rely on the research that is available and to make full use of this research. While it does seem that universities

recognize the importance of Distance Education as we move into the future, the practice and research into the topic seem to be trailing behind. If done properly, Distance Education can be a rewarding experience for the student learner (Bray, Harris, & Major, 2007). It appears that the key element in any Distance Education course will be learning. The overall approach can be further facilitated by a dialogue between the instructor and student. Two types of dialogue may be utilized: First, interpersonal dialogue which will tend to focus on the subject matter being taught. Secondly, intrapersonal dialogue which will focus on the mental aspects of learning used by the student (Gorsky & Caspi, 2005). These two dialogues will help to both mediate and facilitate the effectiveness of the instruction and learning in a Distance Education course (Gorsky & Caspi, 2005).

In order to accomplish goals in Distance Education, universities will need to carefully allocate resources for greatest effectiveness. Resources will be needed to overcome both perceived and real barriers to Distance Education. The barriers may be numerous and varied and cause difficulties in implementing any program. Resistance to change will rank high among the barriers since most organizations will normally be resistant to change in their system. It will be important to have an administration that is supportive (Berge & Muilenberg, 2001). Politically, however, Distance Education may prove to be a valuable concept. It could spread the value of higher education to more people, alleviating the notion that university education is only for the more affluent in society. This is why in many countries, Distance Education is sometimes referred to as "second chance university" (Powell & Keen, 2006). It would be best if a formal plan is developed and the allocation of resources is mapped and articulated as goals are established (Bray, Harris, & Major, 2007). Universities will need to develop policies that include planning across the various colleges at the university along with departments and disciplines.

Long-range strategic planning will be important to develop policies that incorporate Distance Education into the expected workload of faculty along with incorporation into the mission of departments (Tabata & Johnsrud, 2008). As public funds are allocated by state governments, questions will surely be asked about the effectiveness of the program for both the university and the student. The question will become whether this is a cost effective investment for both the student and the allocating body (Koch, 2006). While increasing Distance Education offerings may generate additional revenue, there will most likely be increased costs concerning its implementation. These costs will most likely be associated with technology, its purchase and maintenance and caution should be exercised during the implementation process (Ponzurick, France, & Logar, 2000). Many previous studies have cited no significant difference when looking at the result of Distance Education programs versus other types of instruction. As more research is conducted, control groups may need to be used in order to obtain more substantive results in the studies (Koch, 2006).

Another important consideration concerning resistance to Distance Education may involve legal issues. As the internet is used more commonly as an instructional medium, issues regarding proper use and copyright may be raised as well as the increased exposure to viruses and possible hacking of computer users in a Distance Education class (Berge & Muilenberg, 2001).

Program Evaluation

As the use of Distance Education continues to expand in higher education, it will be important for universities to develop instruments to assess its value. Universities must determine what will lead to success in the Distance Education environment in both teaching and learning by the student (Walker & Fraser, 2005). As more and more students become involved in the

distance learning environment, changes will evolve concerning the way we learn, the way we communicate and the way instruction is delivered via a Distance Education format (Walker & Fraser, 2005). Assessment of Distance Education programs may be linked to scales involving student learning, student autonomy and instructor support among others. This data will aid in the further research of Distance Education since the growth and implementation are tending to outpace new research concerning newly developing programs (Walker & Fraser, 2005). Most early research has tended to focus on the technological aspect of Distance Education rather than focusing on the student and learning. Focusing on the learning environment may help universities create the most advantageous learning situation for the Distance Education student (Walker & Fraser, 2005). The research of Walker and Fraser supports the findings of many previous research studies which revealed collaboration and student interaction to be important factors in a high quality Distance Education program (Walker & Fraser, 2005).

The effectiveness of any Distance Education instruction may not be readily and properly evaluated. There appears to be a lack of ample evaluation methods available which may possibly be a cause for concern (Berge & Muilenberg, 2001). Additionally, student support services may be lacking for those students that are at a distance. Students' ready or easy access to services such as advising or library services may be limited by their distance. It may also be difficult for instructors to monitor Distance Education students and always be assured of their identity. The difficulty or barrier faced by a university will depend on the level of implementation that they have achieved. Different barriers will be faced at different levels of implementation (Berge & Muilenberg, 2001). By their nature, universities tend to be conservative when it comes to maintaining the status quo. They are slow to change with regard to the advanced use of technology. However, once the change has come and "Distance

Education has become institutionalized," that barrier has been removed and Distance Education will become part of the culture of the university (Berge & Muilenberg, 2001).

As the field of Distance Education continues to grow, administrators of universities will certainly notice. This method of instruction can apply to virtually all fields but especially those specific fields which generally require some form of continuing education, such as healthcare (Chaney, et al., 2009). As Distance Education continues to grow and expand, it will become necessary to define quality Distance Education instruction and develop ways to assess it. This may be a difficult task since the definition of quality will vary depending on the stakeholder who is surveyed. The term quality will be interpreted differently by students, faculty, and administrators (Chaney, et al., 2009). The courses that are designed to be delivered via a Distance Education format will need to be consistent with the mission of the university. If it is not, then the presence of such a course may do "more harm than good" (Chaney, et al., 2009). While delivering a course in this manner, it is not always necessary to have the best and newest of technologies. Interaction of the learner and ease of access will play important roles in the selection of the best and most appropriate technology to use. The needs of the students must be addressed as well as the design of the instructional material before final decisions are made (Chaney, et al., 2009). Addressing course structure and guidelines with prospective learners is an important quality indicator associated with Distance Education courses. The students must be made aware of the expectations for the course so that they may determine if they have the technology necessary to participate. They should be given all supplemental materials for the course along with objectives and outcomes for the course. Learners must also assess themselves to determine if they have the self-motivation necessary to participate, complete and succeed in the course (Chaney, et al., 2009).

As with any type of instruction, quality indicators will need to be referred to and addressed on a regular basis. These will help to guide and shape the course of instruction to work toward the best and most practical methods as well as maintaining a high quality with regard to instruction (Chaney, et al., 2009). There are concerns that students who participate in distance learning may not learn as much as those students who are involved in traditional face-to-face classroom instruction. However, research seems to show that one may be as effective as the other with regard to learning as long as the instructional tasks which are used are appropriate, there is timely feedback between the instructor and student and there is some student-to-student interaction (Hamzaee, 2005). This outcome has been further supported by other research study findings which have shown that a Distance Education course is comparable to a course offered via a traditional means of instruction (Shea, Motiwalla, & Lewis, 2001).

An expressed area of concern for all Distance Education courses is the effectiveness of such instruction. Is this type of instruction effective for both the learner in terms of the material presented and learned and for the institution in terms of cost effectiveness for the university (Novak, 2002)? Most likely, the instructor will need to develop individual policies for the class with regard to participation in the class and other activities that are related to the course (Ponzurick, France, & Logar, 2000).

It will be important for any Distance Education program to be recognized as being accredited using benchmarks established by regional accrediting agencies. These benchmarks are grouped into three distinct categories with guidelines established within each category. The first category should include traditions, values and principles. This category includes benchmarks that recognize the traditions and values as established by institutions of higher learning while acknowledging the need to change and adapting to that change. This will most

likely be a work-in-progress as change will occur as the needs of institutions change and as Distance Education grows and evolves also. Challenges will need to be addressed so that Distance Education instruction remains strong and effective (Novak, 2002). The second category should include a commitment to cooperation, consistency and collaboration. As universities develop Distance Education that will lead to a degree, there will be careful initial review. The program will need to be evaluated as part of the regular evaluation process as well as a self - evaluation within the university. This evaluation will lead to continued improvement of any existing programs and remediation of any programs that may be lacking. Drastic measures such as suspending ineffective programs that are not remediated may be recommended by an accrediting body (Novak, 2002). The third category includes a broad range of topics such as curriculum and instruction and faculty/ student support and commitment. This wide range of topics will help an institution learn whether or not the program is effective and having the desired results (Novak, 2002).

Since success is such a broad term, it must first be defined in order to determine if a Distance Education program has achieved success. If a program is successful, there will be shared success between the student and the faculty. From a student's perspective, success would mean satisfactory performance in the course. To achieve this, the student will need to employ certain strategic steps along the way. Planning for success in the course will be very important. These plans will need to be flexible to allow for unpredictable and unavoidable occurrences. A second strategic step is time management. For many students, time will be at a premium, and effective use of time will be critical for success. The realization that time management skills will be important and that the student will be expected to read a great deal during the course are both important concepts to be aware of (Buchannan, 2004). Since Distance Education generally

provides a more flexible time requirement, it provides a better cost opportunity for the student (Hamzaee, 2005).

The faculty's share of success will depend on several factors. Successful faculty will usually be well-oriented with the program and have a genuine commitment to the students' overall success. Their expectations are generally transparent, and they are committed to teaching efficiently. Successful faculty will excite the student to be a part of the program, and the students have generally invested the time to have the necessary computer and technical skills that will allow them to succeed. For these faculty, success has become a philosophy for them and their instruction (Hamzaee, 2005). However, to continue to be successful, faculty must continue to develop new materials and instructional practices. Many times, once faculty has changed from a traditional format to a distance format, little innovation occurs. That faculty member becomes comfortable with both styles, yet fails to realize the learning curve of the student may be steep in both the learning of new technology and the content of the course (Shaffer, Finkelstein, Woelfl, & Lyden, 2008).

Librarians can also play a key role in the effective delivery of a course via Distance Education. They can become a valuable resource to educate students on a one – to – one basis concerning the use of technology for Distance Education. Involvement in whole-class instruction on a short-term basis may also prove to be valuable. This will allow them to solve problems on a wide-spread basis rather than having to address problems on a case-by-case basis. Many instructors inaccurately assume that all Distance Education students already possess the necessary technology tools to succeed. Many times the skills are overestimated, and the use of library resources will prove to be very helpful for the students. To overcome this overestimation, librarians may want to target those students who are first-time Distance Education students and

enhance their technology skills (Shaffer, Finkelstein, Woelfl, & Lyden, 2008). In addition to helping students, librarians may also be of benefit to the instructors of Distance Education courses. They can educate faculty concerning internet resources and copyright issues that often arise in technology - driven courses (Shaffer, Finkelstein, Woelfl, & Lyden, 2008).

It has been suggested that different organizations and institutions may be at different levels in regard to their capabilities concerning Distance Education; Furthermore, barriers that exist may not be technological or pedagogical. True barriers may be the organization's resistance to change. There may need to be a true shift in organizational structure and ideas in order for Distance Education to gain wider acceptance in an institution of higher learning (Berge & Muilenburg, 2001). Other research has consistently shown that time is a major barrier or concern when discussing Distance Education. This particular area is one that appears to receive the most attention when asking for faculty input even among those institutions where Distance Education is widely accepted. This one factor has been a consistent barrier that is noted in all organizations regardless of their level of incorporation of distance learning (Berge & Muilenburg, 2001). However, while the time is consistent across all levels, other barriers such as evaluation, access and student services show a relationship between the level of maturity of the organization and the barrier. It should also be noted that all barriers are perceived in the same way and that not all show the same relationship to the maturity of the organization or institution (Berge & Muilenburg, 2001).

As time passes and more technology is used in different forms of education, all forms of education are converging. Learning systems are leaning toward becoming more learner responsive and generally more flexible (Stella & Gnanam, 2004). As universities move toward a more business-oriented model in the future, Distance Education formats may help them to be

more efficient and profitable (Charr - Chellman, 2000). Distance Education has also narrowed the gap between those students who are on campus and those students who are not. The convergence has led to a new term described as *distributed learning* to fit this new model. This new term may soon be used instead of the more commonly used *Distance Education* as that terminology may be seen as too constrictive. If that becomes the case, then Distance Education as we commonly know it today will need to be redefined (Stella & Gnanam, 2004).

Quality Control

One area of concern throughout the process of implementing Distance Education has been quality control. It has been a long-held belief that courses administered through a Distance Education format were of lower quality than traditional academic class offered on site at the university. Proponents of Distance Education will argue, however, that the same issues of quality will exist in the regular classroom as well. Both forms of instruction may be done poorly or done well depending on the situation (Stella & Gnanam, 2004).

If we are to assess the quality of a Distance Education program, what standards should be used for comparison? Many organizations have developed principles and guidelines which may be used to gauge the effectiveness of the program. Benchmarks established by The Institute for Higher Education Policy of USA are one possible resource which may be used to gauge effectiveness. These benchmarks are considered essential by some, yet there still may be substantial debate concerning what is considered good and what is considered substandard in Distance Education (Stella & Gnanam, 2004). While there has been considerable research in Distance Education, it is not complete. Any new research should build on what has already been done and simply work to fill in gaps. These gaps seemingly lie in areas concerning administrative issues, quality issues, costs and ease of access (Stella & Gnanam, 2004).

As with any effective quality assurance program, defining quality in Distance Education is a difficult process. Universities must determine who will assess the quality of a given program and what are the qualifications of this so called expert? Many potential assessors may have a bias and think that Distance Education is not as effective as a traditional classroom. To be effective, they will have to change their mindset which may be difficult to do. Any group of assessors will need to be well-informed as well as comfortable with the concept of Distance Education as a viable form of instruction for higher education (Stella & Gnanam, 2004).

Some researchers argue that quality assurance in Distance Education is virtually the same as for any other instructional method. Those who argue against this concept state that in Distance Education the faculty role and classroom management techniques are different as well as the use of the library and other learning resources necessary for the course (Stella & Gnanam, 2004). These attributes and new variables are unique to Distance Education and pose challenges to validity of instruction that are not seen in the more traditional instructional format. While some standards have been set for quality assurance in Distance Education, these standards may not always be able to be met and therefore are discontinued, further adding to the debate about assuring quality in any Distance Education program. Appearing to further complicate the question of quality is the idea that different methods may not be needed and a drastically different approach to instruction may not be necessary. (Stella & Gnanam, 2004).

An alternative to solely assessing quality would be to look at student outcomes in courses that are delivered via a Distance Education format. This sort of evaluation would look at standards of achievement and rigor, student achievement assessment and student performance against generally established standards. Whatever direction is chosen, it will be important to remember the uniqueness of Distance Education and its students. A key issue will be to

determine the target group for any study and have that characteristic be well defined (Stella & Gnanam, 2004). In many cases, the Distance Education student is more of a non - traditional student; possibly this group should be looked at more closely as the target group for additional study (Shea, Motiwalla, & Lewis, 2001).

Simply having a quality assurance program in place may solve the issue of quality control in a Distance Education program. There will be a stigma to overcome since there are many in the academic setting who consider Distance Education to be "second grade" (Stella & Gnanam, 2004). One would need to ensure that any evaluation of a program would have to be done with the same rigor and criteria that are used for a traditional evaluation of instruction. It will be essential that the same level and scope of scrutiny be utilized in any evaluation (Stella & Gnanam, 2004). Any quality assurance program used will need to have readily established benchmarks in order to make valid value judgments concerning the program. Specific indicators should be used along with the benchmarks to ensure that quality standards are being met. It will be necessary to use both quantitative and qualitative assessment methods and to spell out exactly what characterizes the different levels of performance that are used in evaluation (Stella & Gnanam, 2004).

