

**Author:** Vines, Kristina M.

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**STUDENT:**

**NAME:** Kristina Vines

**DATE:** 5/16/14

**ADVISOR:** (Committee Chair if MS Plan A or EdS Thesis or Field Project/Problem):

**NAME:** Dr. Carol Mooney

**DATE:** 5/16/14

**This section for MS Plan A Thesis or EdS Thesis/Field Project papers only**  
Committee members (other than your advisor who is listed in the section above)

1. CMTE MEMBER'S NAME: DATE:

2. CMTE MEMBER'S NAME: DATE:

3. CMTE MEMBER'S NAME: DATE:

**This section to be completed by the Graduate School**

This final research report has been approved by the Graduate School.

Director, Office of Graduate Studies:

**DATE:**

**Vines, Kristina M. *Identifying Students' Perceptions on Effective Distance Learning within the Surgical Technology Program at Gateway Technical College***

**Abstract**

This study examined student perceptions of distance learning within the Surgical Technology Program at Gateway Technical College. Two cohorts of students were surveyed with an online questionnaire consisting of 52 open ended questions that explored what student needs and perceptions were relative to the online environment; examining factors affecting their readiness and success in distance education centered around support services, instructional strategies and delivery method, personal aspects of their online learning, the first online course experience and the overall experience of their online learning relative to their readiness and success in distance education. Data was collected and categorized to highlight commonalities in participant responses. Literature reviews contrast with the findings of this study as it relates to student perceptions and familiarity with technology. Time management and motivation are consistent with past studies as barriers to student learning. Despite barriers that students experienced they seem negligible to the learning that occurred in the online environment.

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## Chapter I: Introduction

Enrollment in online courses continues to grow with each passing year as students seek to return to the academic realm while simultaneously trying to balance their pursuit of education with the vigorous demands of a personal and professional life. Acknowledging that one of the preeminent draws to distance learning for students is flexibility, research reports have focused on students' perceptions regarding online learning and their findings reinforced that although there may be challenging aspects, online enrollments continues to gain momentum, "With the continued investments in online course development and a consumer desire for flexible 24/7 learning, there is no evidence that enrollment rates will slow" (Smith, 2005, p. 52).

According to the National Center for Education Statistics (NCES) in 2007-2008, about 4.3 million undergraduate students took at least one distance education course which is equivalent to approximately 20 percent of all undergraduate students enrolled in post-secondary education. Four percent of those undergraduates took their entire program through distance education. These numbers demonstrate a progressive increase from past enrollments of online students of 16 percent from 2003-2004 to 20 percent in 2007-2008. The percentage of post-baccalaureate students that participated in a distance education course was 22 percent, or .8 million students and post-baccalaureate students that completed their entire degree online was higher than that of undergraduate students at a percentage of 9 percent (National Center for Education Statistics, 2011).

The shift from the perception that distance education serves the student stranded in the backwoods or desert is making room for the student just down the street with a harried schedule, family or social commitments, illness, disability or learning preference. (Swan, Jackman, & Grubbs, 2005, p. 50)

Distance education delivery methods provides both returning students and new learners with a much more malleable schedule to continue their education within the restrictions of already busy lives; however, there are considerations that must be taken into account before committing to the online learning environment such as course rigors, differences from online education as it relates to the traditional setting of a classroom environment, and student preparedness.

Student perceptions become tantamount to understanding the effectiveness of such an environment where learners frequently are unprepared for the different challenges that online learning can pose which often leads to student dissatisfaction that conversely impacts their success. Literary reviews criticize common student perceptions pertaining to familiarity, comfort, and personal understanding of technological tools employed in most distance learning settings as being key factors in the disconnect for students ability to easily acclimate from the traditional classroom setting into an online environment. Several authors infer that the learning curve for students from one setting to the other has significant impact on student success in the virtual environment; “In fact, distance education tools might seem to be unfamiliar or difficult to learn for many students, so they might not be enthusiastic about participating in online activities” (Sahin & Shelley, 2008, p. 216).

Students’ perceptions and expectations of online courses are pivotal in successfully navigating those differences between the two delivery methods in education. The transition to the virtual classroom is dependent on not only the students’ dedication to succeed in the learning environment but also their ability to acclimate to new environments and delivery methods. “Even though online schools differ from traditional universities in many respects, it is very easy to gain the same access to information, resources and professors” (Fandl, 2013). The extent to which these perceptions and expectations impact the students’ ability to perform within the

online setting and how swiftly that transition occurs is yet to be fully explored. Without this kind of information, it is difficult for students and instructors alike to adequately prepare for their education within an unfamiliar setting. With a sound understanding of student perceptions of the virtual learning environment and their needs, educators will be able to better facilitate and promote a positive learning environment for their learners.

### **Statement of the Problem**

The increasing availability of online courses yields a greater flexibility to students towards the completion of their educational goals; yet it also poses some difficulties for learners that are not accustomed to a constructivist learning style which is the cornerstone of most distance learning classrooms. Students, who chose distance learning, often do so for the perceived flexibility it will allow for the completion of their educational studies; however, proper consideration to the time and dedication required to such courses is not clear to students impacting their success rates. Research has only just begun on how student perceptions, needs and expectations of online course work correlates to the effectiveness of distance education. As a result, there is a need to gather and present information about student perceptions of online courses which will assist educators to better facilitate and promote a positive learning environment for their learners that features student-centered learning.

### **Purpose of the Study**

In the book, *Success as an Online Student: Strategies for Effective Learning*, a reminder is posed to prospective learners that although online classrooms “differ from traditional universities in many respects, it is very easy to gain the same access to information, resources and professors” (Fandl, 2013). The purpose of this study is to determine what student needs and perceptions are relative to the online environment; examining the factors affecting their readiness

and success in distance education both prior to entry of their online courses and once immersed in the distance education environment. More specifically, the study will examine student needs and perceptions relative to the online environment that center around support services, instructional strategies and delivery method, personal aspects that influenced online learning, the first online course experience and the overall experience of their online learning relative to their readiness and success in distance education.

The information obtained from this study is two-fold in that it can identify key elements for the preparation of students entering into the virtual learning environment by surveying students who have already participated in an online course work (more specifically, seniors enrolled in the Surgical Technology program who have already completed the course Surgical Pharmacology which is offered online) in an effort to identify their perceptions of the experience, as well as, assist educators in the development and maintenance of an effective learning environment that promotes student success. These components are integral to building a rich educational setting where both the student and teacher are prepared for the demands of online learning. Additionally, students that are currently enrolled in online course work for the program will also be surveyed to determine if there is a trend in student perceptions that can be identified. An online survey distributed by student email through Qualtrics Online Survey Tool will be used to identify common themes and categories of student perceptions and expectations of the online learning environment which were used to determine recommendations regarding student preparation and effective course design for future online students and educators.

## Research Objectives

In light of the literary reviews that were conducted and to satisfy a need for enhanced understanding of what student needs and expectations are as it relates to their perceived notions of a quality online education, three research questions guided this study:

1. What perceptions do students at Gateway Technical College enrolled in the Surgical Technology Program have of online course work?
2. What expectations do students at Gateway Technical College enrolled in the Surgical Technology Program have of an online course?
3. What recommendations would students at Gateway Technical College enrolled in the Surgical Technology Program give to future distance education students?

## Definition of Terms

**Bottom-up perspective.** Bottom-up perspective is from the student's viewpoint on effective classroom management and design; often based on individual needs and expectations for personalized learning.

**Constructivist learning.** Constructivist learning is one which the student is at the center of the process where collaboration and discussion are integral parts of the learning process and the instructor acts more as a facilitator and guide during the explorative nature of learning. Communication is interwoven between student/faculty interaction and student/peer collaboration.

**Distance learning.** Distance learning is a form of education and instructional delivery where students participate in a classroom setting that differs from the traditional format (face-to-face). The classroom utilizes an electronic virtual environment via the internet or intranet through a number of Learning Management Systems (LMS) such as BlackBoard®, WebCT®,

Desire-to-Learn©, Angel©, etc. It is often referred to as “distance education,” “E-learning,” “online learning,” and “web-based learning” interchangeably.

