## Original Paper

# Student Satisfaction and/or Dissatisfaction in Blended Learning

### Environments

### Kimberly A. Roff<sup>1\*</sup>

<sup>1</sup> Graduate School of Education, Touro College and University System, New York, USA
<sup>\*</sup> Kimberly A. Roff, Graduate School of Education, Touro College and University System, New York, USA

Received: July 18, 2018	Accepted: July 31, 2018	Online Published: August 17, 2018
doi:10.22158/fet.v1n2p149	URL: http://dx.doi.org/10.22158/fet.v1n2p149	

#### Abstract

Research exists in blended learning environments as a means of online or distance learning. However, few researchers focused on student satisfaction or dissatisfaction in these environments. This mixed methods study addressed this gap in literature by focusing on how student satisfaction or dissatisfaction is viewed in blended learning environments. The conceptual framework is based upon research that discussed both face-to-face and online environments, which make a key argument for blended learning. This framework is community and inquiry. In conjunction with this, the study relied on the multimodal model that examines different learning environments. A mixed methods study design was conducted using open and closed ended questions for triangulation of the results to be completed. A sample of 23 students from blended undergraduate courses were used. Data was analyzed using open and axial coding to identify emergent themes. The main findings indicated that students were satisfied with blended learning environments because they are flexible and convenient. Some of the areas that participants indicated there was dissatisfaction were: disconnection and technology.

#### Keywords

blended learning, hybrid learning, online learning, student dissatisfaction, student satisfaction, distance learning, alternative learning

#### 1. Introduction

There has been an increase in understanding blended learning regarding student satisfaction or dissatisfaction. The current research in higher education is that there were "over 4.6 million students, mostly at the undergraduate level, were enrolled in at least one online course" (Sinclaire, 2010, p. 2). Some of the areas where research has indicated that students were satisfied with blended learning were

in flexibility, feedback, and learning activities (Francis & Shannon, 2013; Hahessey et al., 2014; Halverson et al., 2012). Additionally, students have discussed their dissatisfaction with blended learning. They have discussed the delivery of material, collaboration, and group work (Osgerby, 2013). Research also examined the role of instructor in satisfaction as well as dissatisfaction of blended learning (Shen et al., 2013).

There was a discrepancy on what components make up blended learning and depending on the course and the instructor, the blending of online and face-to-face activities varied (VanDerLinden, 2013). Research has indicated that there was an inherent challenge in linking material from face-to-face then to online (Glazer, 2011). Others found that by delivering a course through blended learning there are more choices for students and it is an effective way to learn (VanDerLinden, 2013).

There has been an increase in understanding blended learning and student satisfaction or dissatisfaction. The current research in higher education indicated that in higher education there are approximately 80 percent of institutions which offer blended learning courses (Garrison & Vaughn, 2008). Some of the areas where research has indicated that students were satisfied with blended learning were in flexibility, feedback, and learning activities (Francis & Shannon, 2013; Hahessey et al., 2014; Halverson et al., 2012). Through the research, students have discussed their dissatisfaction with blended learning. They have discussed the delivery of material, collaboration, and group work (Osgerby, 2013). Research also examined the role of instructor in satisfaction as well as dissatisfaction of blended learning (Shen et al., 2013).

In conjunction with student satisfaction and dissatisfaction, the role of the instructor in blended learning was another factor to be considered. Through interaction, support and feedback, and overall structure of the course, the instructor role in a blended learning environment should be analyzed.

#### 1.1 Literature Review

To understand what the benefits of blended learning for students in higher education were, student satisfaction and dissatisfaction were explored. Within this literature review, there was a discussion on student satisfaction, student dissatisfaction, and the instructor role.

#### 1.2 Student Satisfaction in Blended Learning

To analyze the effectiveness of blended learning, students were surveyed and observed to see if blended learning is a viable way to learn. One of the key areas of research examined student satisfaction in a blended learning environment. In both the face-to-face as well as the online component of these blended learning environments, there were benefits to student learning. Students may be able to engage in an environment that is non-threatening through the online component and then feel comfort and safe once they meet face-to-face. Students feel comfort in their interactions online and feel anonymity. With the addition of the face-to-face component, it allowed students to meet each other and identify a face with a screen name. Francis and Shannon (2013) found that blended learning allows student engagement to be enhanced and students became active learners in their education.

Researchers found that students were satisfied with blended learning as a positive way to learn. Some researchers found that the mix of online and face-to-face learning met students' needs (Waha & Davis, 2014; VanDerLinden, 2013). Furthermore, Sahin-Kizil (2014) examined a group of over 65 participants in an English Foreign Language (EFL) blended course through Moodle and found that students responded positively to the blended learning environment and Liu et al. (2014) also found that students were happy with the blend of online as well as face-to-face in their course. With this new way of learning and engaging in the learning process, students excelled in blended environments. Shen et al. (2013) conducted a mixed methods case study of over 150 graduates through an online survey and found that students that participated in this study felt that they were satisfied with their blended learning environment. They felt that this type of learning was as effective as face-to-face learning. In addition, Obiedat et al. (2014) discussed blended learning as it affected students at the University of Jordan. A qualitative survey was conducted of over 400 randomly selected students in the School for Information Technology and found that blended learning positively impacted academic achievement on the students. Students were achieving higher grades and final grades within their courses. Lothridge et al. (2014) discussed how blended learning "combines the benefits of collaborative, independent, and problem-based learning to reach the broadest range of learning types" (p. 408).