One major aspect of any performance review in Distance Education will need to be redefined. The aspect of on - site visits will need to be changed to something that is more conducive to the distance learning environment. Current methods may not translate well into evaluating a person's home or living room. Any new methods employed will need to be translated carefully. Some methods of adaptation may be relatively simple while others such as the use of technology may require significantly more time and effort. This aspect of a limited site visit may become more important as time goes on and more Distance Education courses are

offered. There may be less need for a physical site as the learning may become boundary less (Stella & Gnanam, 2004).

Final outcomes will require more study. The focus of any quality assessment will need to be determined, and the program used will need to be designed with that in mind. It will also be necessary to note who will be the direct beneficiary of quality assessment; is it the instructional unit or is it the learner? Whichever the case, significant adjustments will need to be made and a pooling of knowledge and resources will be necessary. It is unlikely that current methods employed for traditional instruction would be as effective for evaluating Distance Education. Better ways of assessing Distance Education will be developed but the distinct characteristics of quality assessment will be preserved (Stella & Gnanam, 2004).

Over long periods of time, accreditation has offered universities constancy in their approach to instruction and to their academic offerings. This constancy has withstood political changes, advancements in technology and other changes in society (Swail & Kampits, 1999). As education is beginning to shift to an approach that can lead to instruction anytime, anywhere, a new opportunity presents itself for a change in the accreditation process. As the landscape and pedagogy of higher education changes with the advent and implementation of Distance Education programs, further investigation into accreditation processes and procedures will need to follow. As far back as the early 1900s, talk of technology entering into the classroom has been mentioned. Talk of this technology one day replacing teachers has also been discussed, yet this has not occurred. Even with all the increase of technology, the pedagogy of the university has changed very little (Swail & Kampits, 1999).

As issues of accreditation arise, both faculty and the public seem to agree on the credibility of online or Distance Education courses as well as the courses offered on campus in a

traditional format. As universities work to ensure quality and accreditation, many issues will arise and need to be considered, among them peer reviews, learning climate and the development and improvement of educational programs (Swail & Kampits, 1999). Organizational structure, and a commitment by the university appear to be key in developing appropriate and useful Distance Education programs in institutions of higher learning. All of these will require institutional involvement that is meaningful and geared toward developing standards that will be useful in the accreditation process. For accreditation, the work should also be a collaborative effort between the institution and the accrediting agency. Together they must develop mutually acceptable guidelines that will play a role in the development of effective programs (Swail & Kampits, 1999). Since the concept of widespread Distance Education is a relatively new one, the issue of accreditation of those programs is new as well and provides a difficult problem for accreditors. How should they deal with this growing trend and market in education and higher learning? The issue is one that is complex and one that may take time to resolve. It does seem that universities are willing to deal with the issue head-on as they are cognizant that Distance Education is likely here to stay and probably will grow in the future. The challenge will be to keep open discussion going with regard to accreditation and quality assurance (Swail & Kampits, 1999).

Once a Distance Education program has been established, there is concern that there will be little to no innovation that will occur in the course designed by the faculty member. Factors that control traditional-based lectures may also figure into the Distance Education format. Once a faculty member has changed format, it appears that change may occur only incrementally (Shaffer, Finkelstein, Woelfl, & Lyden, 2008). Once faculty members have mastered the concept of the Distance Education format, they seem to forget that most students will have a

steep learning curve with regard to this change from the traditional format. Some responsibility may fall to librarians to help educate students in the distance format in both formal and one-to-one sessions. This support will help the students to adapt to the changes both in the delivery format and the use of technology in the classroom. Library resources will become an important component of effective Distance Education, and faculty will need to make use of them (Shaffer, Finkelstein, Woelfl, & Lyden, 2008). Many faculty incorrectly assume that students will have the necessary skills that they need in order to succeed in a Distance Education format. While students will often possess the telecommunications skills that they need, they will often not possess the research skills that are necessary especially if this is their first Distance Education course (Shaffer, Finkelstein, Woelfl, & Lyden, 2008).

An added concern in some Distance Education courses will be the perceived attitudes of instructors toward copyright. Many instructors may choose to use internet-based resources rather than peer reviewed material in order to avoid any copyright concerns. In some instances, these choices may not be the best ones for the instructor to make. These resources may not be the best literature available to the students, and using them does not model good research behavior for the students. Many faculty also incorrectly assume that since information is posted on the internet, copyright rules are not applicable. In this situation, both the instructor and the student will need to be educated regarding copyright laws. Although this information is readily available, librarians may need to find effective ways to communicate this to the instructor and to the students (Shaffer, Finkelstein, Woelfl, & Lyden, 2008). The enactment of the TEACH Act passed by Congress in 2002 may help educators in this regard. Fully known as the Technology, Education, and Copyright Harmonization Act, the TEACH Act seeks to provide a balance between protecting copyrighted documents and works and allowing educators to use them in

Distance Education instruction without the payment of royalties or receiving permission from the owner of the copyright. By enacting the TEACH Act, Congress has acknowledged the importance of Distance Education while still striving to protect the owner of the copyrighted material. The law permits the instructor to use the material and for the student to have access to material during a prescribed time period but not be granted unrestricted access to the material outside of this time period. This burden will fall to the university as it will have to develop controls for student access to materials posted. One possible solution suggested would be to link access to enrollment figures provided by a university's registrar. While this access now has parameters on which a faculty member may rely, the focus of the faculty members should be on the quality of the instruction which they are providing. Therefore, while the TEACH Act provides significant opportunity for Distance Education faculty, there is also a burden and a responsibility that comes with it. Educators will need to be mindful of fair use and respond to gaps in the law which may be exposed as technology advances. All of this will require the active involvement of all members of the institution from faculty to administrators to students (Crews, 2003).

Research involving studying and study methods of Distance Education students has been relatively consistent. These findings show that students involved in Distance Education courses generally use the same concepts and study methods as those that are used by students in a traditional education course (Richardson, Morgan, & Woodley, 1999). Also consistent within several research studies is the fact that Distance Education students tend to exhibit or possess characteristics of studying that are more consistent with the goals of higher education. This is a significant fact that further shows the potential importance of Distance Education (Richardson, Morgan, & Woodley, 1999). This conclusion would suggest that both Distance Education and

traditional students are similar once background differences are accounted for. It has been noted, however, that there is a difference in study habits among Distance Education students with regard to age, area of study and gender and that these findings have been consistent among several studies (Richardson, Morgan, & Woodley, 1999). It appears that the way a student approaches learning and studying in a Distance Education course is directly related to their motives and that these motives are driven by attitudes toward studying for this course (Richardson J. T., 2007).

Distance Education expansion has come about relatively quickly. This expansion may be attributed to the rapid expansion of the use of technology and to the ease of access to this technology. This has challenged higher education and at times possibly overwhelmed it. It has been a difficult task to keep up with the changes and new methods, new technologies and other challenges. Benchmarks that have been established are generally considered temporary measures due to the tremendous amount of change which occurs. These benchmarks will need to be constantly reviewed and modified because a solution that worked previously may not be sufficient for the needs of the future Distance Education course. (Novak, 2002).

Student Concerns

To be successful in a Distance Education program, students will need to be adequately prepared for this type of instruction. They must be provided with instruction concerning the requirements for the course along with the requirements regarding pedagogy and technology (Novak, 2002). There will also need to be adequate planning on the part of the university to ensure that learners will have the experience that they are expecting from the course. Unfortunately, many times a trial-and-error approach is used rather than adequate prior planning (Buchanan, 2004).

The effect of the learning environment on the learner is a concern among stakeholders in Distance Education. Learning styles and seat time in the class may have an effect on the distance learner. Researchers differ as to how much the learning environment in a Distance Education course should resemble the learning environment in a traditional course (Novak, 2002).

As technology capabilities have increased over the past several years, education has not seen a similar increase in the attention to the educational implications of that technology, causing a gap between technology and the pedagogy of the interactive classroom. Brindle and Levesque suggest that there are three challenges to effective interactive Distance Education. These include technology challenges, work – site dynamics and the student - professor relationship (Brindle & Levesque, 2000). Obvious challenges are presented when a class is delivered via an interactive Distance Education format. Technology issues will always be a concern. The transmission must be smooth, and all equipment must operate smoothly and effectively. When this does not happen, the class may be over. Also many times in this format, there is a delay in the broadcast for the off-campus student. These delays may sometimes lead to a jerky appearance of the broadcast and instructors should be aware that effective motions in a normal classroom such as walking around and hand movements may lose effectiveness in a broadcast class. Different classroom techniques such as tone of voice and speed of delivery may need to be employed. It is also important to note that actively engaged classrooms may not appeal to off-site students. They may tend to feel left out or bored and may simply tune out since they do not feel involved (Brindle & Levesque, 2000). Many times the relationship between the student and the instructor changes in an interactive Distance Education course. The instructor might not focus on individual students but rather on transmission sites, especially if more than one student is present at the off-campus site. This focus changes the dynamic of the relationship since often students

will interact with each other at off-campus sites similar to how they may interact in a normal classroom setting. The interaction creates a group level dynamic of which the instructor is not aware. These off-campus students may mute the microphone and carry on conversations about the lecture. These conversations may prove to be beneficial since social information processing often has an effect on student learning (Brindle & Levesque, 2000).

An important issue that must be considered is the behavior of students who are present at off-campus locations. When a student is present in a normal classroom setting, it is easy for the instructor to have control. If a student is late for class, gets up during class or is disruptive, the behavior is generally controlled by using non-verbal cues from the instructor. This type of classroom management is ineffective for those students who are off-campus since many times those students are not continuously monitored and the instructor is unaware of any behavioral concerns (Brindle & Levesque, 2000).

A missing component in many Distance Education classes is the development of a faculty student relationship. Those students at off-campus sites do not get to have interaction with the instructor in an informal way which normally happens in the traditional setting. They do not get to visit in the hallway or go by during office hours to develop that instructor student relationship. It is also found that off-campus students do not have as many opportunities to develop relationships with other students in the course, an important component that these students miss out on (Brindle & Levesque, 2000). Studies have suggested that these relationships are not a major concern to the millennial generation. A relationship between student and faculty is only of minor concern, and academic life is not generally a priority for the millennial student (Hanson T. L., Drumheller, Mallard, Mckee, & Schlegel, 2011). However, students may miss out on the closeness that can develop simply from a smile, eye contact or proximity to the instructor

(Hanson T. L., Drumheller, Mallard, Mckee, & Schlegel, 2011). This absence of nonverbal cues from the instructor to the Distance Education students could possibly be an issue for some. The possibility also exists for there to be some social isolation for the Distance Education student (Shea, Motiwalla, & Lewis, 2001). Distance Education students are generally aware of this and realize that the course being offered is more "client centered" and is of service to the student rather than a privilege (Charr - Chellman, 2000). If possible, it may be beneficial for an instructor to build in some face-to-face contact time with students enrolled in a Distance Education course. This is a concept that most likely will not be popular with students; however, it may help to build a relationship that may otherwise be lacking in a Distance Education course (Charr - Chellman, 2000).

In order to effectively implement any Distance Education program, it is recommended that all persons who are involved receive formal training concerning this type of instruction. This training will involve students, faculty and any others involved in the dissemination of the program. This training may be in various forms, but it is important for all involved to be trained properly (Buchannan, 2004).

Another important aspect of Distance Education to consider is whether it will translate well into many different courses and disciplines. Using the same format and pedagogy may not work across all disciplines; doing so could affect the overall quality of the instruction in exchange for the convenience offered by a course offered via a Distance Education format. It is important to consider whether this would be an effective format in courses which require a lab or other types of hands-on learning (Ponzurick, France, & Logar, 2000). Research studies involving faculty from several disciplines would help to increase knowledge with regard to the acceptance of Distance Education by university faculty (Gibson, Harris, & Colaric, 2008). A study of

aggregate data does show that there is generally no significant difference between Distance Education instruction and traditional face-to-face instruction. However, making this generalization may not be completely accurate. Variance in the outcomes of both forms of instruction does exist (Zhao, Lei, Yan, Lai, & Tan, 2005). In general, students are looking for course content and assignments that are relevant and related to the assessment criteria that are established for the course. High quality feedback is also important for the distance learner. Since face-to-face contact is generally limited, it is important that written feedback is clear and concise. Relevance of assignments, quality feedback and clear assessment criteria appear to be most important factors to the student enrolled in a Distance Education course (Tricker, Rangecroft, & Long, 2001). Researchers have shown that any factors that have an impact on traditional forms of instruction will generally be the same factors that will impact Distance Education forms of instruction (Zhao, Lei, Yan, Lai, & Tan, 2005)

Distance Education as a means of instruction for college students appears to have a place as universities move forward. It is a way of attracting more students for the university and therefore generating more revenue. The concept also generates concerns with regard to evaluation and quality control over instruction. There will need to be ample planning and allocation of resources dedicated to any Distance Education programs in order for them to be successful. Simply putting a program into place without the proper safeguards to ensure quality of instruction will not work. Training programs will need to be developed and faculty will need time allocated to them in order to fully develop courses that may be taught using a Distance Education format. There appears to be no easy solution nor is there a one size fits all approach that may be used. However, with proper planning, it appears that Distance Education will continue to gain more acceptance among universities.

CHAPTER 3: METHODOLOGY

Problem

The primary purpose of this study is to determine the influence of selected demographic and perceptual characteristics on the culture and desirability of Distance Education among faculty at a research extensive university in the southeastern region of the United States

Population and Sample

The target population for this study was full and part time faculty at comprehensive public universities in the southeastern United States. The accessible population was full and part time faculty in one college at a research extensive university in Louisiana. The current size of the accessible population is 168. The minimum sample size was determined to be 53 using Cochran's Sample Size formula. The calculation using the Cochran Sample Size formula was as follows:

Cochran's Sample Size formula

Equation

$$n_0 = \frac{t^2 s^2}{d^2}$$

$$n_0 = \frac{(1.96)^2 (.67)^2}{(.15)2}$$

$$n_0 = \frac{3.8146 (.4489)}{.0225}$$

$$n = \frac{n_0}{1 + \frac{n_0}{N}}$$

$$n = \frac{77}{1 + .46}$$

$$n = \frac{77}{1.46}$$

$$n = 53$$

The legend for Cochran's sample size determination formula is as follows:

d = acceptable margin of error of +/- 2%

(.02 x (5) point Likert – type scale) = .15

s^2 = the estimated variance (.7) (range/6 standard deviations)

t^2 = acceptable risk

(t at .05 for N = 1,000 is 1.96)

N = population size approximately 168

n_0 = unadjusted sample size

n = adjusted sample size

Instrumentation

The instrument used to collect data for this study consists of a questionnaire developed by Dr. Shanan Gibson (Gibson D. S., 2014) and used with permission from the author. Minor changes to the instrument were allowed with the consent of the original author. Content validity of the survey instrument was determined through a review by a select panel of experts.