**Learning Management System (LMS) and Classroom Management System (CMS).**

Learning Management System (LMS) and Classroom Management System (CMS) are often used interchangeably. It is a software application or Web-based technology system that delivers educational content over the internet by providing a virtual classroom environment where instruction can be implemented through a multitude of delivery methods such as written instructional notes, PowerPoint, reading assignments, online collaboration through asynchronous and synchronous discussion. LMS allows for instructional staff to deliver content, monitor student participation and assess performance. A few examples of LMS would be BlackBoard©, WebCT©, Desire-to-Learn© and Angel©.

**Student centered learning.** Student centered learning is a student driven atmosphere focused in the classroom where the instructor facilitates discussion in a group learning environment.

**Student perception.** Student perception is the awareness and understanding of college students that is reflective of their personal needs and expectations for learning in the online environment. Perceptions are generated through fore-knowledge and understanding of the virtual environment that is then expanded on through personal observation and experience. It is an intuitive recognition or awareness that is derived from the learning process.

**Top-down perspective.** Top-down perspective is from the instructor’s and/or college’s viewpoint on effective classroom management and design; often related to curriculum requirements and preferred instructional methods.

### **Importance of the Study**

Important implications of this study may be the following:

1. Identification of student perceptions is of the utmost importance to fostering a healthy learning environment. The learning environment should be free of distractions that can impede student learning; likewise, educational settings should provide an optimal learning experience so that students can focus on the material instead of expending time and energy navigating the virtual classroom setting and the transition into the non-traditional delivery method. This study may improve on practices in the classroom by identifying student needs based off their perceptions of distance learning.

2. The study may further techniques and practices that are employed during the preparation of students and educators alike for the successful completion of online courses by identifying skill sets that are important throughout the entire learning process in a distance education setting based on the learners needs in a constructivist setting.

This information will then add to the present state of knowledge that is being compiled in regards to a relatively new field of instruction.

### **Limitations of the Study**

Potential weaknesses of this study may be the following:

1. Reliability and/or validity of instrument: A focus group of twenty four students enrolled in the Surgical Technology program at Gateway Technical College during the fall and spring semesters will be surveyed about their expectations and perceptions of online education, validity may be compromised as not all students are from the same cohort so the rigors of the curriculum may differ.

2. Limited resources or source of material: The focus group of Surgical Technology students may be limited in personal experiences with online courses and knowledge of the online environment. This may impair their ability to intellectualize the questions posed in the survey which is crucial for the researcher to establish common themes and categories.
3. Sample size: The sample size was limited to a small focus group of Gateway Technical College students enrolled in the Surgical Technology program during the fall and spring semester. The small number of students available to survey may impact the return rate/numbers of questionnaires completed which in turn can impact validity of the data obtained.
4. Time: Time will be the biggest factor in completion of the study in relation to the length of the questionnaire and the amount of time granted for completion of the survey and interviews to be conducted.

## Chapter II: Literature Review

The purpose of this study was to determine how student perceptions of distance education can impact their ability to transition from the traditional classroom setting into the virtual environment of Distance Learning. A study by Ortiz, Telg and Irani (2005) indicated that a majority of research to date has been performed from a top-down approach where the educators course design is developed from an instructor centered (lecture) course to facilitate the learning process when in essence a bottom-up view-point should be utilized to gather students expectations, concerns and needs which in turn may improve the learning process altogether. The bottom-up approach will give educators the view point that has consistently been missing from research in that they will now be able to see what quality education means through the eyes of the learner.

There are numerous studies that focus on the necessary attributes for an educator to be successful in the distance learning environment; however, there are an inadequate number of publications that delve into the topic from a student's perspective relative to their success in the online environment (Roper, 2007, p. 62). It is the responsibility of instructors to identify and promote useful strategies in their online courses for the success of their students. To do this, educators must first understand how discipline, motivation, social environments and communication are key concepts that vastly differ from one delivery method to the other. In studying student perceptions, several components have been revealed as important for successful Internet-based learning of a student. These critical attributes are self-management, self-reliance, and accurate expectations. Additionally, it has been noted that these attributes are a responsibility of the learner to comprehend but increased awareness can be achieved with the assistance of the educator (Howland & Moore, 2002, p. 187).

## **Student Satisfaction**

A review by Sahin and Shelley (2008) emphasized that student values should be considered and when course content is prepared with values in mind, in addition to their social and cultural context, then learning will be more likely to occur. The authors also indicated that a course which failed to meet student expectations could potentially lead to low levels of involvement with the course material that in turn impacts the ability to learn. This statement was furthered by stressing that technological satisfaction is conceptualized as an essential association within student outcomes where levels of personal enjoyment directly correlates to higher levels of student engagement which in turn presupposes an increase in student learning (Sahin & Shelley, 2008, p. 217).

Research has shown that student satisfaction can have both positive and negative components that should be considered in order to provide a complete picture of what learners' needs and expectations are which can then provide a more rounded understanding of students' perception with regards to what defines a quality educational experience in an online setting. According to a study completed by Smith (2006), potential advantages relative to online classes that were identified by researchers are mostly pedagogical in nature with correlations to inherent learning within the online environment and individual learning styles. Interestingly enough, that study also revealed that in the traditional classroom setting, learning revolved around pedagogical aspects also but in a slightly different context. Moreover, this same study identified challenging aspects of online classes related to time management issues and feedback which was in direct opposition of challenges posed for the traditional classroom setting. Factors that influence the successful learning environment in the virtual setting are communication between student and instructor, perceived social interaction between fellow students, familiarity and

comfort with technology, an ability to transcribe thought and understanding into the written word and circumventing preconceived notions and misconceptions about the online learning environment.

### **Student Perceptions**

Further review of literature suggested student perceptions of distance education can influence their ability to learn within the virtual environment that they find themselves suddenly immersed. Perceptions are often viewed as student expectations in what will create a satisfying educational experience or what will potentially lead to student dissatisfaction and are often indicative of personal needs. Although each student has a unique learning style relative to the teaching method used within the classroom setting that is reflective of personal ability to acquire information, to interact with their peers and instructors, and to participate in learning experiences (Mupinga, et al., 2006) there are recurrent themes that are noteworthy enough that indicated further exploration is a necessity.

These themes were more clearly identified in a study by Wilson, Parr and Parr (2012) where they identified a list of variables that effect student levels of satisfaction within the online learning environment. The variables cited includes motivation, support services, social presence, technology, interaction with faculty and other students, course management, promptness of material delivery, and willingness to enroll in a second distance education course. These were formulated from research conducted by Kelsey, Lindner, and Dooley where they stated, “Collecting data about student satisfaction with distance education courses has the potential benefit of guiding decision-making with respect to planning and providing educational services” (Kelsey, Lindner, & Dooley, 2002, p. 26).

## **Students and Technology**

As in all learning circumstances, students come to the classroom with a different set of personal skills, varying levels of comfort and familiarity with technology, and preconceived expectations of what the learning environment will be like. Each of these factors directly correlates to the students' success in the online environment. Technology continues to advance for online delivery and along with it comes a certain level of problematic issues that cause student frustration and aggravation, a few examples are poorly functioning technology and inaccessible resources and educational materials as indicated in a study written by Wilson, Parr and Parr (2012).

Many distance education programs utilize Course Management Systems (CMS) to facilitate the educational process online. Unfamiliarity with this form of technology can be intimidating to students, particularly those that have little to no computer knowledge (Chaloo, 2010). Despite this being a "Technological Era", the body of students that attend college can be from a vast array of different generations, not all of which integrated computers or respective CMS software leading to new challenges for educational institutions. Instructional facilities are faced with not only the development of a distance education program but also with establishing a high quality delivery method for these programs. In an effort to meet both demands, educational institutions must search for effective usages of existing technology and continually develop exceptional ways to utilize new technology (Ortiz, 2005, p. 97).