There were several areas where student satisfaction was further analyzed in terms of the flexibility, accessibility, and usability of the blended learning environments. Hahessy et al. (2014) discussed, through a blended learning program of approximately 190 students in 7 modules, that students were satisfied with the flexibility that blended learning had to offer. The allowance of students to take the courses whenever and wherever they want was a quality that many adult learners want. Hahessy et al. (2014) also described that accessibility was a key component for student satisfaction. Having access to courses anywhere they may be being positive for students interacting in a blended environment. Although, Hahessy et al. (2014) did not discuss the negative implications when of accessibility, not everyone has access even though they may want it.

The organization of the blended course allowed for student satisfaction, Osgerby (2013) in a qualitative case study at the University of Winchester in the United Kingdom, students reported that through focus groups that they enjoyed the organization of the blended learning course. Liu et al. (2014) also described that the learning platform was easy to use and because of the usability it saved time. Students moved through the course seamlessly and this allowed them to have a positive experience in the blended learning environment.

For students to succeed and be satisfied with the blended learning environment they had feedback, support, as well as assessment. Hahessy et al. (2014) described that students felt that more guidance and feedback needed to be provided within assessment. Students felt that additional feedback needed to be given so expectations could be communicated and allow students to see where their areas of weakness were in each assignment. Without feedback, positive or negative, students felt that they were

not guided or supported. In any blended course, a discussion on how students will be supported is needed, whether it is with the library services, technical support, or another source (Wang et al., 2015). An assessment, in the form of a quiz or a question, has students feel that their learning is being monitored. Sockalingam (2012) focused on five different criterions for the relationship with students' satisfaction and blended learning in a study of approximately 2,700 students in a blended format in Singapore University. It was revealed that students were satisfied with assessment. This form of feedback was valued by the students and provided a positive experience in the blended learning environment.

Learning activities within blended environments. Per Francis and Shannon (2013), "blended learning takes its place among online learning modes as an instructional technique that marries the benefits of social and collaborative interaction between students and staff together with the qualities of self-paced learning, reiteration, and revision" (p. 361). Student satisfaction within the area of independence or collaboration was also analyzed. In either case of examination, communication was a positive part of students' satisfaction (Hahessy et al., 2014; Sahin-Kizil, 2014). In many blended learning environments, collaborative activities are required, either through the online component or the face-to-face.

The primary focus of the collaborative activity was the student. The authors found that students can discover new conclusions and knowledge when they collaborate, rather than just relying on the teacher to present information when students play an active role in the course through collaborative learning, it provided opportunities for them to explore ideas and concepts through conversations (Vesisenaho et al., 2010).

Independence in learning was also discovered as part of students' satisfaction with blended learning. As researched by Liu et al. (2014) through a 20-participant trial course in China, the blended learning environment was helpful and that the students became more independent because of the course.

Researchers found that student satisfaction in blended learning enhanced their learning and students were active learners when they were satisfied. Researchers also found that if students were satisfied that learning would be engaging and positive. Researchers found that student satisfaction in blended learning was experienced when students had a flexible, accessible, and usable. Students also needed to be given feedback, and support in their blended learning environment. This research is important to conducting the study because these factors needed to be evaluated on student satisfaction in blended learning.

#### 1.3 Student Dissatisfaction in Blended Learning

As with every learning environment there are positives as well as negatives to examine. In a qualitative case study by Osgerby (2013) it was found that students revealed negative aspects of blended learning. Students were not as satisfied with the delivery of material within the blended learning course because they preferred lectures (Osgerby, 2013). The question remains if the blended learning environment was being given in the same manner. Some blended learning environments have lectures that are given in person.

Besides the lack of personal lectures, students also were not satisfied with collaboration and group work. Osgerby (2013) found that the students did not like the group work within the online component of the course and preferred the traditional way of performing group work. Students related to each other more in a face-to-face environment for group collaboration than through asynchronous discussions. Waha and Davis (2014), in a study of 23 masters level students, found that while using a tool called Elluminate, they experienced frustration with technical issues and this led to frustration with the blended learning environment.

Some students also found that the blended learning environment was not a positive experience for them. In the blended learning courses, students were confused with the formatting associated with the coursework. Francis and Shannon (2013) also found that in some areas of study in the blended learning environments it is hard to respond back to feedback and critique. The authors found that the flexibility may hinder students from receiving the proper feedback (Francis & Shannon, 2013).