Data Collection

Contact was made with the Dean of the selected college at the university to help in determining accessibility to a database of current full and part time faculty in the college. Further contact was made with the Institutional Review Board (IRB) to determine the procedures to

follow in order to conduct the survey at the university. Contact was made with the developer of the instrument that was used and permission was obtained for use of the questionnaire in this study as long as the work is properly cited. Permission was also obtained to make minor changes to the instrument. An electronic survey administered through Qualtrics (Qualtrics, Provo, UT) was emailed to the accessible population. A follow-up email was sent two weeks following the initial email. After an additional two weeks, a second follow-up email was sent. A final follow-up email was sent six weeks after the initial email was sent. After allowing an additional week for responses, the survey was considered closed and no further responses were expected or accepted. Since the survey was conducted electronically, no additional follow-up of non-respondents was conducted. Participation in the survey was voluntary and all information provided was held in the strictest of confidence by the researcher with electronic responses stored on a secure website.

Data Analysis

The first objective of this study was to describe university faculty at a research extensive university in the southeastern region of the United States on the following demographic characteristics:

a. age
b. gender
c. degree held
d. years' experience
e. academic rank

The variables of gender, degree held and academic rank are nominal variables and frequencies and percentages were used to describe participants in each category. The variables

of age and years' experience are measured as interval data. Mean and standard deviation were used to describe participants on these variables

The second objective of this study was to determine the culture of Distance Education programs within the institution as perceived by faculty at a research extensive university in the southeastern region of the United States. A factor analysis was conducted on the nine variables used to measure culture. Seven items with an adequate Measure of Sampling Adequacy (MSA) were loaded on one factor and a mean culture score was computed for each of the included variables.

The third objective of this study was to determine the extent to which electronic resources are used in the instructional activities of faculty at a research extensive university in the southeastern region of the United States. The variable was considered nominal data and frequencies and percentages were used to describe participants on these variables.

The fourth objective of this study was to determine the perceptions of Distance Education among faculty at a research extensive university in the southeastern region of the United States. A factor analysis was conducted on the 25 variables designed to measure culture. Twenty one variables with an adequate MSA were loaded on "Knowledge and Resources" and "Institutional Issues" factors. A mean perception score was computed. The fifth objective of this study was to determine the desirability of teaching by Distance Education as perceived by faculty at a research extensive university in the southeastern region of the United States. A factor analysis was conducted on the15 variables to measure desirability. Thirteen variables with an adequate MSA were loaded on one factor and a mean desirability score was computed.

The sixth objective of this study was to compare Distance Education with Traditional Face-to-Face delivery of instruction on the following selected measures:

a. Selected Process and Outcome Measures of the Learning Environment.

b. Expected Input and Process Traits of Distance Education

c. Appropriateness of Distance Education for Selected Program and Process Measures

d. Importance of Selected Learning Environment Components.

The data is considered nominal data and frequencies and percentages were used to describe the participants.

The seventh objective of this study was to determine if relationships exists between perceptions of Distance Education and selected demographics. A factor analysis of the variable yielded two factors, "Knowledge and Resources", and "Institutional Issues" which were treated as the measure of perception and termed subscale perception scores. The Pearson Product Moment Correlation Coefficient was used to describe the relationship between age and the subscale perception scores and years' experience and the subscale perception scores. An independent t – test was used to describe the relationship between the subscale perception scores and gender subscale perception scores and highest degree held.

The eighth objective of this study was to determine if relationships exist between perceptions of Distance Education and the following other perceptual factors among faculty at a research extensive university in the southeastern region of the United States:

a. Culture of Distance Education programs within the institution

b. Extent to which electronic resources are used in instructional activities

c. Desirability of teaching by Distance Education

A Pearson correlation was used to determine if a relationship existed between the subscale perception scores and the mean perception and culture score. Davis' indicators were used to describe the correlation.

The ninth objective of this survey was to determine if a model exists explaining a significant portion of the variance in the perceptions of Distance Education as perceived by the faculty at a research extensive university in the southeastern region of the United States from selected demographics and other perceptions

a. age
b. gender
c. degree held
d. years of experience
e. academic rank
f. Culture of Distance Education programs within the institution
g. Extent to which electronic resources are used in the instructional activities
h. Desirability of teaching by Distance Education

A regression analysis was conducted using Knowledge and Resources as the independent variable. Variables which entered the regression were examined for excessive colinearity using the variance inflation factor (VIF).

CHAPTER 4: RESULTS

Objective One Results

The first objective of this study was to describe university faculty at a research extensive university in the southeastern region of the United States on the following demographic characteristics:

a. age
b. gender
c. degree held
d. years' experience
e. academic rank

Age

The first variable used to describe faculty was age. Of the 57 participants, six did not provide an answer to this question. The age of the respondents ranged from 32 years to 69 years with a mean age of 54.6 years (SD = 10.73). When examined in age categories, the largest group of faculty were in the 60 – 69 age group (n= 22, 43.1%). The two groups which had the lowest number of faculty were the 30 – 39 age group and the 40 – 49 age group (n = 6, 11.8 % each) (See Table 1).

Table 1 Age of University Faculty at a Research Extensive University in the Southeastern Region of the United States

Age	n[a]	%
30 – 39	6	11.8
40 – 49	6	11.8
50 – 59	17	33.3
60 – 69	22	43.1
Total	51	100%

[a.] Mean Age = 54. 6, Standard Deviation = 10.73, Range = 32 – 69

Gender

Another variable used to describe the faculty was gender. Of the 57 participants, two did not to answer this question. Of the respondents who did provide an answer, 36 faculty (65.5%) were identified as male and 19 faculty (34.5%) were identified as female.

Highest Degree Earned

A third variable used to describe faculty was the highest degree earned. Of the 57 participants, one did not provide a response to this question. Of those participants who did submit an answer, 10 (17.9%) held a master's degree (MA/MS/MBA) as their highest degree and 46 (82.1%) held a doctorate (PhD/EdD/MD or other doctorate).

Years' Experience

The fourth variable used to describe faculty was the number of years of experience teaching at the college or university level. The number of years of experience ranged from 0 years to 40 years of experience with a mean of 18.3 years (SD = 12.31). When the data were examined in categories, the largest group of participants was in the 11 – 20 year range (n = 16, 28.6%) while the smallest group of respondents was in the 31 – 40 year range (n = 12, 21.4%) (See Table 2).

Table 2 Years' Experience of Faculty at a Research Extensive University in the Southeastern Region of the United States

Years' Experience	n[a]	Percent
0 – 10	15	26.8
11 – 20	16	28.6
21 – 30	13	23.2
31 - 40	12	21.4
Total	56	100%

[a] Mean = 18.3 years, Standard Deviation = 12.31, Range = 0 – 40 years

Academic Rank

The final variable used to describe faculty was the academic rank which they held. Fifty percent of the participants held the position of full professor, which was the largest group (n = 28). The smallest group was assistant professor which accounted for 10.7% of the participants (n = 6).

Table 3 Academic Rank of Faculty at a Research Extensive University in the Southeastern Region of the United States

Instructional Position	n[a]	Percent
Instructor	10	17.9
Assistant Professor	6	10.7
Associate Professor	12	21.4
Full Professor	28	50.0
Total	56	100

[a] One participant did not provide a response to the question regarding instructional position

Objective Two Results

The second objective of this study was to determine the Distance Education culture of programs within the institution as perceived by faculty at a research extensive university in the southeastern region of the United States. A 5 – point Likert type response scale was used in the study that was designed to measure culture. A total of nine items were measured. An interpretive scale was developed to aid in the interpretation of the collected data. The interpretive scale used was 4.5 – 5.00 = strongly agree (SA), 3.50 – 4.49 = agree (A), 2.51 – 3.49 = neither agree nor disagree (NA/D), 1.51 – 2.50 = disagree (D), 1.0 – 1.50 = strongly disagree (SD). When the data was examined using this scale, no items were found to be in the strongly agree, disagree or strongly disagree categories. Five items were found to be in the neither agree nor disagree category while four items were in the agree category (See Table 4). The item with the highest mean was “Distance Education will be successfully implemented at other institutions” (m = 3.95, SD = .903). The item with the lowest mean score was “My knowledge of Distance

Education within my/or other departments results in positive expectations for me with regard to teaching Distance Education" (m = 2.93, SD = .951). (See Table 4)

Table 4 Perceived Distance Education Culture of Faculty at a Research Extensive University in the Southeastern Region of the United States

Item	n	Mean	SD	Description[a]
Distance Education will be successfully implemented at other institutions	56	3.95	.903	A
I know why Distance Education is being implemented at my university	56	3.66	.793	A
The culture perpetuated by my college is task-oriented	55	3.63	.779	A
The culture and/or leadership at my college embraces technology	55	3.58	.875	A
Distance Education is/will be successfully implemented at my institution	56	3.41	.848	NA/D
The culture perpetuated by my college is relationship-oriented	55	3.33	.944	NA/D
Individual professors have the ability to influence decisions regarding Distance Education	56	3.32	.974	NA/D
Distance Education is/will be successfully implemented within my department	56	3.20	.903	NA/D
My knowledge of Distance Education within my and/or other departments results in positive expectations for me with regard to teaching Distance Education	56	2.93	.951	NA/D

[a] The response scale used was as follows: 5 – strongly agree, 4 – agree, 3 – neither agree nor disagree, 2 – disagree, 1 – strongly disagree. The interpretive scale used was 4.5 – 5.00 – strongly agree (SA), 3.50 – 4.49 – agree (A), 2.51 – 3.49 – neither agree nor disagree (NA/D), 1.51 – 2.50 – disagree (D), 1.0 – 1.50 – strongly disagree (SD).

To further examine the data for the culture scale, a factor analysis was conducted on the nine variables designed to measure culture. The first step was to check the Measure of Sampling Adequacy (MSA). The Kaiser – Meyer – Olkin (KMO) was used to check the overall MSA with a resulting statistic of .620 which was satisfactory. In addition, individual item MSAs were examined. Two items were found to have an MSA value which was unacceptable; therefore those two items were eliminated from further analysis. The two items which did not have an adequate MSA were: the culture perpetuated by my college is task-oriented (MSA = .40) and the culture and/or leadership at my college embraces technology (MSA = .28). In order to determine the factors to be extracted from the responses, the scree plot technique was used. The scree plot was created by plotting the latent roots against the number of factors in order of extraction. The point at which the curve begins to straighten out directs to the number of factors to be examined. The method used for extraction was the Principal Component Analysis and the Rotation Method was Varimex with Kaiser Normalization. The rotation converged in three iterations with the optimum number being 2 plus or minus 1. Each of the factor groupings were computed and analyzed to identify underlying constructs. Factor loadings are interpreted as follows: +/- .30 = minimal level, +/- .40 = more important, and +/- .50 considered practically significant. The analyses were also examined for inefficient factors and for the presence of significant cross loadings. Based on the data, it was determined that the optimum number of factors to extract was one (See Table 5). A culture score was computed as a mean of the seven remaining items in the factor analysis. The computed culture score was 3.4

Table 5 Factor Analysis of Distance Education Questionnaire Reponses of Faculty at a Research Extensive University in the Southeastern Region of the United States

Component Matrix[a]	
Responses	Factor Loading
Distance Education is/will be successfully implemented at my institution	.796
Distance Education is/will be successfully implemented within my department	.766
Individual professors have the ability to influence the decisions regarding Distance Education	.669
My knowledge of Distance Education within my/other departments results in positive expectations for me with regard to teaching Distance Education	.652
I know why Distance Education is being implemented at my institution	.568
The culture perpetuated by my college is relationship-oriented	0480
Distance Education will be successfully implemented at other institutions	.440

[a] One component extracted. Eigenvalue = 2.841

Objective Three Results

The third objective of this study was to determine the extent to which electronic resources are used in the instructional activities of faculty at a research extensive university in the southeastern region of the United States. Participants were asked to identify whether they used particular electronic resources in face-to-face courses, Distance Education courses, not at all or if they wanted to learn more about the topic. An extent of use score was calculated with one point being assigned for each selection. A mean score of 9.95 was calculated with a standard deviation of 7.13. The maximum score calculated was 39. For the face-to-face courses, a large percentage of faculty indicated that they currently use email (86.0%), electronic posting of grades (73.7%), syllabus posted to the web (66.7%), electronic submission of assignments (63.2%) and Moodle/Blackboard/WebCT any course management systems (61.4%). Small group activities conducted at a distance, video conferencing, WebQuests, and Instant messenger showed minimal

use with only 1.8% of participants indicating that they used this in a face-to-face class. The highest percentages observed in the Distance Education classes were for the use of Moodle/Blackboard/WebCT any course management systems, electronic submission of assignments and email (12.3%). In the category No I do not use this at all, 19 of the 26 topics showed a percentage greater than 50% indicating that they did not use these electronic resources. The greatest interest in learning more about an electronic resource was in audio lectures for dissemination on the web or CD, discussion forums online and video demonstrations/lectures provided on the web (12.3%).

Table 6 Use of Electronic Resources in Instructional Activities of Faculty

Description	Yes I use this in my face-to-face class		Yes I use this in my Distance Education class		No I do not use this at all		I would like to learn more about this	
	n	%	n	%	n	%	n	%
Audio lectures for dissemination on the web or CD	7	12.3	5	8.8	39	68.4	7	12.3
Moodle/Blackboard/WebCT/any course management systems	35	61.4	7	12.3	15	26.3	1	1.8
Blogs	4	7.0	1	1.8	46	80.7	4	7.0
Chat sessions (online)	2	3.5	4	7.0	45	78.9	5	8.8
Discussion forums (online)	8	14	4	7	39	68.4	7	12.3
Electronic submission of assignments	36	63.2	7	12.3	15	26.3	2	3.5
Electronic posting of student grades	42	73.7	6	10.5	9	15.8	2	3.5
Email	49	86.0	7	12.3	2	3.5	0	0.0
Email listservs	24	42.1	3	5.3	24	42.1	1	1.8
Guest lecturers from remote locations	3	5.3	0	0.0	45	78.9	6	10.5
Instant messenger: AOL AIM/Yahoo/MSN	1	1.8	0	0.0	52	91.2	1	1.8
Online office hours	3	5.3	2	3.5	45	78.9	4	7.0

Table 6 Continued

Description	Yes I use this in my face-to-face class		Yes I use this in my Distance Education class		No I do not use this at all		I would like to learn more about this	
	n	%	n	%	n	%	n	%
Online simulations	3	5.3	0	0.0	47	82.5	5	8.8
Online textbooks	13	22.8	2	3.5	37	64.9	3	5.3
Peer review of assignments online	6	10.5	1	1.8	44	77.2	3	5.3
Podcasting	2	3.5	0	0.0	49	86.0	4	7.0
Posting lecture/study notes on the web	34	59.6	4	7.0	16	28.1	2	3.5
Posting PowerPoint slides on the web	34	59.6	6	10.5	17	29.8	1	1.8
Quizzes or tests taken on the web	9	15.8	6	10.5	68	66.7	4	7.0
Small group activities conducted at a distance	1	1.8	3	5.3	47	82.5	3	5.3
Syllabus posted to the web	38	66.7	6	10.5	12	21.1	1	1.8
Video demonstrations/lectures provided on the web	17	29.8	5	8.8	32	56.1	7	12.3
Video conferencing	1	1.8	3	5.3	48	84.2	2	3.5
Web searching assignments for students	22	38.6	3	5.3	29	50.9	2	3.5
WebQuests	1	1.8	1	1.8	51	89.5	2	3.5
Wikis	5	8.8	1	1.8	48	84.2	1	1.8

Objective Four Results

The fourth objective of this study was to determine the perceptions of Distance Education among faculty at a research extensive university in the southeastern region of the United States. A scale was used in the study that was designed to measure perception. A total of 25 items were measured. An interpretive scale was developed to aid in the interpretation of the collected data. The interpretive scale used was 4.5 – 5.00 = strongly agree (SA), 3.50 – 4.49 = agree (A), 2.51 – 3.49 = neither agree nor disagree (NA/D), 1.51 – 2.50 = disagree (D), 1.0 – 1.50 = strongly disagree (SD).