## **Students and the Virtual Environment**

"One of the most notable differences between the classroom and the Web-based environment is just that: the environment" (Smith, 2008). Teachers and students are not physically within the classroom environment and as a result, positive feedback, verbal and

auditory cues, etc. are absent far more difficult to portray which can significantly alter the learning capacity of the student. “A variety of other barriers to distance education have been described including lack of face-to-face contact, lack of faculty time/support, technology issues, lack of student services, and expenses” (Wilson, et al, 2012, p. 159). Student perceptions of these difficulties in relation to what is deemed a quality education are all factors that will influence the success and effectiveness of the online classroom environment. Additionally, it would be ideal if the student could have uninterrupted time to work on the Web-based course, free from outside distractions that a traditional classroom provides but often this is not the case and instead of “being surrounded by a room full of other students who are focused on your subject matter for a period of time, an online student may be surrounded by any number of circumstances at home” (Smith, 2008).

A 2010 study that looked into what lecturer and students viewed as necessary components for a successful and nurturing online environment showed that students “concurred with the lecturers that social and interactive processes are integral to online learning” (Khoo, 2010, p. 21) however, not all formats of social interaction were useful. Additionally, “The shift away from oral disclosure to a dependence on written communication has been seen as contributing to a difficulty in building collaborative relationships among students” (Howland & Moore, 2002, p. 184) which poses a situational difference in online learning vs. the traditional classroom as they are asynchronous in nature where computer-mediated communication is unfamiliar to students.

### **Chapter III: Methodology**

The purpose of this study was to identify student perceptions of an online learning environment and determine what effect those perceptions may have on the quality of education received. More specifically, the study was meant to identify common themes and categories of student perceptions and expectations of the online learning environment which may be used to determine recommendations regarding student preparation and effective course design for future online students and educators.

#### **Subject Selection and Description**

The research design for this study was descriptive. A case study methodology of current phenomena was used to gather the data required to address the research questions. The design queried students in the Surgical Technology Program at Gateway Technical College that were currently enrolled or recently completed the Surgical Pharmacology online course. The students were asked about their perceptions of online course work prior to enrollment, and their expectations of an online course.

The population for this study was Gateway Technical College students in the Surgical Technology Program, both male and female, who were currently enrolled in or had recently completed the Surgical Pharmacology course; this course was a part of the program's core curriculum. Students were chosen based on their availability and willingness to participate in an online survey during the spring session. Each participant was given a questionnaire that queried student perceptions of online courses they have attended. The questionnaire was emailed through the Qualtrics software system with an estimated time of two hours for the subjects' time to complete.

## **Instrumentation**

The researcher prepared a questionnaire that asked fifty-two questions, forty of which are open-ended questions designed to query Surgical Technology students at Gateway Technical College that were currently enrolled in or have recently completed the Surgical Pharmacology course about their perceptions of online course work and their expectations of an online course. The researcher obtained this information by emailing the questionnaire to students by means of the Qualtrics Survey tool while adhering to a set of questions that was developed specifically for this study and was intended to reveal the students' perceptions and expectations.

Key elements of the questionnaire requested students to indicate the number of online classes enrolled, completed, and personal factors that influenced choices for taking online classes. In addition to these basic questions, demographics were requested to identify such characteristics as program of study, degree students were seeking, location of the university attended and gender.

To gather information about student perceptions, an analytical induction approach was used through a series of several open-ended questions that were posed to students to identify common themes and categories that center around support services, instructional strategies and delivery method, personal aspects that influenced online learning, the first online course experience and the overall experience of their online learning.

## **Data Collection Procedures**

The questionnaire was emailed to students through the Qualtrics Survey tool. Additionally, the questionnaire document was discussed verbally with the participants in advance, so that they can take their time when considering the questions posed to alleviate as

much time constraint as possible and assist those participants that are more auditory rather than visual.

The data was collected using the Qualtrics software program and retrieved by the researcher through use of the survey tools secured program. Participant answers were recorded using an “Excel” export with comma delineation for further review where necessary. All questionnaires and researcher notes were saved to a thumb-drive at the completion of this survey and housed on the Qualtrics system under the research project title, “Student Perceptions of Effective Online Courses.” The results of the study were not made available for public examination.

### **Data Analysis**

The researcher reviewed written participant responses which were transcribed verbatim into a Microsoft Word document after the survey process came to an end and later saved to a PDF. All text was highlighted to indicate commonalities found in participant responses, highlighting was color coded to assist in identification of similarities and identify common coding categories. Coding categories were highlighted in a Microsoft Word document where they were analyzed. To differentiate from one response to the next, all participants were assigned a number which was transcribed onto corresponding questionnaire responses which also included declared program of study, school and location of educational institution will be included. The transcribed responses and Excel file was used to make adjustments as noted before results were concluded.

## Limitations

Potential weaknesses of this study may be the following:

1. Reliability and/or validity of instrument: A focus group of twenty four students enrolled in the Surgical Technology program at Gateway Technical College during the fall and spring semesters were surveyed about their expectations and perceptions of online education, validity may be compromised as not all students are from the same cohort so the rigors of the curriculum may have differed.
2. Limited resources or source of material: The focus group of Surgical Technology students may be limited in personal experiences with online courses and knowledge of the online environment. This may have impaired their ability to intellectualize the questions posed in the survey which was crucial for the researcher to establish common themes and categories.
3. Sample size: The population/sample size was limited to a small focus group of Gateway Technical College students enrolled in the Surgical Technology program during the fall and spring semester. The small number of students available to survey may impact the return rate/numbers of questionnaires completed which in turn can impact validity of the data obtained.
4. Time: Time will be the biggest factor in completion of the study in relation to the length of the questionnaire and the amount of time granted for completion of the survey and interviews to be conducted.

## Chapter IV: Results

The purpose of this study was to identify student perceptions of an online learning environment and determine what effect those perceptions may have had on the quality of education. More specifically, the study examined student needs and perceptions relative to the online environment that centered around support services, instructional strategies and delivery method, personal aspects that influenced online learning, the first online course experience and the overall experience of their online learning relative to their readiness and success in distance education.

The research design was descriptive in nature and a questionnaire that utilized a series of open-ended questions was used to gather information about the students' perceptions and expectations of online learning. Demographics were requested to identify such characteristics as program of study, degree students were seeking, location of the university attended and gender.

In light of the literary reviews that were conducted and to satisfy a need for enhanced understanding of what student needs and expectations are as it relates to their perceived notions of a quality online education. The study sought to address the following issues:

1. What perceptions do students at Gateway Technical College enrolled in the Surgical Technology Program have of online course work?
2. What expectations do students at Gateway Technical College enrolled in the Surgical Technology Program have of an online course?
3. What recommendations would students at Gateway Technical College enrolled in the Surgical Technology Program give to future distance education students?

## **Demographic Information**

The population for this study was college students who have completed at least one online course. The study was conducted across two cohorts of Gateway Technical College students enrolled in the Surgical Technology program. Students were chosen based on their availability and willingness to participate in a questionnaire during the spring session. A total of twenty-one students were invited to participate, nineteen students agreed to participate in the questionnaire, twelve of which started the questionnaire, seven of which returned completed questionnaires; of the students that responded and completed the survey seven were female and none were male. The location of the students attended the Surgical Pharmacology distance education course was spread throughout different parts of Wisconsin: Racine, Kenosha, Pell Lake, Williams Bay and Milwaukee. The level of degree sought by participants was an Associate of Applied Science, Surgical Technology, two of which have been completed at this time indicating that two students were from the senior class cohort and the remaining ten from the ongoing freshmen cohort. The number of courses reported that were taken through an online delivery method ranged between 1 and 5 and the factors that influenced student choice of online coursework versus traditional face-to-face classes was flexibility for six of the students, class availability (only offered online or no traditional classes available) for five students and personal interest for one of the students. Course Management Systems that were used was Blackboard Collaborate for all twelve students.

## **Item Analysis**

**Support services.** The first research question that this study addressed was how student perceptions in of support services in an online learning environment affected the quality of education obtained. To answer this question, the researcher asked participants a series of open-

ended questions that explored the level of assistance students were given regarding technology that is used in online courses. The participants recorded their answers in an online written questionnaire and similar themes were highlighted, categorized and counted.