Only three items did not fall into the neither agree nor disagree category. The one item that fell into the agree category was I find Distance Education technology not useful for education (m= 3.58, SD .875). Two items fell into the disagree category. Those two items were University leadership believes that I should teach Distance Education courses (m= 2.47, SD .766), and Distance Education is an appropriate tool for professors to use as a teaching medium (m= 2.35, SD = .886). A perception score was computed for each of the factors used in the analysis. The perception score for Knowledge and Resources was 3.11with a standard deviation of .496 and the perception score for Institutional Issues was 2.82 with a standard deviation of .449.

To further examine the data for the perception scale, a factor analysis was conducted on the 25 variables designed to measure perception. The first step was to check the Measure of Sampling Adequacy (MSA). The Kaiser – Meyer – Olkin (KMO) was used to check the overall MSA with a resulting statistic of .760. In addition, individual item MSAs were examined. Four items were found to have an MSA value which was unacceptable; therefore those four items were eliminated from further analysis. The four items which did not have an adequate MSA were: University leadership believes that I should teach Distance Education courses (MSA = .39), I find our Distance Education resources easy to use (MSA = .43). It is not easy for me to become more skillful in using the Distance Education technology (MSA = .49), and Teaching Distance Education will probably impact my teaching evaluations negatively (MSA = .49). (See Table 7).

In order to determine the factors to be extracted from the responses, the scree plot technique was used. The scree plot was created by plotting the latent roots against the number of factors in order of extraction.

Table 7 Perceptions of Distance Education among faculty at a research extensive university in the southeastern region of the United States

Item	N	Mean	SD	Description[a]
I find Distance Education technology not useful for education	55	3.58	.875	A
Distance Education is a fad that will soon pass	55	3.49	.998	NA/D
Students are prepared to be successful in Distance Education courses	54	3.39	.899	NA/D
I have the resources necessary to teach Distance Education courses	55	3.36	1.112	NA/D
Offering Distance Education courses diminishes the reputation of a university	55	3.27	1.079	NA/D
I find Distance Education inflexible	55	3.24	.962	NA/D
It is not easy for me to become more skillful in using Distance Education technology	54	3.22	1.058	NA/D
I dislike the idea of Distance Education	55	3.20	1.095	NA/D
I have embraced Distance Education technology in my workplace	55	3.16	.977	NA/D
Assuming that I have the opportunity, I will teach Distance Education courses as much as possible	55	3.11	1.100	NA/D
As an instructor, I am prepared to teach Distance Education courses	55	3.09	1.076	NA/D
My feelings of responsibility toward my students influence me to teach Distance Education	54	3.09	.996	NA/D
My institution provides adequate technology support	55	3.07	1.034	NA/D
I find our Distance Education resources (course management software, etc.) to be easy to use	55	3.05	.650	NA/D
I have the knowledge necessary to teach Distance Education courses	55	3.04	1.201	NA/D
I find it easy to get our course management software to do what I need it to do in my classes	55	3.00	.839	NA/D
Distance Education can be an effective way for students to learn in my area of teaching	55	3.00	.981	NA/D
Teaching Distance Education will probably impact my teaching evaluations negatively	54	2.96	.613	NA/D

Table 7 Continued

Item	N	Mean	SD	Description[a]
Given the choice, I would avoid teaching Distance Education courses	55	2.93	1.120	NA/D
Distance Education is not compatible with how I teach my courses	55	2.91	1.175	NA/D
My feeling of responsibility toward my students influence me to not teach Distance Education	54	2.78	.965	NA/D
Distance Education will lower our teaching effectiveness in the long run	55	2.67	1.139	NA/D
Distance Education can be an effective way for students to learn	55	2.55	.812	NA/D
University leadership believes that I should teach Distance Education courses	55	2.47	.766	D
Distance Education is an appropriate tool for professors to use as a teaching medium	55	2.35	.886	D

[a] The response scale used was as follows: 5 – strongly agree, 4 – agree, 3 – neither agree nor disagree, 2 – disagree, 1 – strongly disagree. The interpretive scale used was 4.5 – 5.00 – strongly agree (SA), 3.50 – 4.49 – agree (A), 2.51 – 3.49 – neither agree nor disagree (NA/D), 1.51 – 2.50 – disagree (D), 1.0 – 1.50 – strongly disagree (SD).

The point at which the curve begins to straighten out directs to the number of factors to be examined. The method used for extraction was the Principal Component Analysis and the Rotation Method was Varimex with Kaiser Normalization. The rotation converged in three iterations with the optimum number being 2 plus or minus 1. Each of the factor groupings were computed and analyzed to identify underlying constructs. Factor loadings are interpreted as follows: +/- .30 = minimal level, +/- .40 = more important, and +/- .50 considered practically significant. The analyses were also examined for inefficient factors and for the presence of significant cross loadings. Based on the data, it was determined that the optimum number of factors to extract was two. The items in each factor were examined and labeled as follows; Factor 1 – Knowledge and Resources and Factor 2 – Institutional issues (See Table 8). Factor 1 related items appear as the first subscale related items in the Table 8, while Factor 2 related items appear as the second subscale related items.

Table 8 Factor Analysis of Distance Education Questionnaire Reponses of Faculty at a Research Extensive University in the Southeastern Region of the United States

Subscale – Related Items	Knowledge and Resources	Institutional Issues
Given the choice, I would avoid teaching Distance Education courses	.905	.100
Assuming that I have the opportunity, I will teach Distance Education courses as much as possible.	-.794	-.099
I find Distance Education inflexible	.775	-.148
Distance Education is an appropriate tool for professors to use as a teaching medium	-.763	.209
Distance Education can be an effective way for students to learn.	-.753	.346
Distance Education is not compatible with how I teach my courses	.734	-.038
As an instructor, I am prepared to teach Distance Education courses.	-.708	.124
Distance Education will lower our teaching effectiveness in the long run	.698	-.244
My feelings of responsibility toward my students influence me to teach Distance Education.	.686	-.049
Offering Distance Education courses diminishes the reputation of a university	.683	-.316
I dislike the idea of Distance Education	.673	-.167
I find Distance Education technology not useful for education	.529	-.309
Distance Education can be an effective way for students to learn	-.528	.375
My feelings of responsibility toward my students influence me to teach Distance Education	-.506	-.261
Distance Education is a fad that will soon pass	.458	-.440
Distance Education is a fad that will soon pass	.458	-.440
I have embraced Distance Education technology in my workplace	-.457	.402

Table 8 Continued

Subscale – Related Items	Knowledge and Resources	Institutional Issues
I have the resources necessary to teach Distance Education courses	-.107	.751
I find our Distance Education resources (course management software, etc.) to be easy to use	.025	.719
My institution provides adequate technology support	.006	.693
I have the knowledge necessary to teach Distance Education courses	-.154	.522
Students are prepared to be successful in Distance Education courses	-.068	.513

Note. Eigenvalue Knowledge and Resources = 8.054, Eigenvalue Institutional Issues = 2.50

Objective Five Results

The fifth objective of this study was to determine the desirability of teaching by Distance Education as perceived by faculty at a research extensive university in the southeastern region of the United States. A scale was used in the study that was designed to measure faculty Member's perceptions of Distance Education desirability. A total of 15 items were measured. An interpretive scale was developed to aid in the interpretation of the collected data. The interpretive scale used was 4.5 – 5.00 = strongly agree (SA), 3.50 – 4.49 –=agree (A), 2.51 – 3.49 = neither agree nor disagree (NA/D), 1.51 – 2.50 = disagree (D), 1.0 – 1.50 = strongly disagree (SD). Participants indicated agreement with only one statement: "Teaching Distance Education courses is challenging" (Mean = 3.70, SD = .690). Participants disagreed with four statements in the survey. Those four statements were: "Participating in Distance Education will improve my working conditions (Mean = 2.69, SD = 1.04), "Instituting Distance Education is a foolish idea" (Mean = 2.39, SD = .940), "Teaching Distance Education courses is more pleasant than teaching face-to-face" (Mean = 2.24, SD = .970), and "Distance Education will improve my ability to

build relationships with my students" (Mean = 2.20, SD = .890). All other responses to the statements fell into the neither agree nor disagree range.

A desirability score was computed with the computed desirability score being 2.74 with a standard deviation of .689 (See Table 9).

Table 9 Desirability of Teaching by Distance Education as Perceived by Faculty at a Research Extensive University in the Southeastern Region of the United States

Item	n	Mean	SD	Description[a]
Teaching Distance Education courses is challenging	54	3.70	.690	A
Using Distance Education does not enhance my teaching effectiveness.	53	3.47	.973	NA/D
Distance Education is a good idea	55	3.45	.919	NA/D
Teaching Distance Education courses is more challenging than teaching face-to-face	54	3.33	.911	NA/D
Teaching Distance Education courses is less rewarding than teaching face-to-face.	54	3.26	.935	NA/D
My peers think that I/we should teach Distance Education courses.	55	2.95	.803	NA/D
Teaching Distance Education courses is rewarding	54	2.89	.839	NA/D
Teaching Distance Education courses is pleasant	54	2.87	.802	NA/D
Participating in Distance Education will enable greater achievement or success in my work	54	2.69	1.04	NA/D
Participating in distance education will increase the amount of autonomy and independence I experience at work	54	2.63	.917	NA/D
Distance Education will (or has already) lead to greater amounts of recognition for my work.	54	2.54	.905	NA/D
Participating in distance education will improve my working conditions.	54	2.39	.899	D
Instituting Distance Education is a foolish idea.	54	2.39	.940	D
Teaching Distance Education courses is more pleasant than teaching face-to-face.	54	2.24	.970	D
Distance Education will improve my ability to build relationships with my students	55	2.20	.890	D

[a] The response scale used was as follows: 5 – strongly agree, 4 – agree, 3 – neither agree nor disagree, 2 – disagree, 1 – strongly disagree. The interpretive scale used was 4.5 – 5.00 – strongly agree (SA), 3.50 – 4.49 – agree (A), 2.51 – 3.49 – neither agree nor disagree (NA/D), 1.51 – 2.50 – disagree (D), 1.0 – 1.50 – strongly disagree (SD).

To further examine the data for the perception scale, a factor analysis was conducted on the 15 variables designed to measure desirability. The Kaiser – Meyer – Olkin (KMO) Measure of Sampling Adequacy (MSA) was checked with a resulting statistic of .814. Two items were found to have an MSA value which was unacceptable; therefore those two items were eliminated from further analysis. The two items which did not have an adequate MSA were: Teaching Distance Education courses is challenging (MSA = .389), and Teaching Distance Education courses is more challenging than teaching face-to-face (MSA = .452). (See Table 10)

Table 10 Factor Analysis of Distance Education Questionnaire Reponses of Faculty at a Research Extensive University in the Southeastern Region of the United States

Component Matrix	
[a]Item	Factor Loading
Participating in Distance Education will enable greater achievement or success in my work	.899
Teaching Distance Education courses is pleasant	.817
Participating in Distance Education will increase the amount of autonomy and independence I experience at work	.811
Teaching Distance Education courses is rewarding	810
Participating in Distance Education will improve my working conditions.	.806
Distance Education is a good idea	.789
Distance Education will improve my ability to build relationships with my students	.773
Instituting Distance Education is a foolish idea.	-.732
Teaching Distance Education courses is less rewarding than teaching face-to-face.	-.697
Teaching Distance Education courses is more pleasant than teaching face-to-face.	.673
Distance Education will (or has already) lead to greater amounts of recognition for my work.	.582
Using Distance Education does not enhance my teaching effectiveness.	-.561
My peers think that I/we should teach Distance Education courses.	.248

[a] One component extracted. Eigenvalue = 6.85

Objective Six Results

The sixth objective of this study was to compare Distance Education with traditional face-to-face delivery of instruction on the following selected measures:

a. Selected Process and Outcome Measures of the Learning Environment
b. Expected Input and Process Traits of Distance Education
c. Appropriateness of Distance Education for Selected Program and Process Measures
d. Importance of Selected Learning Environment Components

Parts a, b, c of the objective were measured using a scale with the following response options in order to compare Distance Education courses to traditional face-to-face courses. The four response options were "less than face-to-face", "comparable to face-to-face", "more than face-to-face", and "uncertain". When comparing traditional face-to-face courses with Distance Education courses on selected Process and Outcome Measures of the Learning Environment, faculty indicated that student-to-student interaction (66.7%) and student to professor interaction (72.2%) will be less in Distance Education courses. A slight majority (54.4%) felt that Distance Education will offer more flexibility to the students than face-to-face instruction. No faculty indicated that student-to-professor interaction would be greater or that student grades would be better or that student learning (synthesis and integration) would be different in Distance Education classes compared to traditional face-to-face instruction (See Table 11).

When comparing expected Input and Process Traits of Distance Education courses to traditional face-to-face instruction, the majority of faculty (68.5%) indicated that more time would be spent developing a Distance Education class and that more time would also be spent interacting with students via email (63.0%). Slightly more than half (53.7%) had the expectation

that the amount of time spent grading assignments would be equal for both types of instruction (See Table 12).

Table 11 Comparison of Distance Education Courses with Traditional Face-to Face Courses on Selected Process and Outcome Measures of the Learning Environment as Perceived by Faculty at a Research Extensive University in the Southeastern United States

Description	Less than face-to-face		Comparable to face-to-face		More than face-to-face		Uncertain		Total	
	n	%	n	%	n	%	n	%	n	%
Student-to-student interaction	36	66.7	4	7.4	2	3.7	12	22.2	54	100
Student-to-professor interaction	39	72.2	8	14.8	0	0.0	7	13.0	54	100
Amount of course structure	5	9.3	26	48.1	9	16.7	14	25.9	54	100
Flexibility for students	5	9.4	7	13.2	31	54.4	10	18.9	54	100
Cost efficiency for students	4	7.4	9	16.7	20	37.0	21	38.9	54	100
Student-centered learning	15	27.8	14	25.9	9	16.7	16	29.6	54	100
Student performance (grades)	12	22.2	18	33.3	0	0.0	24	44.4	54	100
Student learning (synthesis and integration)	20	37.0	12	22.2	0	0.0	22	40.7	54	100
Student motivation	23	42.6	7	13.0	2	3.7	22	40.7	54	100

In comparing Distance Education to traditional face-to-face instruction on Appropriateness of Distance Education for Selected Program and Process, the majority of faculty (60..4%) indicated that Distance Education was less appropriate for both graduate education and undergraduate education (52.8%). Half of the faculty (50%) also expressed that Distance Education was more appropriate for professional education or Continuing Ed (See Table 13).

Table 12 Comparison of Distance Education Courses with Face-to-Face Instruction on Expected Input and Process Traits of Distance Education as Perceived by Faculty at a research Extensive University in the Southeastern United States

Description	Less than face-to-face		Comparable to face-to-face		More than face-to-face		Uncertain		Total	
	n	%	n	%	n	%	n	%	n	100
Flexibility for professors	12	22.2	12	22.2	22	40.7	8	14.8	54	100
Opportunities to try innovative teaching techniques	12	22.6	15	28.3	16	30.2	10	18.9	54	100
Time spent developing/prepping the course	2	3.7	10	18.5	37	68.5	5	9.3	54	100
Time spent administering a course	8	14.8	17	31.5	22	40.7	7	13.0	54	100
Time spent grading student assignments	10	18.5	29	53.7	11	20.4	4	7.4	54	100
Time spent interacting with students via email	4	7.4	12	22.2	34	63.0	4	7.4	54	100
Time spent interacting with students via phone	2	3.7	13	24.1	26	48.1	13	24.1	54	100
Time spent interacting with students in general	14	25.9	17	31.5	13	24.1	10	18.5	54	100
Training resources available from the institution	15	27.8	11	20.4	8	14.8	20	37.0	54	100
Financial resources available from the institution	11	20.4	14	25.9	6	11.1	23	42.6	54	100
Technology resources available from the institution	7	13.0	13	24.1	13	24.1	21	38.9	54	100
Hands-on support from the institution (graduate assistants, clerical support etc.)	13	24.1	15	27.8	8	14.8	18	33.3	54	100

Table 13 When Compared to a Traditional Face-to-Face Environment, How Appropriate is Distance Education for the Following?

Description	Less than face-to-face		Comparable to face-to-face		More than face-to-face		Uncertain		Total	
	n	%	n	%	n	%	n	%	n	%
Undergraduate education	28	52.8	20	37.7	2	3.8	3	5.7	53	100
Graduate education	32	60.4	13	24.5	2	3.8	6	11.3	53	100
Non – traditional students	11	21.6	10	19.6	24	47.1	6	11.8	51	100
Professional education (Continuing Ed. for exp.)	8	15.4	11	21.2	26	50.0	7	13.5	52	100
Team teaching (multiple course instructors)	10	18.9	22	41.5	12	22.6	9	17.0	53	100
Use of Socratic Method	16	30.8	11	21.2	2	3.8	23	44.2	52	100
Use of case studies as teaching tools	10	19.2	29	55.8	2	3.8	11	21.2	52	100
Use of group projects as teaching tools	28	53.8	11	21.2	2	3.8	11	21.2	52	100
Surveys measuring student opinions of instruction (teaching evals)	8	15.7	26	51.0	3	5.9	14	27.5	51	100

Part d of Objective six compared the Importance of Selected Learning Environment Components of Distance Education students with traditional face-to-face students. The response options used for comparison were “This is more important to Distance Education Students”, “This is more important to face-to-face students, and “It is equally important to both. Over 50% of all participants found that the items which were listed were of equal importance to both groups of students with the exception of seeing the professor (45.6%) and an online discussion board where you can read and post comments (38.9%). The online discussion board item was the only item in which over 50% of the participants indicated it was more important for Distance

Education students. Only one item was rated as more important to face-to-face students by 50% or more of the participants. That item was seeing the professor (50%) (See Table 14)

Table 14 Comparison of Distance Education and Traditional On-Site Students with Regard to the Importance of Selected Learning Environment Components as Perceived by Faculty at a Research Extensive University in the Southeastern Region of the United States

Description	This is more important to Distance Education students		This is more important to face-to-face students		It is equally important to both		Total	
	n	%	n	%	n	%	n	%
Seeing the professor	1	1.9	27	50.0	26	45.6	54	100
Hearing the professor	1	1.9	16	29.6	37	68.5	54	100
Understanding the professor	1	1.9	8	15.1	44	83.0	53	100
Obtaining feedback from the professor	1	1.9	5	9.3	48	88.9	54	100
Conveniently asking the professor for feedback	5	9.3	9	16.7	40	74.1	54	100
Conveniently presenting thoughts to the class	4	7.4	16	29.6	34	63.0	54	100
Conveniently presenting thoughts to the professor	3	5.7	13	24.5	37	69.8	53	100
Conveniently presenting thoughts to group members	4	7.5	17	32.1	32	60.4	53	100
Learning the course material	1	1.9	6	11.1	47	87.0	54	100
Understanding the text book	3	5.7	3	5.7	47	88.7	53	100
Applying the course material	0	0.0	5	9.4	48	90.6	53	100
Conveniently sharing work with group members	3	5.6	15	27.8	36	63.2	54	100
Conveniently accessing course material	7	13.2	2	3.8	44	83.0	53	100
Student-to- instructor email	7	13.2	3	5.7	43	75.4	53	100
Student-to-student email	9	17.0	5	9.4	39	73.6	53	100
A website containing course content	16	29.6	2	3.5	36	66.7	54	100

Table 14 Continued

Description	This is more important to Distance Education students		This is more important to face-to-face students		It is equally important to both		Total	
	n	%	n	%	n	%	n	%
An online discussion board where you can post and read comments (for the professor and other students) asynchronously	31	57.4	2	3.7	21	38.9	54	100
A website used exclusively by group members for completing projects	21	41.2	1	2.0	29	56.9	51	100
A website used for electronic file transfer (upload a file to a website to be downloaded by others)	21	40.4	1	1.9	30	57.7	52	100
A website containing archives of class discussions, chats etc. that can be viewed at any time	23	45.1	2	3.9	26	51.0	51	100
Being highly motivated to do well in a course	5	9.3	11	20.4	38	70.4	54	100
Being highly motivated to do well in school/course of study	5	9.4	10	18.9	38	71.7	53	100
Having strong time management skills	13	24.1	10	18.5	31	57.4	54	100
Having knowledge of course subject matter in advance	3	5.9	4	7.8	44	86.3	51	100
Being self – disciplined	17	31.5	5	9.3	32	59.3	54	100
Software skill (MS Word, Excel, PowerPoint, etc.)	12	23.1	2	3.8	38	73.1	52	100
Strong internet skills	20	37.7	1	1.9	32	60.4	53	100
General computer skills	12	22.6	1	1.9	40	75.5	53	100

Objective Seven Results

The seventh objective of this study was to determine if relationships existed between Knowledge and Resources or Institutional Issues of Distance Education and the selected

demographics of age, gender, degree held, years' experience and academic rank of faculty at a research extensive university in the southeastern portion of the United States.

The variable being tested in this objective was perception of Distance Education by the faculty of a research extensive university in the southeastern region of the United States. A factor analysis of the variable yielded two factors which were treated as the measure of perception. These two factors were labelled by the researcher as Knowledge and Resources and Institutional Issues.

The Pearson Product Moment Coefficient was used to measure the relationship between each of the subscale perception scores (Knowledge and Resources and Institutional Issues) and the demographic variable of age. The computed measures were found to be non – significant indicating that there is no association between age and Knowledge and Resources ($r = -.07$, $p = .61$) or age and Institutional Issues ($r = -.13$, $p = .38$).

The next step in objective 7 was to determine if a relationship existed between the perception subscales Knowledge and Resources or Institutional Issues and the demographic characteristic of gender. In order to accomplish this, an independent t-test was used. Examination of the results of the t-test showed that there is insufficient evidence to suggest that there was a significant difference in the perceptions of male and female faculty members on the Knowledge and Resources perception of the Distance Education subscale ($t_{52} = 1.01$, $p = .28$). (See Table 15) When the perception of Distance Education subscale "Institutional Issues" was compared by gender of faculty, the t value was non – significant which indicates that there is insufficient evidence to suggest that there is a significant difference between males and females ($t_{52} = .721$, $p = .474$) (See Table 16).

Table 15 Perceived Relationship between Knowledge and Resources of Distance Education and Gender of Faculty at a Research Extensive University in the Southeastern Portion of the United States

	Gender	N	m	sd	t	df	p
Knowledge and Resources	Male	35	3.03	.672	-1.10	52	.276
	Female	19	3.25	.775			

Table 16 Perceived Relationship between Institutional Issues of Distance Education and Gender of Faculty at a Research Extensive University in the Southeastern Portion of the United States

	Gender	N	m	sd	t	df	p
Institutional issues	Male	35	2.77	.653	-.721	52	.474
	Female	19	2.91	.725			

The next variable examined in objective 7 was highest degree held. The response provided grouped faculty into two categories: "Master's Degree", and "Doctorate", therefore, to accomplish this, an independent t-test was used. The results of the t-test showed a value of .943 which is greater than alpha of .05 which suggest that there is insufficient evidence to suggest that there a relationship between and knowledge and resources and MA/MS/MBA (m = .313, SD = .662) or PhD/EdD/MD/Other doctorate (m = 3.11 SD = .721). The t-test value for institutional issues was .844 which was greater than alpha of .05 which suggests that there is insufficient evidence to suggest that there is a relationship between institutional issues and MA/MS/MBA(m = 2.78. SD = .649) or PhD/EdD/MD/Other doctorate (m = 2.83, SD = .682).

Table 17 Perceived Relationship between Knowledge and Resources and Highest Degree Held Among Faculty at a Research Extensive University in the Southeastern Portion of the United States

	Degree	n	m	sd	T	df	p
Knowledge and Resources	MA/MS/MBA	10	3.13	.662	.072	53	.943
	PhD/EdD/MD/Other doctorate	45	3.11	.721			

Table 18 Relationship between Institutional Issues and Degree Held

	Degree	n	m	sd	T	df	p
Institutional issues	MA/MS/MBA	10	2.78	.649	-.197	53	.844
	PhD/EdD/MD/Other doctorate	45	2.83	.682			

The next variable examined in objective 7 was to determine if a relationship exists between knowledge and resources and years' experience or between institutional issue and number of years' experience. A Pearson Product Moment Coefficient was used to measure the relationship between each of the subscale perception scores (Knowledge and Resources and Institutional Issues) and the demographic variable years of experience. The computed measures were found to be non – significant, indicating that there is weak relationship between Knowledge and Resources and years' experience (-.234, p = .09) and a moderate relationship between Institutional Issues and years' experience (-.262, p = 0.54).

Objective Eight Results

The eighth objective of this study was to determine if relationships exist between perceptions of Distance Education and the following other perceptual factors among faculty at a research extensive university in the southeastern region of the United States:

a. Culture of Distance Education programs within the institution

b. Desirability of teaching by Distance Education

A Pearson correlation was computed to determine if a relationship existed between knowledge and resources and the culture and perception score and institutional issues and the culture and perception score. Using Davis' (1971) Descriptors, the results show that there is a substantial correlation between the culture score and Knowledge and Resources (.60) and a moderate correlation between the culture score and Institutional Issues (.36). (See Table 19). It

was also found that there was a very strong association between the Desirability score and Knowledge and Resources (.83) and a low association between the desirability score and institutional issues (.25). (See Table 20).

Table 19 Comparison of "Knowledge and Resources" and "Institutional Issues" Subscale Scores and Culture Score of Faculty at a Research Extensive University in the Southeastern Portion of the United States.

	Culture		Descriptor[a]
	r	p	
Knowledge and Resources	.60	< .001	Substantial Association
Institutional Issues	.36	.008	Moderate Association

[a] Davis's Descriptors (1971): .00 to .09 = Negligible Association, .10 to .29 = Low Association, .30 to .49 = Moderate Association, .50 to .69 = Substantial Association, and .70 or higher = Very Strong Association

Table 20 Comparison of "Knowledge and Resources" and "Institutional Issues" Subscale Scores and Desirability Score of Faculty at a Research Extensive University in the Southeastern Portion of the United States.

	Desirability		Descriptor[a]
	r	p	
Knowledge and Resources	.83	< .001	Very Strong Association
Institutional Issues	.25	.06	Low Association

[a] Davis's Descriptors (1971): .00 to .09 = Negligible Association, .10 to .29 = Low Association, .30 to .49 = Moderate Association, .50 to .69 = Substantial Association, and .70 or higher = Very Strong Association

Objective Nine Results

The ninth objective of this study was to determine if a model exists explaining a significant portion of the variance in the perceptions of Distance Education among the faculty at a research extensive university in the southeastern region of the United States from the following selected demographic characteristics and other perceptions

a. age

b. gender

c. degree held

e. years of experience

f. Culture of Distance Education programs within the institution

g. Extent to which electronic resources are used in the instructional activities

h. Desirability of teaching by Distance Education

A multiple regression analysis was conducted using the perception subscale Knowledge and Resources as the dependent variable. The variables included in the regression were examined for excessive colinearity using the variance inflation factor (VIF). The VIF statistics ranged from 1.006 to 1.115, therefore no excess multicolinearity was observed in the data. After checking for multicolinearity, the next step in the regression analysis was to examine the bivariate correlations, the highest was desirability score ($r = .83$, $p < .001$). Overall, four of the variables were found to be significant (See Table 21).

When the regression analysis was examined, the variable which entered the model first was "Desirability Score" which accounted for 69.3% of the variance. One additional variable "Culture Score" added 3.3% of the explained variance. These two variables together account for 72.6% of the variance in "Knowledge and Resources" among faculty at a research extensive university in the southeastern region of the United States (See Table 22). The nature of the association was such that higher Desirability score and higher Culture score both tended to be associated with higher "Knowledge and Resources" subscale scores.

Table 21 Correlations between Perception Subscale Knowledge and Resources and Selected Demographics and Perceptual Measures

Variable	r	p
Desirability Score	.83	, .001
Culture Score	.60	, .001
Extent of Use of Technology	.28	.018
Years Teaching	-.23	.04
Gender	.15	.13
Age	-.07	.31
Education Level	-.01	.47

Note. n = 57

Table 22 Multiple Regression Analysis of "Knowledge and Resources" Score and Selected Demographics and Other Perceptions of Faculty at a Research Extensive University in the Southeastern Portion of the United States

ANOVA

Source of Variation	df	MS	F	p
Regression	2	9.743	71.883	<.001
Residual	54	.136		
Total	56			

Model Summary

Model	R Square	R Square change	F Change	Sig. F Change	Standardized Coefficients Beta
Desirability Score	.693	.693	124.439	<.001	.716
Culture Score	.727	.033	6.617	.013	.217

Excluded Variables

Variables	t	p
Age	0.52	.958
Gender	.503	.617
Highest Degree Earned	.747	.458
Years' Experience	.311	.757
Extent of use of electronic resources	1.763	.084

An additional multiple regression analysis was conducted using the Institutional Issues sub-scale score as the dependent variable. The variables included in the regression were examined for excessive collinearity using the variance inflation factor (VIF) and ranged from 1.00 to 1.40. Therefore no excess multicollinearity was observed in the data. After checking for multicollinearity, the next step in the regression analysis was to examine the bivariate correlations. The highest was culture score ($r = .35$, $p = .001$). Overall, three of the variables were found to be significantly related to the Institutional Issues sub-scale score (See Table 23).