Students were asked to indicate whether or not they received assistance with technology that was used in their online courses starting first with broad spectrum questions about the CMS/LMS systems for course delivery which was then narrowed down to specific features within the software such as drop-box, chat, email, etc. Additionally, students were asked to indicate if the assistance received was effective; of the twelve students that participated in the survey, nine completed this section of the questionnaire. Table 1 details which features included directions on usage, instances where N/A was selected it was due to those features having not been personally experienced and/or necessary for an individual student during their online course studies. When asked to supply further explanation regarding if the instructions received were adequate and helpful, one participant in particular indicated that this varied from one class to the next with some of the classes sending advanced information by email and others waiting until the day the course was scheduled to start. She furthered this comment by stating that, “The classes that opened the day they started, those were harder to understand. It wasn’t clear what to expect from the class.”

Five students indicated that there was a mandatory face-to-face instruction where “demos given were understandable and made things self-explanatory” or “The first class was always in a classroom to get information and any questions answered.” Collaboration features reported by all nine students centered on “Discussion Boards”, no other synchronous or asynchronous features were reported to be used by the participants.

General consensus of technology support as it applied to the internet, software and system compatibility of the college's Help Desk/Tech Support was good for those students that reported having to use this feature when on campus; however, off campus difficulties were experienced. Comments reported from participants were, "It is a very good system if you are on campus. Support systems outside of campus are internet based so if you are having trouble there are a few resources to aid in the solution to your problem," and "I feel an instructional module (on IT support) would benefit any person who may need the help, not make it mandatory but have it available for those that choose to take advantage of available resources." Instructor's knowledge, skill base, and effectiveness with 'Technology' support were reported to be "knowledgeable" with several positive commentaries regarding response time, ability and helpfulness.

Table 1

*Distance Education Students' Perceptions Concerning Support Services*

(Number of participants responding = 9)

<b>Statement</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
Were you given online 'Course Preparatory Instructions' (FAQ sheets, videos, "how to" instructions)?	9	0	0
Were you given 'Chat Communication Features' instructions?	8	0	1
Were you given 'Email Communication Features' instructions	7	1	1
Were you given an explanation regarding 'Current Announcement' and/or 'News Page' Features?	7	1	1
Were you given information regarding the 'Assignment Features' Such as exams, quizzes, drop-box, assignment submission?	9	0	0
Were you given information regarding 'Collaboration Features' such as video conferencing, synchronous chat groups, discussion board?	8	1	0
<b>Statement</b>	<b>Yes</b>	<b>No</b>	<b>Possibly</b>
Do you feel you would have benefited from an 'Instructional Module' for the above features prior to class?	4	6	0
<b>Statement</b>	<b>Good</b>	<b>Bad</b>	<b>N/A</b>
What do you think of the 'Technology' support provided by the university?	4	6	0
What do you think of the 'Technology' support provided by instructors?	9	0	0

*Source:* Student Perceptions of Effective Online Courses Questionnaire

Instructional materials were given to students for key components of the CMS/LMS software such as email functions and assignment features. Most of these were reported to be within individual instructor syllabi or during face-to-face mandatory orientation and the level of effectiveness reported was effective in nature. Not all assignment features embedded within

CMS/LMS software are used by instructors; those which were not, no instructions were provided.

**Instructional strategies and delivery methods.** The second research question that this study addressed was how student perceptions and expectations of instructional strategies and delivery methods for the online learning environment affected the quality of education obtained. To answer this question, the researcher asked participants a series of open-ended questions that explored student readiness for the learning environment, course agenda and intensity, course layout and structure, course materials and media, instructor participation and effectiveness, and workload. Additionally, students were asked opinion based questions to identify factors they believed affected performance the most and least in online courses. The participants recorded their answers on an online written questionnaire and similar themes were highlighted, categorized and counted.

When questioned about instructional strategies and delivery methods that affected online learning, student responses were varied. Table 2 details student readiness for online learning, comfort levels of navigating the CMS/LMS software applications and whether basic information was provided regarding course structure, course layout, materials usage and level of confusion experienced (if any). Regarding the level of confusion, one student indicated that “Some of my classes were hard to understand, the layout wasn’t easy. It was unclear how to work some of the links” and another indicated that “There was only a slight confusion once regarding an assignment due date, but that was quickly fixed”. Another student indicated that there was some high-school preparation prior to college and stated that “In high school, when first establishing my online schooling it was hard to dedicate myself to it and getting use to checking email, school work, etc. on a daily basis”.

Reading material, although reported by eight out of ten students to be effective, was not always utilized. One student stated that “I pretty much just read out of the text books which was very helpful for the homework.” Another indicated, “Yes. The more information I get, the easier the class is for me. I feel like the teacher cares more about us learning if we get more information. I feel like they are actually taking their time to give us more information.” Three students commented on how lecture notes and/or PowerPoints were useful alongside the required textbooks.

Opinion based questions were given to the students to establish a deeper understanding of the environment students were immersed, these findings are reported in the narrative instead of the tables for clarity sake. Students were asked if they felt the discussions with classmates were useful to which responses varied. Three students felt they were useful and that it was beneficial to see other viewpoints; however, most of the students reported it was only somewhat beneficial. Comments that accompanied these statements were, “I think it can be tedious remembering to go and post on a discussion board when we already have clinical, lecture, clinical paperwork, lecture exams, lecture homework, etc.” and “I felt it was just another question from the homework the discussion boards didn’t further my understanding much.” Another student felt they were “ok” but dependent on frequency of classmate posts and the quality of posts, “People don’t respond as much as they should. It’s all about completing the work instead of the actual discussion”.

This also factored into the degree to which the instructor participated in online discussions; overall consensus from students was mixed, some feeling the instructor was present others indicating that “The instructor didn’t comment on anything I posted but they were pretty straight forward answers”, or that “The instructors give personal criticism more than

involvement in the different discussions”. One student indicated that it was her understanding that, “Our discussions were for students to communicate with one another”. One student stressed that, “I think the teacher should be involved. The teacher can lead us into the right direction and tell us when we aren’t understanding something”. Overall, of the eight responses to this question, four participants reported favorable feedback on instructor participation.

Student opinion on instructor effectiveness in managing the course(s) was positive, of the nine students answering this question, eight indicated that the instructor was on schedule and one student answered the question from a personal perspective indicating that, “It doesn’t bother me if the class has a schedule or not. Sometimes it’s nice to have a schedule because then it focuses me to remember I have an online class but then having a strict schedule (ex: having a test or quiz only being open for two hours) takes away from being able to have a flexible schedule.”

Likewise, when it came to instructor availability (office hours, timeliness and frequency), all nine students reported the instructors did “great” and that “hours were always posted”. Instructor support was reported that they were “available and would work with you and your schedule.”

Instructor feedback on assignments; however, was varied. Two students reported that feedback was minimal with some instructors giving, “little to no feedback”, one student felt “she seemed fair and willing to listen if a student thought something was not graded correctly,”; where-as others indicated that the feedback was on the graded assignment and posted either to the discussion board or directly on the assignment. Lastly, two students indicated that they had no opinion” or that “it is a wonderful option” yet provided no supporting information to aid in their thought process.

Feedback on workload was also varied, of the nine students that replied, two indicated they felt it was the same as a face-to-face course. Three felt that the amount of work was more

so than a traditional delivery, with one comment indicating a feeling of being “punished for taking an online class”. One student stated that “Online courses have more work but spread out more evenly over a set amount of time, where in class the information is given all at once and expected to comprehend by the next week”. Another student indicated that “Workload was a lot but I had to make time every day to do sections so I wasn’t doing it all at once. It is manageable.” The remaining two students reported that they did not feel overwhelmed or that it was “just right”.