When the regression analysis was examined, the variable which entered the model was "Culture Score" which accounted for 12.5% of the variance. No other variables entered the

regression (See Table 24). The nature of the association with the "Institutional Issues" sub-scale score was such that higher culture scores tended to be associated with higher Institutional Issues sub-scale scores.

Table 23 Correlations between Perceptions Subscale Knowledge and Resources and Selected Demographics and Perceptual Measures

Variable	r	p
Culture Score	.35	.003
Years Teaching	-.26	.027
Desirability Score	.25	.029
Extent of Use of Technology	.18	.090
Age	-.12	.186
Gender	.10	.232
Education Level	.03	.421

Note. n = 57

Table 24 Multiple Regression Analysis of "Institutional Issues" Score and Selected Demographics and Other Perceptions of Faculty at a Research Extensive University in the Southeastern Portion of the United States

ANOVA

Source of Variation	df	MS	F	p
Regression	1	3.035	7.865	.007
Residual	55	.386		
Total	56			

Model Summary

Model	R Square	R Square change	F Change	Sig. F Change	Standardized Coefficients Beta
Culture Score	.125	.125	7.865	.007	.354

Excluded Variables

Variables	t	p
Age	-.960	.341
Gender	.312	.756
Highest Degree Earned	.353	.725
Years' Experience	-1.758	.084
Extent of use of electronic resources	1.000	.322
Desirability Score	.584	.561

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The primary purpose of this study was to determine the influence of selected demographic and perceptual characteristics on the culture and desirability of Distance Education among faculty at a research extensive university in the southeastern region of the United States.

Objectives of the study

The following objectives were used in conducting this study.

1. Describe university faculty at a research extensive university in the southeastern region of the United States on the following demographic characteristics:
    a. age
    b. gender
    c. degree held
    d. years' experience
    e. academic rank
2. Determine the culture of Distance Education programs within the institution as perceived by faculty at a research extensive university in the southeastern region of the United States
3. Determine the extent to which electronic resources are used in the instructional activities of faculty at a research extensive university in the southeastern region of the United States
4. Determine the perceptions of Distance Education among faculty at a research extensive university in the southeastern region of the United States
5. Determine the desirability of teaching by Distance Education as perceived by faculty at a research extensive university in the southeastern region of the United States
6. Compare Distance Education with Traditional Face-to-Face delivery of instruction on the following selected measures:
    a. Selected Process and Outcome Measures of the Learning Environment.

b. Expected Input and Process Traits of Distance Education

c. Appropriateness of Distance Education for Selected Program and Process Measures

d. Importance of Selected Learning Environment Components.

7. Determine if relationships exist between perceptions of Distance Education and selected demographics

8. Determine if relationships exist between perceptions of Distance Education and the following other perceptual factors among faculty at a research extensive university in the southeastern region of the United States:

a. Culture of Distance Education programs within the institution

b. Extent to which electronic resources are used in instructional activities

c. Desirability of teaching by Distance Education

9. Determine if a model exists explaining a significant portion of the variance in the perceptions of Distance Education as perceived by the faculty at a research extensive university in the southeastern region of the United States from selected demographics and other perceptions

a. age

b. gender

c. degree held

d. years of experience

e. academic rank

f. Culture of Distance Education programs within the institution

g. Extent to which electronic resources are used in the instructional activities

h. Desirability of teaching by Distance Education

Methodology

The target population for this study was full and part-time faculty at comprehensive public universities in the southeastern United States. The accessible population was full and part-time faculty in one college at a research extensive university in Louisiana. The current size of the accessible population is 168. The minimum sample size was determined to be 53 using Cochran's Sample Size formula

Instrumentation

The instrument used to collect data for this study consists of a questionnaire developed by Shanan Gibson (Gibson, 2014) and used with permission from the author. Minor changes to the instrument were allowed with the consent of the original author. Content validity of the survey instrument was determined through a review by a select panel of experts.

Data Collection

Contact was made with the Dean of the selected college at the university to help in determining accessibility to a database of current full and part-time faculty in the college. Further contact was made with the Institutional Review Board (IRB) to determine the procedures to follow in order to conduct the survey at the university. Contact was made with the developer of the instrument that was used and permission was obtained for use of the questionnaire in this study as long as the work is properly cited. Permission was also obtained to make minor changes to the instrument. An electronic survey administered through Qualtrics (Qualtrics, Provo, UT) was emailed to the accessible population. A follow-up email was sent one week following the initial email. After an additional two weeks, a second follow-up email was sent. A final follow-up email was sent six weeks after the initial email was sent. After allowing an additional week for responses, the survey was considered closed and no further responses were expected or

accepted. Since the survey was conducted electronically, no additional follow-up of non-respondents was conducted. Participation in the survey was voluntary and all information provided was held in the strictest of confidence by the researcher with electronic responses stored on a secure website.

Conclusions and Recommendations

Based on the findings of this study, the researcher offers the following conclusions and recommendations.

Conclusion One

The faculty of the college surveyed is an aging faculty which will likely lead to a substantial amount of turnover in faculty due to retirement in the near future.

This conclusion is based on the findings of the survey, which showed that over 60% of the survey participants were over the age of 50, with a mean age of 54.6. Based on this finding, it is likely that the college will see the retirement of a large portion of the faculty in the coming years. As this happens, it may be likely that some of the new faculty hires will have participated in a Distance Education class as a graduate or undergraduate student. This could lead to a change in the culture and perception of Distance Education that is currently held by members of the faculty. Based on previous research, organizations are resistant to change (Gibson, Harris, & Colaric, 2008), (Berge & Muilenberg, 2001), yet if new faculty are brought in, it may be possible to change the culture without having as much resistance as may be present with faculty who have been in their current position for a long period of time and who may not want to make major changes late in their career.

Based on this conclusion and the findings, the researcher recommends that a desired qualification be experience and/or expertise in the area of Distance Education with teaching of

Distance Education courses as a part of their assignment. This should be a part of the job description when positions are advertised. The researcher also recommends that further study be done within the college to determine the time frame in which older faculty members plan to retire or leave the college. The findings of that study could then be used for effective planning for the hiring of new faculty members with the further implementation of Distance Education courses in mind.

Conclusion Two

The participants in this study recognize that Distance Education is becoming an integral part of higher education.

This conclusion is based on the find that 75.4% of survey participants either agreed or strongly agreed with the statement "Distance Education will be successfully implemented at other institutions" This suggests that faculty are aware of the importance of Distance Education as a viable means of instruction in a university setting. This fact however, did not lead to faculty agreeing with the statement "Distance Education would be implemented at my institution". Faculty did not agree or disagree with that statement. This may again be related to the resistance to change that organizations generally face (Gibson, Harris, & Colaric, 2008), (Berge & Muilenberg, 2001).

Since faculty recognizes that other universities are using this form of instruction, the researcher makes the following recommendation. Current faculty may reduce their resistance to change if they feel that implementing this form of instruction would be of benefit to them. It is recommended that the university offer incentives to encourage their acceptance of Distance Education assignments. As has been noted in previous studies, compensation may need to be provided to those faculty members who are required to teach a Distance Education course

(Milheim, 2001). This compensation can be in the form of an increase in salary or in an indirect form such as additional release time, the attendance of conferences or absorbing the cost of training of faculty members regarding Distance Education (Milheim, 2001). Given the current budget situation, compensation of faculty may be difficult. However, without that incentive offered to faculty, the idea of Distance Education may be difficult to pursue within the college. Even so, the researcher recommends that every effort be made to find the resources necessary to further implement Distance Education. As noted in previous research, the use of grants as a start- up may be one option (Berge & Muilenberg, 2001). Another option may be the increased revenue that is generated by having increased enrollment due to the presence of Distance Education students, (Ponzurick, France, & Logar, 2000), which could be used to offset the cost of incentives.

Conclusion Three

Faculty within this college are ambivalent toward the idea of Distance Education.

This conclusion is based on the overall culture score of Distance Education programs which was calculated to be 3.4, showing that faculty neither agreed nor disagreed with the culture of Distance Education programs at their university. However, it can be noted that faculty did not disagree or strongly disagree with any of the seven measured variables used in this portion of the study. This may suggest that while faculty shows ambivalence toward Distance Education, the resistance may be something that could be overcome.

The researcher recommends using open communication with the current faculty concerning the concepts of Distance Education. This should include the use of face-to-face meetings with individual faculty members. The administration must clearly map the future that it envisions concerning Distance Education and what that will mean for the faculty. If that future

entails the implementation of more Distance Education courses and programs, then the faculty should be well-informed, and the expectations of the faculty should be clearly spelled out. This should include the expectation of developing and teaching Distance Education courses as part of their teaching assignment. It should also include the incentives or compensation that will be used as part of this additional expectation of time and effort on the part of the faculty member.

Conclusion Four

Faculty within this college have a comfort level with some forms of technology.

This conclusion is based on the findings that 86% of faculty currently use email as a means of communicating with students enrolled in their face-to-face classes. It was also found that faculty use electronic posting of grades (73.7) and Moodle or other course management software (61.4%).

The researcher recommends that the college begin to mandate the expanded use of technology by instructors and professors in both their face-to-face and Distance Education courses. The researcher also recommends that the college implement a training program to educate faculty about other forms of technology that are available to them. The topics should include blogs, online textbooks, podcasting, and discussion forums at a minimum. This should be done in the form of mandatory in-service programs designed to expose faculty to this technology. These programs should be hands-on with enough time to allow faculty to become familiar with new technology. It should not be assumed that faulty will become proficient in just one session with any new form of technology. Follow-up sessions should be scheduled to ensure the use of the new technology. As faculty become proficient in the use of more forms of technology, additional training should be scheduled.

Conclusion Five

Faculty indicated learning styles and preferences are equally important in both Distance Education and face-to-face courses. However, there is some degree of uncertainty with some aspects of Distance Education.

This conclusion is based on the findings which showed that for 26 of the 28 statements surveyed, over 50% of the participants indicated that the statement was equally important for both Distance Education and Face-to-face students. Statements that showed the highest amount of uncertainty regarding Distance Education among survey participants include "student performance" (44.4%), "student learning" (40.7%), "student motivation (40.7) and "financial resources available from the institution" (42.6%).

The researcher recommends further studies be done to more specifically identify reasons for uncertainty as indicated by the faculty. Follow-up research will need to be conducted within the college in the near term if the expansion of Distance Education is to be implemented. It may not be necessary to conduct a formal study. It is recommended that face-to-face interviews be conducted within the college to ascertain the concerns of the faculty. It is recommended that department heads conduct interviews within their own department and report their findings to the administration of the college. Once concerns are identified, the college can then formulate a plan to address those concerns. This plan should be formulated by involving both department heads and faculty within the college. The researcher feels that this will allow for ownership of the plan by the faculty and potentially lead to less resistance to the implementation and/or expansion of Distance Education courses. Since such a large number of statements were rated equally important for Distance Education and face-to-face students, alleviating concerns should allow for further implementation of Distance Education courses or programs

Conclusion Six

Demographics studied in this research did not influence the perception of Distance Education among faculty at a research extensive university in the southeastern region of the United States.

This conclusion is based on the finding which excluded demographic variables from the regression due to p values which were all greater than .08. This finding was not expected by the researcher.

Based on the findings, the researcher recommends further study be conducted to identify any other demographic characteristics which may influence faculty perception of Distance Education. It may be informative to look at demographics individually to determine their effect on the perception of Distance Education held by faculty. It is possible that there is a bias within the participants in this study due to the relatively small sample size which was selected. It is also possible that the participants responded by choosing the "Neither Agree nor Disagree" category so as to maintain a status quo within the college with regard to Distance Education courses and programs.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL

ACTION ON EXEMPTION APPROVAL REQUEST

Institutional Review Board
Dr. Dennis Landin, Chair
130 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.8692
F: 225.578.5983
irb@lsu.edu | lsu.edu/irb

TO: J. Gerard Richard
Human Resource Education & Workforce Development

FROM: Dennis Landin
Chair, Institutional Review Board

DATE: July 28, 2014

RE: **IRB#** E8875

TITLE: The Perceptions of University Faculty Regarding the Need for and Effectiveness of Distance Delivery of University Courses and Programs

New Protocol/Modification/Continuation: New Protocol

Review Date: 7/25/2014

Approved X **Disapproved** _____

Approval Date: 7/25/2014 **Approval Expiration Date:** 7/24/2017

Exemption Category/Paragraph: 2b

Signed Consent Waived?: Yes

Re-review frequency: (three years unless otherwise stated)

LSU Proposal Number (if applicable): _____

Protocol Matches Scope of Work in Grant proposal: (if applicable) _____

By: Dennis Landin, Chairman _____

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING –
Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
7. Notification of the IRB of a serious compliance failure.
8. SPECIAL NOTE:

**All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at http://www.lsu.edu/irb*

APPENDIX B: SURVEY COVER LETTER

December 3, 2014

Dear College of Agriculture Faculty Member,

In recent years we have seen a rapid growth in the number of educational programs offered through distance delivery techniques. However, questions are still being raised regarding the appropriateness of distance delivery for certain content (social sciences, hard sciences, etc.) and levels (undergraduate, masters, doctoral) of education. One of the issues that is of paramount importance in the successful development of programs for distance delivery is the perceptions of the faculty in the specific program being proposed for this change.

You have been selected, as a member of the faculty in the College of Agriculture, to participate in a study designed to measure the perceptions toward several aspects of the implementation and/or expansion of Distance Education in the College of Agriculture at LSU. Since you are one of a relatively small group of participants, it is very important that I receive every survey that is distributed to be certain that I am able to accurately assess all viewpoints regarding this highly publicized and sometimes controversial area.

This study will provide the vital information that will help the College of Agriculture to make effective decisions about the future involvement of the College in Distance Education. This study has been approved by the LSU Institutional Review Board, and Dr. William B. Richardson, the Vice-President for Agriculture and Dean of the College of Agriculture (Refer to the letter from Dean Richardson received earlier this week).

Participation in this survey is voluntary; however your participation will help the College in establishing goals regarding Distance Education. Your answers are completely confidential and no individual identifiers or individually identifiable answers will be used at any point in the study. Results will be reported only in summary form. The survey may be accessed using the following link: http://lsu.qualtrics.com//SE/?SID=SV_1XhZuhvMi6gdvqB

If you should have any questions regarding the study, I would be happy to talk with you about it. I can be reached by phone at (337) 652 – 0662 or via email at grichard@kaplantel.net. In addition, if you wish to talk to my major professor, Dr. Burnett can be reached at 578-2362 or by email at vocbur@lsu.edu.

Thank you in advance for your help in the completion of this study and for your dedication to the mission and goals of the College of Agriculture at LSU.

Sincerely,

J. Gerard Richard
Science Teacher
St. Thomas More Catholic High School

APPENDIX C: SURVEY FOLLOW-UP LETTER

December 22, 2014

Dear College of Agriculture Faculty Member;

Last week you should have received an electronic survey from me that focused on your perceptions regarding distance delivery of university courses and programs. If you have already responded to the survey, please accept this note as my thanks for your help. If you have not yet had time to complete the survey, I ask that you please do so as soon as possible. Due to the relatively small size of the selected sample, each survey is very important to the usefulness of the study results. We are very optimistic that the findings of this study will provide information that will be beneficial to the College of Agriculture in planning their future directions in the area of distance delivery of agriculture courses and programs.

If for some reason you did not receive the survey, please let me know at grichard@kaplantel.net or by telephone at (337) 652-0662 so that I can send a copy of the survey to you. Your input in this matter is very important to the College and your opinions will be valuable in establishing Distance Education guidelines within the College of Agriculture.

Again, thank you for your help in completing this critical study. I appreciate the time and effort that you have and will provide to this study and to the College of Agriculture at LSU.

J. Gerard Richard
Science Teacher
St. Thomas More Catholic High School

APPENDIX D: SURVEY FOLLOW-UP LETTER 2ND NOTICE

January 5, 2015

Dear College of Agriculture Faculty Member;

Before the holidays, you should have received an electronic survey from me that focused on your perceptions regarding distance delivery of university courses and programs. If you have already responded to the survey, please accept this note as my thanks for your help. If you have not yet had time to complete the survey, I ask that you please do so as soon as possible. Due to the relatively small size of the selected sample, each survey is very important to the usefulness of the study results. We are very optimistic that the findings of this study will provide information that will be beneficial to the College of Agriculture in planning their future directions in the area of distance delivery of agriculture courses and programs. Your answers are completely confidential and no individual identifiers or individually identifiable answers will be used at any point in the study. Results will be reported only in summary form. The survey may be accessed using the following link: http://lsu.qualtrics.com//SE/?SID=SV_1XhZuhvMi6gdvqB

If for some reason you cannot access the survey, please let me know at grichard@kaplantel.net or by telephone at (337) 652-0662 so that I can send a copy of the survey directly to you. Your input in this matter is very important to the College and your opinions will be valuable in establishing Distance Education guidelines within the College of Agriculture.

Again, thank you for your help in completing this critical study. I appreciate the time and effort that you have and will provide to this study and to the College of Agriculture at LSU.

J. Gerard Richard
Science Teacher
St. Thomas More Catholic High School

APPENDIX E: SURVEY FOLLOW-UP LETTER 3RD NOTICE

January 12, 2015

Dear College of Agriculture Faculty Member;

Before the holidays, you should have received an electronic survey from me that focused on your perceptions regarding distance delivery of university courses and programs. This is the survey that Dr. Richardson referenced in his letter to you. If you have already responded to the survey, please accept this note as my thanks for your help. If you have not yet had time to complete the survey, I ask that you please try to do so by Friday January 16 so that I may begin the analysis of data. I realize that some of you may have had an issue with accessing the survey after January 9. I contacted Qualtrics and believe that we have solved that issue and the survey is accessible to you. Due to the relatively small size of the selected sample, each survey is very important to the usefulness of the study results. We are very optimistic that the findings of this study will provide information that will be beneficial to the College of Agriculture in planning their future directions in the area of distance delivery of agriculture courses and programs. Your answers are completely confidential and no individual identifiers or individually identifiable answers will be used at any point in the study. Results will be reported only in summary form. The survey may be accessed using the following link:
http://lsu.qualtrics.com//SE/?SID=SV_1XhZuhvMi6gdvqB

If for some reason you still cannot access the survey, please let me know at grichard@kaplantel.net or by telephone at (337) 652-0662 so that I can send a copy of the survey directly to you. Your input in this matter is very important to the College and your opinions will be valuable in establishing Distance Education guidelines within the College of Agriculture.

Again, thank you for your help in completing this critical study. I appreciate the time and effort that you have and will provide to this study and to the College of Agriculture at LSU.

J. Gerard Richard
Science Teacher
St. Thomas More Catholic High School

APPENDIX F: FINAL FOLLOW UP LETTER FOR SURVEY

January 16, 2015

Dear College of Agriculture Faculty Member;

Over this past weekend, I was made aware of a problem with the access of the survey I had sent to you regarding Distance Education. It is possible that you may have received a message that the survey had expired. This is not the case and I have resolved the issue after speaking with technical support at Qualtrics. You should now be able to access the survey using the original link or the one contained in this letter. If you have already responded to the survey, please accept this note as my thanks for your help. If you have not yet had time to complete the survey, I ask that you please try to do so by Wednesday January 21 so that I may begin the analysis of data. Due to the relatively small size of the selected sample, each survey is very important to the usefulness of the study results. I am very optimistic that the findings of this study will provide information that will be beneficial to the College of Agriculture in planning their future directions in the area of distance delivery of agriculture courses and programs. Your answers are completely confidential and no individual identifiers or individually identifiable answers will be used at any point in the study. Results will be reported only in summary form.

The survey may be accessed using the following link:

http://lsu.qualtrics.com//SE/?SID=SV_1XhZuhvMi6gdvqB

If for some reason you still cannot access the survey, please let me know at grichard@kaplantel.net or by telephone at (337) 652-0662 so that I can send a copy of the survey directly to you. Your input in this matter is very important to the College and your opinions will be valuable in establishing Distance Education guidelines within the College of Agriculture.

Again, thank you for your help in completing this critical study. I appreciate the time and effort that you have and will provide to this study and to the College of Agriculture at LSU.

J. Gerard Richard
Science Teacher
St. Thomas More Catholic High School

APPENDIX G: DISSERTATION SURVEY

Dissertation Survey

Q1 Which of the following categories best describes you?

- ❍ Instructor (1)
- ❍ Assistant Professor (2)
- ❍ Associate professor (3)
- ❍ Full Professor (4)

Q2 How many years have you been teaching at the college or university level or in academics?

Q3 If you have been teaching via Distance Education, how many years have you taught?

Q4 If you have taught courses via Distance Education, how many course sections have you taught?

Q5 Approximately what percentage of your performance evaluation is tied to your teaching effectiveness? (As opposed to research productivity and service responsibilities)

Q6 Which of the following best describes your teaching responsibilities? Please mark all that apply.

- ❑ A. I teach undergraduate courses in a face-to-face format. (1)
- ❑ B. I teach undergraduate courses in a Distance Education format. (2)
- ❑ C. I teach graduate courses in a face-to-face format. (3)
- ❑ D. I teach graduate courses in a Distance Education format. (4)
- ❑ E. Other, please specify (5) _____

Q7 Prior to entering academics, did you have work experience elsewhere?

- ❍ A. No, I've only worked in academics. (1)
- ❍ B. Yes, but not in the field which I currently teach. (2)
- ❍ C. Yes, I worked in the same area that I currently teach in. (3)
- ❍ D. Other, please specify (4) _____

Q8 What is the highest degree you have earned?

- ❍ A. MA/MS/MBA (1)
- ❍ B. PhD/EdD/MD/Other doctorate (2)
- ❍ C. Other, please specify (3) _____

Q9 What is your gender?

- ❍ Male (1)
- ❍ Female (2)

Q10 What is your age?

Q11 How would you describe your level of computing technology competence?

- ❍ A. Excellent - Much Better Than Others in My Field (1)
- ❍ B. Good (2)
- ❍ C. Average - Comparable to Most Others (3)
- ❍ D. Fair (4)
- ❍ E. Poor - Much Worse than Others in My Field (5)

Q12 Using the following scale, please indicate to what degree you agree or disagree with the following statements:

	Strongly Agree (1)	Agree (2)	Neither Agree nor Disagree (3)	Disagree (4)	Strongly Disagree (5)
The culture perpetuated by my college is task-oriented (1)	❍	❍	❍	❍	❍
The culture perpetuated by my college is relationship-	❍	❍	❍	❍	❍

oriented. (2)					
The culture and/or leadership at my college embraces technology. (3)	❍	❍	❍	❍	❍
I know why Distance Education (DE) is being implemented at my institution (4)	❍	❍	❍	❍	❍
My knowledge of Distance Education within my and/or other departments results in positive expectations for me with regard to teaching Distance Education (5)	❍	❍	❍	❍	❍
Individual professors have the ability to influence the decisions regarding Distance Education. (6)	❍	❍	❍	❍	❍
Distance Education is/will be successfully implemented at my institution. (7)	❍	❍	❍	❍	❍

Distance Education is/will be successfully implemented within my department. (8)	❍	❍	❍	❍	❍
Distance Education will be successfully implemented at other institutions. (9)	❍	❍	❍	❍	❍

Q13 Please indicate if you use the following in your teaching

	Yes, I use this in my face-to-face courses (1)	Yes I use this in my Distance Education Classes (2)	No I do not use this at all (3)	I would like to learn more about this (4)
Audio lectures for dissemination on the Web or a CD (1)	❑	❑	❑	❑
Moodle/Blackboard / WebCT / any other course management systems (2)	❑	❑	❑	❑
Blogs (3)	❑	❑	❑	❑
Chat sessions (online) (4)	❑	❑	❑	❑
Discussion forums (online) (5)	❑	❑	❑	❑
Electronic submission of assignments (6)	❑	❑	❑	❑
Electronic posting of student grades (7)	❑	❑	❑	❑
email (8)	❑	❑	❑	❑
email listservs (9)	❑	❑	❑	❑
Guest lecturers from remote locations (10)	❑	❑	❑	❑
Instant Messenger: AOL AIM / Yahoo / MSN (11)	❑	❑	❑	❑

Online office hours (12)	❑	❑	❑	❑
Online simulations (13)	❑	❑	❑	❑
Online textbooks (14)	❑	❑	❑	❑
Peer review of assignments online (15)	❑	❑	❑	❑
Podcasting (16)	❑	❑	❑	❑
Posting lecture/study notes on the Web (17)	❑	❑	❑	❑
Posting Power Point slides on the Web (18)	❑	❑	❑	❑
Quizzes or tests taken on the Web (19)	❑	❑	❑	❑
Small group activities conducted at a distance (20)	❑	❑	❑	❑
Syllabus posted to the Web (21)	❑	❑	❑	❑
Video demonstrations/lectures provided on the Web (22)	❑	❑	❑	❑
Video conferencing (23)	❑	❑	❑	❑
Web searching assignments for students (24)	❑	❑	❑	❑
WebQuests (25)	❑	❑	❑	❑
Wikis (26)	❑	❑	❑	❑

Q14 Using the following scale, please indicate to what degree you agree or disagree with the following statements:*

	Strongly Agree (1)	Agree (2)	Neither Agree nor Disagree (3)	Disagree (4)	Strongly Disagree (5)
Distance Education is an appropriate tool for professors to use as a teaching	❍	❍	❍	❍	❍

medium. (1)					
Distance Education will lower our teaching effectiveness in the long run. (2)	❍	❍	❍	❍	❍
Assuming that I have the opportunity, I will teach Distance Education courses as much as possible. (3)	❍	❍	❍	❍	❍
Distance Education is not compatible with how I teach my courses. (4)	❍	❍	❍	❍	❍
Given the choice, I would avoid teaching Distance Education courses. (5)	❍	❍	❍	❍	❍
University leadership believes that I should teach Distance Education courses. (6)	❍	❍	❍	❍	❍
I dislike the idea of Distance Education. (7)	❍	❍	❍	❍	❍
I find Distance Education inflexible (8)	❍	❍	❍	❍	❍
I find Distance Education	❍	❍	❍	❍	❍

technology not useful for education. (9)					
I find our Distance Education resources (course management software, etc) to be easy to use. (10)	❍	❍	❍	❍	❍
I find it easy to get our course management software to do what I need it to do in my classes. (11)	❍	❍	❍	❍	❍
I have embraced Distance Education technology in my workplace. (12)	❍	❍	❍	❍	❍
I have the knowledge necessary to teach Distance Education courses. (13)	❍	❍	❍	❍	❍
I have the resources necessary to teach Distance Education courses. (14)	❍	❍	❍	❍	❍
It is not easy for me to become more skillful in using the Distance Education technology.	❍	❍	❍	❍	❍

(15)					
My feelings of responsibility toward my students influence me to teach Distance Education. (16)	❍	❍	❍	❍	❍
My feelings of responsibility toward my students influence me to NOT teach Distance Education. (17)	❍	❍	❍	❍	❍
Teaching Distance Education will probably impact my teaching evaluations negatively (18)	❍	❍	❍	❍	❍
My institution provides adequate technology support. (19)	❍	❍	❍	❍	❍
Distance Education can be an effective way for students to learn. (20)	❍	❍	❍	❍	❍
Distance Education can be an effective way for students to learn in my area of teaching. (21)	❍	❍	❍	❍	❍
Students are	❍	❍	❍	❍	❍

prepared to be successful in Distance Education courses. (22)					
As an instructor, I am prepared to teach Distance Education courses. (23)	❍	❍	❍	❍	❍
Distance Education is a fad that will soon pass. (24)	❍	❍	❍	❍	❍
Offering Distance Education courses diminishes the reputation of a university. (25)	❍	❍	❍	❍	❍

Q15 Using the following scale, please indicate to what degree you agree or disagree with the following statements

	Strongly Agree (1)	Agree (2)	Neither Agree nor Disagree (3)	Disagree (4)	Strongly Disagree (5)
Participating in Distance Education will enable greater achievement or success in my work. (1)	❍	❍	❍	❍	❍
Participating in Distance Education will increase the amount of autonomy and independence	❍	❍	❍	❍	❍

I experience at work. (2)					
Distance Education will (or has already) lead to greater amounts of recognition for my work. (3)	❍	❍	❍	❍	❍
Distance Education will improve my ability to build relationships with my students. (4)	❍	❍	❍	❍	❍
Participating in Distance Education will improve my working conditions. (5)	❍	❍	❍	❍	❍
My peers think that I/we should teach Distance Education courses. (6)	❍	❍	❍	❍	❍
Using Distance Education does not enhance my teaching effectiveness. (7)	❍	❍	❍	❍	❍
Distance Education is a good idea. (8)	❍	❍	❍	❍	❍
Teaching Distance Education courses is pleasant. (9)	❍	❍	❍	❍	❍
Teaching	❍	❍	❍	❍	❍

Distance Education courses is more pleasant than teaching face-to-face. (10)					
Teaching Distance Education courses is challenging. (11)	❍	❍	❍	❍	❍
Teaching Distance Education courses is more challenging than teaching face-to-face. (12)	❍	❍	❍	❍	❍
Teaching Distance Education courses is rewarding. (13)	❍	❍	❍	❍	❍
Teaching Distance Education courses is less rewarding than teaching face-to-face. (14)	❍	❍	❍	❍	❍
Instituting Distance Education is a foolish idea. (15)	❍	❍	❍	❍	❍

Q16 Compared with traditional face-to-face courses, how do Distance Education courses compare with regard to:

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Student to student interaction (1)	❍	❍	❍	❍
Student to professor interaction (2)	❍	❍	❍	❍
Amount of course structure (3)	❍	❍	❍	❍
Flexibility for students (4)	❍	❍	❍	❍
Cost efficiency for students (5)	❍	❍	❍	❍
Student-centered learning (6)	❍	❍	❍	❍
Student performance (grades) (7)	❍	❍	❍	❍
Student learning (synthesis and integration) (8)	❍	❍	❍	❍
Student motivation (9)	❍	❍	❍	❍

Q17 When compared to traditional face-to-face courses, what are your expectations for Distance Education with regard to:

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Flexibility for professors (1)	❍	❍	❍	❍
Opportunities to try innovative teaching techniques. (2)	❍	❍	❍	❍
Time spent developing/prepping the course (3)	❍	❍	❍	❍
Time spent	❍	❍	❍	❍

administering a course (4)				
Time spent grading student assignments (5)	❍	❍	❍	❍
Time spent interacting with students via email (6)	❍	❍	❍	❍
Time spent interacting with students via phone (7)	❍	❍	❍	❍
Time spent interacting with students in General (8)	❍	❍	❍	❍
Training resources available from the Institution (9)	❍	❍	❍	❍
Financial resources available from the institution. (10)	❍	❍	❍	❍
Technology resources available from the institution. (11)	❍	❍	❍	❍
Hands-on support from the institution (graduate assistants, clerical support, etc) (12)	❍	❍	❍	❍

Q18 When compared to a traditional face-to-face environment, how appropriate is Distance Education for the following?