When asked to indicate which of the above mentioned factors influenced student learning the most, students had difficulty pinpointing any one item. Comments were given that stated, “Taking time to study helped”, and “That you work at it on your own pace but knowing that there is also a deadline so you work more efficiently” was beneficial. Participants reported that discussion boards and resources made available to them were influential factors. Two students indicated that the face-to-face mandatory meeting before the online course began was the most helpful. Much like the ability to identify what was most influential, student answers were varied with what affected their performance the least but on a lesser scale. Time management was reported by two of the eight students that answered this question, three cited the discussion board, and one indicated that classmate interaction was least beneficial. The remaining two participants had no opinion.

Table 2

*Distance Education Students' Perceptions Concerning Instructional Strategies and Delivery Methods*

<b>Statement</b>	<b>Yes</b>	<b>No</b>	<b>Occasionally</b>
Did you feel you were prepared/ready for the online learning environment?	8	1	0
Did you know what a CMS/LMS system was?	3	6	0
Did you feel comfortable navigating the CMS/LMS?	7	0	2
Were you given information regarding the course agenda?	9	0	0
Were you given information regarding the degree of intensity of the class and instructor expectations for the course?	10	0	0
Did you feel a clear course layout/structure was established?	10	0	0
Did you experience confusion regarding the online environment?	2	7	0
Did you feel reading/written material was used effectively (textbooks, PDF, PowerPoint)?	9	0	0

**Additional questions that were 'opinion' based were posed to students – feedback can be found in the narrative.**

(Number of participants responding = 10)

*Source:* Student Perceptions of Effective Online Courses Questionnaire

Feedback regarding instructional strategies and delivery method was varied in student opinions. Materials used received the most favorable feedback from all students. Instructor effectiveness with course management and student interaction was diverse and varied from instructor to instructor but was “pretty good” or “acceptable” in students’ perceptions. Opinions

on workload in online classes vs. traditional varied. Identification of factors that were most and least effective in online class was different for all students.

**Other aspects for online learning.** The third research question that this study addressed was how student perceptions and expectations of personal aspects for the online learning environment affected the quality of education obtained. To answer this question, the researcher asked participants a series of open-ended questions that explored student beliefs and expectations related to personal level of engagement in the online environment, time management skills, motivation, pace of course delivery and workload for online classes. The participants recorded their answers on an online written questionnaire and similar themes were highlighted, categorized and counted.

When questioned about personal aspects that affected online learning, student responses varied. Table 3 details student perceptions with regards to boredom, time management, motivation, course pace and whether online met or exceeded a traditional classroom setting. Only one of the students felt bored during the class; however, another indicated that she enjoyed face-to-face interaction more than online and third gave an impartial answer of “yes and no” with a comment that indicated if there was any boredom with classes in general it was “when the class itself is boring” with no relevance to online vs. face-to-face settings. Conversely, one student said that “in class I find myself getting more bored than online because in class you have to sit through questions other students have that you may not have”. There was one participant that did provide commentary regarding the depth to which learning occurred because there was a feel of more personal involvement with the course material.

Time management and personal levels of motivation were felt by all as being important for online learning. Personal responses on time management highlighted that it was easy to “fall

behind” if this soft skill was one of individual struggle and that motivation was a necessity, one student even commented that “You need to be motivated if you want to finish an online class. It is very easier to forget about the class.” Course pace for all participants was reported as being “good” with two of the nine respondents indicating it was “nice being able to work ahead” and one student reiterating that procrastination could be a detriment for any online course.

When asked if the workload of an online course meets or exceeds that of a traditional course, nine participants responded with three electing to not state meet or exceed but instead provided personal commentary. One of which indicated, “I didn’t mind the workload in the online classes I took”, another spoke to personal perception that “I would have expected about the same as a face-to-face course” and the third stating that “I think it depends on the course you are taking.”

Table 3

*Distance Education Students' Perceptions Concerning Personal Aspects for Online Learning*

(Number of participants responding = 9)

<b>Statement</b>	<b>Yes</b>	<b>No</b>	<b>Occasionally</b>
Did you feel bored learning in the online environment?	1	7	1
Did you feel your personal 'Time Management' skills factored in the learning process?	9	0	0
Did you feel your personal 'Motivation' was a factor in the learning experience?	9	0	0

  

<b>Statement</b>	<b>Fast</b>	<b>Slow</b>	<b>Good</b>
Considering the pace of course delivery, how engaged did you feel in the class (too fast, too slow, good)?	0	0	9

  

<b>Statement</b>	<b>Meets</b>	<b>Exceeds</b>	<b>Lesser</b>
Did you feel the workload in an online course meets Or exceeds that of a face-to-face?	4	1	1

*Source:* Student Perceptions of Effective Online Courses Questionnaire

Time management and motivation are factors that students reported would have an effect on their online learning experience. Course pacing and workload was dependent on individual instructors and the specific courses but overall response was positive.

**Initial online learning experience.** The fourth research question that this study addressed was how student perceptions and expectations of their initial online learning experience affected the quality of education obtained. To answer this question, the researcher asked participants a series of open-ended questions that explored student beliefs and expectations

prior to entering their first online course. The participants recorded their answers on a written questionnaire and similar themes were highlighted, categorized and counted.

When questioned about the first online experience, students were asked if they had any preconceived beliefs, expectations, etc. of what to expect of the online environment (for example, was it easier than face-to-face classes, less work than face-to face classes, learn as you go, etc.); Table 4 details student preparedness for the online learning environment prior to entry, preconceived beliefs and expectations, and individual familiarity with technology. Three of the nine students indicated that they didn't know what to think before their first online course. Those that did report preconceived beliefs cited various thought processes that flexibility would be a consideration prior to entering the course, that the course would have been easier due to the accessibility to look up information, less time consuming and that procrastination alongside the workload were of concern.

Participants were asked if they felt whether they were prepared for online learning prior to their first online course was mostly favorable. Of the nine that responded only one indicated a level of fear and based that on having little understanding of how to work a computer not the course in particular. Of the nine students that responded to the question as to personal preparedness for online learning in relation to motivation, time management and independent learning, seven replied positively with the two that indicated with a negative response furthered those responses with comments of "I had no idea what to expect of the class" and "I don't think I ever will be."

Table 4

*Distance Education Students' Perceptions Concerning Initial Online Experience*

(Number of participants responding = 9)

<b>Statement</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
Did you have any preconceived beliefs, expectations, etc. of what to expect of the online environment?	5	4	0
Did you feel you were prepared for online learning in respect to personal knowledge and skill level with technology?	8	1	0
Did you feel prepared for online learning relative to personal level of motivation, time management skills, and independent learning?	7	2	0

*Source:* Student Perceptions of Effective Online Courses Questionnaire

Four out of nine students indicated they had no preconceived beliefs, expectations, etc. of the online environment before entering into a distance learning environment. Likewise, eight out of nine students felt they had the personal skill sets necessary for online learning and technology. Although most students stated they felt prepared for online learning, one acknowledged that she didn't feel she would ever be prepared for online course work.

**Overall learning experience.** The fifth research question that this study addressed was student perceptions and expectations of the overall learning experience for the online learning environment. The researcher asked participants a series of open-ended questions that queried students on what could have been done differently to improve the learning experience, what recommendations would they give to future online students, and whether or not they would consider taking online classes again. The participants recorded their answers on an online written questionnaire and similar themes were highlighted, categorized and counted.

When questioned about the overall learning experience for online education, students were asked to identify what could have done differently to improve learning in online courses; Table 5 details student responses with regards to willingness to take an online course in the future. Three of the nine students indicated that they felt nothing different could have been done to improve learning and that they enjoyed the experience. One student indicated more instructor involvement could improve the course that in her experience one teacher would take weeks to respond or provide feedback. Two participants indicated that more quizzes or assignments that promoted interaction with the material would have been beneficial; whereas, another stated that the software resources could have been utilized more to improve the experience. Lastly, one participant indicated that a better agenda could have been put into place.