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Undergraduate Education (1)	❍	❍	❍	❍
Graduate Education (2)	❍	❍	❍	❍

Non-traditional students (3)	❍	❍	❍	❍
Professional Education (Continuing Ed, for exp.) (4)	❍	❍	❍	❍
Team Teaching (Multiple Course Instructors) (5)	❍	❍	❍	❍
Use of the Socratic Method (6)	❍	❍	❍	❍
Use of case studies as teaching tools (7)	❍	❍	❍	❍
Use of group projects as teaching tools (8)	❍	❍	❍	❍
Surveys measuring student opinions of instruction (teaching evals) (9)	❍	❍	❍	❍

Q19 Please compare Distance Education and traditional on-site students with regard to the following learning styles and preference areas.

	This is more important to Distance Education Students. (1)	This is more important to Face-to-face Students. (2)	It is equally important to both. (3)
Seeing the professor (1)	❍	❍	❍
Hearing the professor (2)	❍	❍	❍
Understanding the professor (3)	❍	❍	❍
Obtaining feedback from the professor (4)	❍	❍	❍
Conveniently asking professor for feedback (5)	❍	❍	❍
Conveniently presenting thoughts to the class (6)	❍	❍	❍

Conveniently presenting thoughts to the professor (7)	❍	❍	❍
Conveniently presenting thoughts to group members (8)	❍	❍	❍
Learning the course material (9)	❍	❍	❍
Understanding the text book (10)	❍	❍	❍
Applying the course material (11)	❍	❍	❍
Conveniently sharing work with group members (12)	❍	❍	❍
Conveniently accessing course materials (13)	❍	❍	❍
Student to Instructor email (14)	❍	❍	❍
Student to Student email (15)	❍	❍	❍
A website containing course content (16)	❍	❍	❍
An online discussion board where you can post and read comments (for the professor and other students) asynchronously (17)	❍	❍	❍
A website used exclusively by group members for completing projects (18)	❍	❍	❍
A website used for electronic file transfer (upload a file to a website to be downloaded by others) (19)	❍	❍	❍
A website containing archives of class	❍	❍	❍

discussions, chats, etc. that can be viewed at any time (20)			
Being highly motivated to do well in a course (21)	❍	❍	❍
Being highly motivated to do well in school / course of study. (22)	❍	❍	❍
Having strong time-management skills (23)	❍	❍	❍
Having knowledge of the course subject matter in advance. (24)	❍	❍	❍
Being self-disciplined (25)	❍	❍	❍
Software skills (MS Word, Excel, PowerPoint, etc) (26)	❍	❍	❍
Strong internet skills (27)	❍	❍	❍
General computer skills (28)	❍	❍	❍

Q23 Compared with traditional face-to-face courses, how do Distance Education courses compare with regard to:

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Student to student interaction (1)	❍	❍	❍	❍
Student to professor interaction (2)	❍	❍	❍	❍
Amount of course structure (3)	❍	❍	❍	❍
Flexibility for students (4)	❍	❍	❍	❍
Cost efficiency for students (5)	❍	❍	❍	❍
Student-centered	❍	❍	❍	❍

learning (6)				
Student performance (grades) (7)	❍	❍	❍	❍
Student learning (synthesis and integration) (8)	❍	❍	❍	❍
Student motivation (9)	❍	❍	❍	❍

Q24 When compared to traditional face-to-face courses, what are your expectations for Distance Education with regard to:

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Flexibility for professors (1)	❍	❍	❍	❍
Opportunities to try innovative teaching techniques. (2)	❍	❍	❍	❍
Time spent developing/prepping the course (3)	❍	❍	❍	❍
Time spent administering a course (4)	❍	❍	❍	❍
Time spent grading student assignments (5)	❍	❍	❍	❍
Time spent interacting with students via email (6)	❍	❍	❍	❍
Time spent interacting with students via phone (7)	❍	❍	❍	❍
Time spent interacting with students in General (8)	❍	❍	❍	❍
Training resources	❍	❍	❍	❍

available from the Institution (9)				
Financial resources available from the institution. (10)	❍	❍	❍	❍
Technology resources available from the institution. (11)	❍	❍	❍	❍
Hands-on support from the institution (graduate assistants, clerical support, etc) (12)	❍	❍	❍	❍

Q25 When compared to a traditional face-to-face environment, how appropriate is Distance Education for the following?

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Undergraduate Education (1)	❍	❍	❍	❍
Graduate Education (2)	❍	❍	❍	❍
Non-traditional students (3)	❍	❍	❍	❍
Professional Education (Continuing Ed, for exp.) (4)	❍	❍	❍	❍
Team Teaching (Multiple Course Instructors) (5)	❍	❍	❍	❍
Use of the Socratic Method (6)	❍	❍	❍	❍
Use of case studies as teaching tools (7)	❍	❍	❍	❍
Use of group projects as teaching tools (8)	❍	❍	❍	❍
Surveys measuring	❍	❍	❍	❍

student opinions of instruction (teaching evals) (9)				

Q26 Please compare Distance Education and traditional on-site students with regard to the following learning styles and preference areas.

	This is more important to Distance Education Students. (1)	This is more important to Face-to-face Students. (2)	It is equally important to both. (3)
Seeing the professor (1)	❍	❍	❍
Hearing the professor (2)	❍	❍	❍
Understanding the professor (3)	❍	❍	❍
Obtaining feedback from the professor (4)	❍	❍	❍
Conveniently asking professor for feedback (5)	❍	❍	❍
Conveniently presenting thoughts to the class (6)	❍	❍	❍
Conveniently presenting thoughts to the professor (7)	❍	❍	❍
Conveniently presenting thoughts to group members (8)	❍	❍	❍
Learning the course material (9)	❍	❍	❍
Understanding the text book (10)	❍	❍	❍
Applying the course material (11)	❍	❍	❍
Conveniently sharing work with group members (12)	❍	❍	❍
Conveniently accessing course materials (13)	❍	❍	❍

Student to Instructor email (14)	❍	❍	❍
Student to Student email (15)	❍	❍	❍
A website containing course content (16)	❍	❍	❍
An online discussion board where you can post and read comments (for the professor and other students) asynchronously (17)	❍	❍	❍
A website used exclusively by group members for completing projects (18)	❍	❍	❍
A website used for electronic file transfer (upload a file to a website to be downloaded by others) (19)	❍	❍	❍
A website containing archives of class discussions, chats, etc. that can be viewed at any time (20)	❍	❍	❍
Being highly motivated to do well in a course (21)	❍	❍	❍
Being highly motivated to do well in school / course of study. (22)	❍	❍	❍
Having strong time-management skills (23)	❍	❍	❍
Having knowledge of the course subject matter in advance. (24)	❍	❍	❍
Being self-disciplined (25)	❍	❍	❍
Software skills (MS Word, Excel,	❍	❍	❍

PowerPoint, etc) (26)			
Strong internet skills (27)	❍	❍	❍
General computer skills (28)	❍	❍	❍

Q27 Compared with traditional face-to-face courses, how do Distance Education courses compare with regard to:

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Student to student interaction (1)	❍	❍	❍	❍
Student to professor interaction (2)	❍	❍	❍	❍
Amount of course structure (3)	❍	❍	❍	❍
Flexibility for students (4)	❍	❍	❍	❍
Cost efficiency for students (5)	❍	❍	❍	❍
Student-centered learning (6)	❍	❍	❍	❍
Student performance (grades) (7)	❍	❍	❍	❍
Student learning (synthesis and integration) (8)	❍	❍	❍	❍
Student motivation (9)	❍	❍	❍	❍

Q28 When compared to traditional face-to-face courses, what are your expectations for Distance Education with regard to:

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Flexibility for professors (1)	❍	❍	❍	❍
Opportunities to try innovative teaching techniques. (2)	❍	❍	❍	❍
Time spent developing/prepping the course (3)	❍	❍	❍	❍
Time spent administering a course (4)	❍	❍	❍	❍
Time spent grading student assignments (5)	❍	❍	❍	❍
Time spent interacting with students via email (6)	❍	❍	❍	❍
Time spent interacting with students via phone (7)	❍	❍	❍	❍
Time spent interacting with students in General (8)	❍	❍	❍	❍
Training resources available from the Institution (9)	❍	❍	❍	❍
Financial resources available from the institution. (10)	❍	❍	❍	❍
Technology resources available from the institution. (11)	❍	❍	❍	❍
Hands-on support	❍	❍	❍	❍

from the institution (graduate assistants, clerical support, etc) (12)				

Q29 When compared to a traditional face-to-face environment, how appropriate is Distance Education for the following?

	Less than Face-to-face (1)	Comparable to Face-to-face (2)	More than Face-to-face (3)	Uncertain (4)
Undergraduate Education (1)	❍	❍	❍	❍
Graduate Education (2)	❍	❍	❍	❍
Non-traditional students (3)	❍	❍	❍	❍
Professional Education (Continuing Ed, for exp.) (4)	❍	❍	❍	❍
Team Teaching (Multiple Course Instructors) (5)	❍	❍	❍	❍
Use of the Socratic Method (6)	❍	❍	❍	❍
Use of case studies as teaching tools (7)	❍	❍	❍	❍
Use of group projects as teaching tools (8)	❍	❍	❍	❍
Surveys measuring student opinions of instruction (teaching evals) (9)	❍	❍	❍	❍

Q30 Please compare Distance Education and traditional on-site students with regard to the following learning styles and preference areas.

	This is more important to Distance Education Students. (1)	This is more important to Face-to-face Students. (2)	It is equally important to both. (3)
Seeing the professor (1)	❍	❍	❍
Hearing the professor (2)	❍	❍	❍
Understanding the professor (3)	❍	❍	❍
Obtaining feedback from the professor (4)	❍	❍	❍
Conveniently asking professor for feedback (5)	❍	❍	❍
Conveniently presenting thoughts to the class (6)	❍	❍	❍
Conveniently presenting thoughts to the professor (7)	❍	❍	❍
Conveniently presenting thoughts to group members (8)	❍	❍	❍
Learning the course material (9)	❍	❍	❍
Understanding the text book (10)	❍	❍	❍
Applying the course material (11)	❍	❍	❍
Conveniently sharing work with group members (12)	❍	❍	❍
Conveniently accessing course materials (13)	❍	❍	❍
Student to Instructor email (14)	❍	❍	❍
Student to Student email (15)	❍	❍	❍
A website containing	❍	❍	❍

course content (16)			
An online discussion board where you can post and read comments (for the professor and other students) asynchronously (17)	❍	❍	❍
A website used exclusively by group members for completing projects (18)	❍	❍	❍
A website used for electronic file transfer (upload a file to a website to be downloaded by others) (19)	❍	❍	❍
A website containing archives of class discussions, chats, etc. that can be viewed at any time (20)	❍	❍	❍
Being highly motivated to do well in a course (21)	❍	❍	❍
Being highly motivated to do well in school / course of study. (22)	❍	❍	❍
Having strong time-management skills (23)	❍	❍	❍
Having knowledge of the course subject matter in advance. (24)	❍	❍	❍
Being self-disciplined (25)	❍	❍	❍
Software skills (MS Word, Excel, PowerPoint, etc) (26)	❍	❍	❍
Strong internet skills (27)	❍	❍	❍
General computer skills (28)	❍	❍	❍

APPENDIX H: CONTENT VALIDITY LETTER

Dear Dr.Otea,

In the coming weeks, I will be conducting a study at a research extensive university in the southeastern United States concerning the implementation and expansion of Distance Education courses and programs along with the concerns of the faculty. This study also hopes to determine effectiveness of such programs and courses as perceived by the faculty of the college. This study will be conducted in association with Dr. Michael Burnett. In preparation for the study, I have received permission to use a questionnaire developed by Dr. Shanan Gibson at East Carolina University. With her permission, I have made minor adjustments to the questionnaire to better fit the objectives of my study. At this time, I am requesting your help in determining content validity of the questionnaire to ensure that the instrument meets the needs of the study and addresses the objectives outlined above. I would appreciate your feedback and recommendations in this matter so that I may proceed with the study.

Thank you for your help and cooperation. It is greatly appreciated.

Sincerely,

J. Gerard Richard

Dr. Michael Burnett
LSU College of Agriculture

VITA

J. Gerard Richard was born and raised in Kaplan, Louisiana. He graduated from Vermilion Catholic High School in 1977. He attended the University of Louisiana – Lafayette, formerly the University of Southwestern Louisiana where he earned a Bachelor of Science degree in Horticulture in 1980. He was awarded a Master of Science degree in Horticulture from Louisiana State University in 1983. Upon graduation, he began a private business as owner and operator of JGR Enterprise, a wholesale/retail nursery and truck farm located in Kaplan. In 1996, he closed the business and entered the profession of teaching beginning as a science teacher at Vermilion Catholic High School. He remained at the school for 13 years, becoming principal in 2002. During his time there, he became a certified teacher in the areas of General Science, Agriculture and Biology. Also during this time, he returned to graduate school at the University of Louisiana – Lafayette and completed a +30 in Administration and Supervision in the College of Education. He also became certified as a Level 1 administrator. In 2009, he returned to the classroom at St. Thomas More Catholic High School in Lafayette, Louisiana where he is still employed. Also in 2009, he returned to graduate school in the School of Human Resource Education and Workforce Development at Louisiana State University. He will receive his PhD in May of 2015.

Gerard currently lives in Kaplan, Louisiana with his wife Suzanne. They have two adult daughters, Alida, a Pre-K 3 teacher at Carencro Catholic School, and Madeleine, who is a credit analyst at Farmers Merchant Bank and who will receive her MBA from the University of Louisiana –Lafayette in May of 2015.