Students were asked for recommendations that they would give other students before they take an online class and the feedback was varied. Nine individuals responded to this query, five of which spoke of personal time management, establishing a schedule and adhering to it. Other students provided advice consoling others to “Treat it as a face-to-face class. Don’t be afraid to ask for help”, to regularly check email and to take advantage of all resources that are made available. Participants were asked to indicate if they would take another online course in the future and requested to provide a rationale to their responses. As noted below in Table 5, seven of the nine indicated that they would.

Table 5

*Distance Education Students' Perceptions Concerning Overall Learning Experience*

(Number of participants responding = 9)

<b>Statement</b>	<b>Yes</b>	<b>No</b>	<b>Maybe</b>
Would you take another online course?	7	0	2
<b>Additional questions that were 'opinion' based were posed to students – feedback can be found in the narrative.</b>			

*Source:* Student Perceptions of Effective Online Courses Questionnaire

The online experience was favorable for seven of the nine students; two of which stated they were undecided if they would take another online course. Strong advice was given for future students that centered on time management, asking questions, make connections and treat the courses no differently than the traditional classroom delivery method. All of which were also indicated as areas indicated for improvement in online courses.

## Chapter V: Discussion

The purpose of this study was to determine what student needs and perceptions are relative to the online environment; examining the factors affecting their readiness and success in distance education both prior to entry of their online courses and once immersed in the distance education environment. More specifically, the study examined student needs and perceptions relative to the online environment that centered around support services, instructional strategies and delivery method, personal aspects that influenced online learning, the first online course experience and the overall experience of their online learning relative to their readiness and success in distance education.

In light of the literary reviews that were conducted and to satisfy a need for enhanced understanding of what student needs and expectations are as it related to their perceived notions of a quality online education, three research questions that guided this study were:

1. What perceptions do students at Gateway Technical College enrolled in the Surgical Technology Program have of online course work?
2. What expectations do students at Gateway Technical College enrolled in the Surgical Technology Program have of an online course?
3. What recommendations would students at Gateway Technical College enrolled in the Surgical Technology Program give to future distance education students?

The research design for this study was descriptive in nature and a case study methodology of current phenomena was used to gather the data required to address the research questions. The design queried students in the Surgical Technology Program at Gateway Technical College that were currently enrolled or recently have completed the Surgical

Pharmacology online course about their perceptions of online course work prior to enrollment, and their expectations of an online course.

The survey employed a questionnaire that asked fifty-two questions, forty of which were open-ended questions designed to query Surgical Technology students at Gateway Technical College that were currently enrolled in or had recently completed the Surgical Pharmacology course about their perceptions of online course work and their expectations of an online course. The information was obtained by emailing the questionnaire to students by means of the Qualtrics Survey tool while adhering to a set of questions that was developed specifically for this study and was intended to reveal the students' perceptions and expectations.

All text was reviewed and highlighted to indicate commonalities found in participant responses, highlighting was color coded to assist in identification of similarities and to identify common coding categories. Coding categories were transferred to a Microsoft Word file where they were analyzed. To differentiate from one response to the next, all participants were assigned a number which was transcribed onto corresponding questionnaire responses that also included program of study, school and location of educational institution will be included. The transcribed responses and Microsoft Word file were used to make adjustments as noted before results were concluded.

The results were used to identify key elements for the preparation of students entering into the virtual learning environment, as well as, assist educators in the development and maintenance of an effective learning environment that promotes student success. These components are integral to building a rich educational setting where both the student and teacher are prepared for the demands of online learning.

## **Discussion**

The first research question that this study addressed was how student perceptions of support services in an online learning environment affected the quality of education obtained. Findings suggest students were satisfied regarding support services that were provided for their online courses both with the CMS/LMS systems that were utilized and the instructional support that was provided. Participants felt they had the personal skill sets necessary for online learning as it relates to technology which was not supported in the literature review where even recent reports by Wilson, Parr and Parr (2012) extrapolated that technology continues to advance for online delivery and along with it comes a certain level of problematic issues that cause student frustration and aggravation. In fact, literary reviews criticized common perceptions of students that pertain to familiarity, comfort, and personal understanding of technological tools that are employed in most distance learning settings. “In fact, distance education tools might seem to be unfamiliar or difficult to learn for many students, so they might not be enthusiastic about participating in online activities” (Sahin & Shelley, 2008, p. 216); however, this group of students seemed to experience little of these complications. Most students felt well prepared for their online courses with a few exceptions, these exceptions being limited to internet connectivity when inside the campus building and compatibility issues between Windows based Operating Systems (OS) versus Mac neither of which the students contributed to a failing of support services but more to a generalized personal knowledge of computer usage.

The second research question that this study addressed was how student perceptions and expectations of instructional strategies and delivery methods for the online learning environment affected the quality of education obtained. Findings showed that a majority of the respondents indicated they felt prepared in advance for the online learning environment despite half of them

being unfamiliar with the terminology of what a CMS/LMS system pertained to; they were able to identify with terminology such as BlackBoard© most of which were comfortable with navigating the software system. This was reported to be due in part to a familiarity of having already been exposed to the system throughout their college experience at Gateway where navigation was necessary to obtain grades and communicate with instructors and also to the simplicity of the LMS itself for navigation which was reported as “easy” and “comfortable” by students when queried.

Additionally, findings regarding instructional strategies and delivery method were varied in student opinions as they referred to materials received as the most favorable feedback from all students, whereas classmate support was identified to be primarily ineffective or non-existent and usage of the discussion board ranged from being “somewhat beneficial” to “tedious”. Only three participants found the discussion board to be helpful and informational. Such findings are not new to researchers observing the online learning environment, in fact, studies show that “One of the most notable differences between the classroom and the Web-based environment is just that: the environment” (Smith, 2008). Teachers and students are not physically within the classroom environment and as a result, positive feedback, verbal and auditory cues, etc. are absent far more difficult to portray which can significantly alter the learning capacity of the student. “A variety of other barriers to distance education have been described including lack of face-to-face contact, lack of faculty time/support, technology issues, lack of student services, and expenses” (Wilson, et al., 2012, p. 159). Surprisingly though, of all the indicators referenced by Wilson, et al, only the face-to-face contact seemed to be the most notable by this group of respondents.

The findings that were the most diverse came from questions revolving instructor effectiveness with course management and student interaction; here student replies were very diverse and varied depending on what format the educator was interacting with the students. Again, the discussion board fared poorly with student comments to indicate low involvement and a desire for more direct interaction in the discussions; however, when it came to managing the course itself students were quite satisfied with the pace and clarity of established timelines.

The third research question that this study addressed was how student perceptions and expectations of personal aspects for the online learning environment affected the quality of education obtained. Findings revealed that time management and motivation are factors that students reported had an effect on their online learning experience which is supported by research. All of the students acknowledged that soft skills such as motivation alongside time management posed difficulties which are supported by researchers like Smith (2006), who identified challenging aspects of online classes related to time management issues. Participants indicated that setting a personal schedule was important and that if one lacked time management skills that it would be to the individual's detriment to successfully complete an online course.

Other factors that studies reported to have impact for students was course pacing and workload such as the one written by Wilson, Parr and Parr (2012) where they identified a list of variables that effect student levels of satisfaction within the online learning environment which included lack of faculty time/support, promptness of material delivery and course motivation; but in these areas these findings are inconsistent with this study group where only motivation was found to be in accordance with past literature and again, this was of a more personal nature than that of instructional.

The fourth research question that this study addressed was how student perceptions and expectations of their initial online learning experience affected the quality of education obtained. Four out of nine students indicated they had no preconceived beliefs, expectations, etc. of the online environment before entering into a distance learning environment. Likewise, eight out of nine students felt they had the personal skill sets necessary for online learning and technology. Although most students stated they felt prepared for online learning, one acknowledged that she didn't feel she would ever be prepared for online course work. These findings are somewhat controversial to literature cited previously in this study, where it is indicated that perceptions are often viewed as student expectations in what will create a satisfying educational experience or what will potentially lead to student dissatisfaction and are often indicative of personal needs. Mupinga, et al. hypothesized that learning is reflective of personal ability to acquire information, to interact with their peers and instructors, and to participate in learning experiences yet the absence of preconceived beliefs, expectations, etc. leaves a void where there should otherwise be recurrent themes; this in itself is noteworthy and indicative of further exploration.

The fifth research question that this study addressed was student perceptions and expectations of the overall learning experience for the online learning environment. Findings showed that the online experience was favorable for most with 78% of the respondents indicating they would take an online course again and the remaining 22% replying with a "maybe"; none of which stated they would not take another online course. This is not surprising, given the data that was discovered in the literature reviews regarding the increases in online enrollment where the National Center for Education Statistics (NCES) in 2007-2008, reported about 4.3 million undergraduate students took at least one distance education course which is equivalent to approximately 20 percent of all undergraduate students enrolled in post-secondary education.

These numbers demonstrate a progressive increase from past enrollments of online students of 16 percent from 2003-2004 to 20 percent in 2007-2008.

Strong advice was given for future students that centered on time management, asking questions, making connections and working with other students in person, despite the course being online. They also advised other students to taking advantage of the resources that are provided. In a pilot study that was conducted prior to this study, bullying and earlier integration into discussion groups were areas indicated for improvement in online courses; however, those issues did not become apparent in this study group. It is not surprising that social aspects of a classroom are, in part, what students offered as recommendations for future students; a 2010 study that looked into what lecturer and students viewed as necessary components for a successful and nurturing online environment showed that students “concurred with the lecturers that social and interactive processes are integral to online learning” (Khoo, 2010, p. 21).

## **Conclusions**

Based on the findings, the following conclusions were drawn:

- The literature reviews frequently reference student perceptions and expectations with regards to how both affect the learning environment. Given that the findings in this study showed students indicated that they had no preconceived beliefs it is thought that this is not an accurate reflection of the phenomena and is likely due to the small sampling of participants or possibly due to an increased familiarity with technology and distance learning education.
- Time management and student motivation are frequent barriers in the online environment.

- Instructional strategies and delivery methods have a direct correlation to student satisfaction and learning online; most noted are discussion board utilization, instructor interaction, peer interaction and the workload of each specific class that students are expected to complete.
- Technology is a broad spectrum topic with many separate categories that must be taken into account when looking at online education, everywhere from soft skill sets of basic operations to the more advanced capabilities with specialty programs embedded within software. The findings reported in this study were not representative of past reports.
- Perceptions of instructional strategies and delivery methods varied based on student experiences with each instructor and course. This is not surprising given that students learn differently and that delivery methods can affect the learning that is obtained.
- Despite barriers that students experienced in the online classroom, they seem negligible to the learning that occurred. Students flexibility is greater than the studies imply given that the numbers of online enrollment continue to increase and student satisfaction reported in this study were all positive and looking to return.

### **Recommendations**

Based on the findings and conclusions of the study, the following recommendations were made:

- To properly represent student perceptions and expectations, a larger sampling to substantiate data and further research is necessary.

- To accurately understand technology and the affect it has on student learning demographics need to include student age and pre-testing of technological skill levels to substantiate data.
- Additional studies are required to establish ways to improve student readiness and understanding of soft skills such as time management and motivation as it applies to the online environment.
- Detailed instructional modules should be developed that are offered to students on an optional basis before the start of an online course. These modules would be self-paced learning that walk students through all elements of the CMS/LMS the college utilizes for online delivery.
- Students should be counseled by advisers about time management and motivation skills with regards to online education; where applicable, self-paced courses should be provided to students that demonstrate low levels attainment of these soft skills.
- To properly understand student perceptions and expectations, future studies should make a comparative study of Associate, Bachelors and Masters Students in an online environment to determine if there is a difference in student immersion and commitment to their education as it relates to their studies in an online course.

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## **Appendix: Online Consent and Survey as Viewed by the Participants Through Qualtrics**

### **Survey Tool**

*“This research has been reviewed by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.”*

#### **Consent to Participate in UW-Stout Approved Research**

**Title:** Identifying Students’ Perceptions on Effective Distance Learning within the Surgical Technology Program at Gateway Technical College

**Investigator:** Kristina Vines

**Description:**

You are being invited to participate in a research study titled *“Identifying Students’ Perceptions on Effective Distance Learning within the Surgical Technology Program at Gateway Technical College”*. This study is being done by *Kristina Vines* from the University of Wisconsin-Stout. You were selected to participate in this study because of your enrollment in the Surgical Technology Program course titled, Surgical Pharmacology, which is an online delivery method of instruction. Students invited to this survey will not face any penalty in their grades or standing by participating in the survey.

The purpose of this research study is to determine what student needs and perceptions are relative to the online environment; examining the factors affecting their readiness and success in distance education both prior to entry of their online courses and once immersed in the distance education environment. More specifically, the study will examine student needs and perceptions relative to the online environment that center around support services, instructional strategies and delivery method, personal aspects that influenced online learning, the first online course experience and the overall experience of online learning relative to readiness and individual success in distance education.

If you agree to take part in this study, you will be asked to complete an online survey. This survey/questionnaire will ask about what student needs and expectations are as it relates to their perceived notions of a quality online education, three research questions that will guide this study are:

1. What perceptions do students at Gateway Technical College enrolled in the Surgical Technology Program have of online course work?
2. What expectations do students at Gateway Technical College enrolled in the Surgical Technology Program have of an online course?
3. What recommendations would students at Gateway Technical College enrolled in the Surgical Technology Program give to future distance education students?

**Time Commitment and Payment:**

The survey/questionnaire will take you approximately 2 hours to complete and may be accessed multiple times to allow for completion over a two week period of time effective starting the date you receive the initial email invitation for the survey link. Please note, there is no financial compensation associated with the completion of this survey.

**Risks and Benefits:**

You may not directly benefit from this research; however, we hope that your participation in the study may improve on practices in the classroom by identifying student needs based off their perceptions of distance learning. The study may further techniques and practices that are employed during the preparation of students and educators alike for the successful completion of online courses by identifying skill sets that are important throughout the entire learning process in a distance education setting based on the learners needs in a constructivist setting. This information will then add to the present state of knowledge that is being compiled in regards to a relatively new field of instruction.

We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach is always possible.

**Confidentiality:**

To the best of our ability your answers in this study will remain confidential. We will minimize any risks by utilizing an online survey tool known as Qualtrics, which houses all data on a confidential server accessible only by the researcher. Data will be quantified with this tool at which time student names will be struck from the final results after being assigned an identification number. Resultant data will be housed on a secure, password protected computer for a period of five years, accessible only by the researcher; after five years has transpired, and data will be permanently deleted.

**Right to Withdraw:**

Your participation in this study is completely voluntary and you can withdraw at any time. You are free to skip any question that you choose or to stop participating at any time. Whether you choose to participate or not will have no effect on your grade or evaluation. However, should you choose to participate and later wish to withdraw from the study, there is no way to identify your anonymous document after it has been turned into the investigator. If you are participating in an online survey, once you submit your response, the data cannot be linked to you and cannot be withdrawn.

**IRB Approval:**

This study has been reviewed and approved by The University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have questions or concerns regarding this study please contact the Investigator or Advisor. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact the IRB Administrator.

“As researchers we are not qualified to provide counseling services and we will not be following up with you after this study. If you feel upset after completing the study, or find that some questions or aspects of the study triggered distress, talking with a qualified clinician may help. If you feel you would like assistance please contact a licensed Mental Health counselor and/or physician that your insurance provider covers. In the case of an emergency please call 911.”

Investigator: Kristina Vines, (262) 930-7423, vinesk@my.uwstout.edu

Advisor: Dr. Carol Mooney, (715) 232- 1444, MooneyC@uwstout.edu

IRB Administrator: Sue Foxwell, Research Services 152 Vocational Rehabilitation Bldg.  
UW-Stout Menomonie, WI 54751 715.232.2477 [foxwells@uwstout.edu](mailto:foxwells@uwstout.edu)

**State of Consent:**

“By clicking next, you will indicate that you have read and fully understand the written consent form provided to you by the surveyor. By clicking next, you indicate your consent to participate in this study. If you do not wish to participate in this study, please exit the survey now.”

**SECTION 1: This section will provide basic demographic information and establish the degree of exposure to web-based course instruction.**

**Participant Name:**

**Gateway Technical College Email Address:**

**Gender**

- Male
- Female

**Location of Participant (City, State):**

**Date of Expected Graduation:**

**Program of Study**

- Surgical Technology, AAS

**School**

- Gateway Technical College, Kenosha Campus

Please indicate the number of online classes you have enrolled in before participating in this questionnaire:

Please indicate the number of online classes you have completed before participating in this questionnaire:

What personal factors influenced your choice to enroll in a distance education course? (Flexible schedule, course only offered online, time-frame for completion of program, etc.)

**SECTION 2: Studies indicate that student perceptions entering an online learning environment affect the quality of education they obtained. Please answer the following questions regarding various factors that pertain to distance education**

*Regarding Support Services:* Were you given online ‘Course Preparatory Instructions’ (FAQ sheets, videos, “how to” instructions), were the instructions adequate and helpful? Please explain.

*Regarding Support Services:* Were you given ‘Chat Communication Features’ instructions to communicate with instructor and students? Were the instructions adequate and helpful? Please explain.

*Regarding Support Services:* Were you given ‘Email Communication Features’ instructions to communicate with instructor and students? Were the instructions adequate and helpful? Please explain.

*Regarding Support Services:* Were you given an explanation regarding ‘Current Announcements’ and/or ‘News page’ and where to locate this material? Were the instructions adequate and helpful? Please explain.

*Regarding Support Services:* Were you given information regarding the ‘Assignment Features’ such as exams, quizzes, drop-box, and assignment submission? Was the information adequate and helpful? Please explain.

*Regarding Support Services:* Were you given information regarding ‘Collaboration Features’ such as video conferencing, synchronous chat groups (live chats), and discussion boards? Was the information adequate and helpful? Please explain.

**Regarding Support Services:** Do you feel you would have benefited from an ‘Instructional Module’ that provided a walk-through of the aforementioned items prior to the start of class?

- Yes
- No

**Regarding Support Services:** What do you think of the ‘Technology’ support provided by the university (Internet connection, system compatibility, software compatibility, email support, etc.). Please explain.

**Regarding Support Services:** What do you think of the instructor’s knowledge, skill base, and effectiveness regarding ‘Technology’ support (ability to trouble shoot problems, provided student with information (FAQ) sheets or links to trouble shoot outside of office hours). Please explain.

**Regarding Instructional Strategies and Delivery Method:** Do you feel you were prepared/ready for the online learning environment?

- Yes
- No

**Regarding Instructional Strategies and Delivery Method:** Did you know what a Course Management System (CMS) / Learning Management System (LMS) was prior to taking an online course?

- Yes
- No

**Regarding Instructional Strategies and Delivery Method:** Which delivery method was used i.e. Course Management System (CMS) / Learning Management System (LMS) in your online classes (WebCT©, Angel©, BlackBoard©, Desire2Learn©, Other) Indicate which CMS/LMS was used:

- WebCT©
- BlackBoard©

Desire2Learn©

Other

**Regarding Instructional Strategies and Delivery Method:** Did you feel comfortable navigating the CMS/LMS? Please explain the ease of use or level of difficulty you experienced.

**Regarding Instructional Strategies and Delivery Method:** Were you given information regarding the course agenda?

Yes

No

**Regarding Instructional Strategies and Delivery Method:** Was it beneficial having the course agenda in advance (did it help you organize your schedule/prepare for the class)?

Yes

No

**Regarding Instructional Strategies and Delivery Method:** Were you given information regarding the degree of intensity and instructor expectations for the course (workload, time investment, etc.)?

Yes

No

**Regarding Instructional Strategies and Delivery Method:** Do you feel a clear course layout and structure was established for your online class? (Organization of the course, flow of course, etc.)

Yes

No

**Regarding Instructional Strategies and Delivery Method:** To what extent (if any) did you experience confusion regarding the online environment? Please explain:

**Regarding Instructional Strategies and Delivery Method:** Do you feel reading/written material was used effectively for the delivery of instructional materials online in modules (formats: textbooks, power-points, PDF files, and lecture notes i.e. word.doc)? Please explain:

**Regarding Instructional Strategies and Delivery Method:** Did you feel multimedia platforms were used effectively for the delivery of instructional materials online in modules (formats: video recordings, audio recordings)? Please explain:

**Regarding Instructional Strategies and Delivery Method:** What is your opinion about the usefulness of discussion with other learners (Discussion Boards, Online Chat Sessions, etc.)? Please explain:

**Regarding Instructional Strategies and Delivery Method:** What is your opinion about instructor presence/participation in online discussions and group collaboration activities (Consider the start of a discussion, during the course of a discussion, and at the conclusion of a discussion). Please explain:

**Regarding Instructional Strategies and Delivery Method:** What is your opinion on the instructor's effectiveness in course management? (Keeping on schedule, flow of the course as it relates to learning, etc.) Please explain:

**Regarding Instructional Strategies and Delivery Method:** What is your opinion on the effectiveness of instructor support? (Accessibility, approachability, office hours clearly defined and timeliness and frequency of feedback) Please explain:

**Regarding Instructional Strategies and Delivery Method:** What is your opinion on the ability to provide personal/ student feedback on assignments, discussions, quizzes and assignments (i.e. engaging in conversations with instructors)? Please explain:

**Regarding Instructional Strategies and Delivery Method:** What is your opinion on the level of classmate support experienced during your online course? (Social Interaction-Collaboration) Did it impact your learning? Please explain:

**Regarding Instructional Strategies and Delivery Method:** What is your opinion on the amount of work (i.e. Workload) expected of students in online courses in comparison to traditional face-to-face classes (with the understanding that curriculum and objectives would be the same for each delivery method)? Please explain:

**Regarding Instructional Strategies and Delivery Method:** Which of the above mentioned factors, do you believe affected your performance in an online course the most?

**Regarding Instructional Strategies and Delivery Method:** Which of the above mentioned factors do you believe affected your performance in an online course the least?

***Other Aspects of Online Learning:*** Did you feel bored learning in the online environment considering that you were in front of a computer instead of within a physical social environment like the traditional classroom? Please explain:

***Other Aspects of Online Learning:*** Do you feel your personal ‘Time Management’ skills were a factor in the level of learning experienced during your online course? Please explain:

***Other Aspects of Online Learning:*** Do you feel your personal ‘Motivation’ was a factor in the level of learning experienced during your online course? Please explain:

***Other Aspects of Online Learning:*** Considering the pace of course delivery, how engaged did you feel in the online class or was it too slow, a good speed, too fast? Please explain:

***Other Aspects of Online Learning:*** Did you feel the workload in an online course meets or exceeds that of a face-to-face course? Please explain:

***Thinking Back to Your First Online Course:*** Prior to enrolling in an online course, did you have any preconceived beliefs, expectations, etc. of what to expect of the online environment? (Ex: Easier than face-to-face classes, less work than face-to-face classes, learn as you go schedule, etc.) Please explain:

***Thinking Back to Your First Online Course:*** Do you feel you were prepared for online learning in respect to personal knowledge and skill levels with technology that was used? (Internet, E-mail, CMS/LMS system) Please explain:

***Thinking Back to Your First Online Course:*** Do you feel you were prepared for online learning as it relates to level of personal motivation, time management skills, independent learning? Please explain:

### **SECTION 3:**

***Overall Experience of Online Learning:*** What do you feel could have been done differently to improve the learning experience in your online course(s)?

***Overall Experience of Online Learning:*** What recommendations would you give to fellow students before they take an online course(s)? (What were measures that attributed to your success in an online learning environment)

***Overall Experience of Online Learning:*** Would you take another online course?

Yes

No

Maybe

***Overall Experience of Online Learning:*** Please explain your answer regarding "Would you take another online course?" What influenced this answer? What would make an online course more appealing?

***Thank you for your time! Your insights and opinions are very valuable and greatly appreciated!***

Survey Powered By [Qualtrics](#)