In some instances, researchers found that students were dissatisfied in blended learning because they preferred lectures or were not satisfied with group work. Some students also found that these formats were confusing. This research is important to my study because student dissatisfaction will be evaluated through surveys and these factors will be examined.

#### 1.4 Instructor Role in Blended Learning

The role of the instructor is pivotal in shaping if and how students are satisfied. The instructor has the tools needed to enrich the course whether it is online, blended, or face-to-face. In a study of faculty teaching in a blended mode, Shen et al. (2013) found that the faculty was satisfied with the blended learning environment. They felt that this type of learning was just as effective as face-to-face learning. They also felt that by combining these methods of learning such as online, face-to-face, and field experience, the students were at an advantage in the learning process. Through interaction, support and feedback, and overall structure of the course, the instructor role in a blended learning environment will be analyzed. These areas were examined after a study conducted by Wu et al. (2010) found that the instructor role in these areas was important for student satisfaction.

Interaction in the face-to-face as well as online environment is an important role for an instructor. The way that the instructor structured the discussions was an essential role of the instructors (Carloni, 2013). Furthermore, Liu et al. (2014), through their study, also found that the more discussions that were added to modules, there will be more interaction from students as well as the instructor. This interaction between students and instructor will lead to more satisfaction with the course (Liu et al., 2014). Online communication was an essential component of the online component for instructors and with the use of communication instructors had students feel less isolated (Hahessy et al., 2014).

Resources and support. In addition to interaction, instructors needed to provide students with resources and support so that students felt like they are not alone in their learning. Whether online or face-to-face students needed to feel supported by their instructor as well as others. Rovai and Jordan (2004) conducted a case study of approximately 65 graduate students enrolled in education courses.

They found that the focus should not be on how a course is delivered but rather about the "learning, reaching out to students through distance education technologies" (p. 11). Instructors needed to also maintain a strong presence in the course for support to be felt by their students (Sockalingam, 2012).

Besides supporting students, instructors also needed support in their learning of how to present in an online environment. As discussed previously, all courses cannot be easily converted to blended or online courses (VanDerLinden, 2013). Carloni (2013) found that providing support and resources to instructors helped in effective use of technology. Also, steps needed to be taken so that instructors learn how to teach their course in multiple learning environments. Instructors needed more than just materials for their learning (Sockalingam, 2012).

Every course no matter the formatting needed to have structure and usability. For students to be able to properly learn, instructors needed the course whether online or face-to-face to be accessible (Hahessy et al., 2014). Kezar (2007) expressed that there needs to be small multiple assignments throughout to keep students engaged and learning.

The small assignments needed to be graded rapidly so that the student sees progress. These concepts of assessment allowed the student to not have their grade rely on a series of 1 or 2 assignments but rather multiple to ensure success. The concept of breaking up the lecture by instructor and allowing students voices to be heard is a huge component of the blended model and allowed for the students to take charge of their responsibilities. Sockalingam (2012) discussed how instructors needed more than just materials for their learning.

In addition to creating assignments and lectures, a course was favorable if there was interaction and a strong instructor role. Hahessy et al. (2014) described how the role of the instructor was to provide feedback so that students "scaffold their learning as they progress throughout the program of study" (p. 19417). Feedback influenced student success as well as satisfaction.

Researchers found that it is important for the instructor to have to strong role in a blended learning environment. Some factors such as interaction, resources, and course structure were important to student satisfaction in a blended learning environment. These factors were analyzed through surveys in the study to see if similar factors affect student satisfaction in blended learning environments.

#### 1.5 Research Questions

The framework for this study was through a community of inquiry by Garrison et al. (2000). The ideas behind this framework discuss both face-to-face and online environments, which make a key argument for blended learning. The ideas set forth by this framework are in community and inquiry. In conjunction with the framework of community of inquiry, this study also relies on the multimodal model by Picciano (2009), it "recognizes that because learners represent different generations, different personality types, and different learning styles, teachers and instructional designers should seek to use multiple approaches including face-to-face methods and online technologies that address the learning needs of a wide spectrum of students" (p. 4). This study used data collected from surveys completed by

students who just completed a blended learning course. The findings of this data highlighted the positive aspects of blended earning as well as offered suggestions on methods to improve.

1) What factors have led to students being satisfied with their coursework in a blended learning environment?

2) What factors have led to students being dissatisfied with their coursework in a blended learning environment?

3) How has the instructor role positively or negatively influenced students' satisfaction? These research questions, used in this mixed methods approach, provided a foundation for analysis. The research questions structured the survey questions that were used.

#### 2. Method

There are three main research questions that served as the focus of this study. These questions emerged at the beginning of the study to properly analyze student satisfaction in blended learning environments in an undergraduate course in a blended learning environment. Some of the objectives that this study focused on are student satisfaction and dissatisfaction as they pertain to flexibility, feedback, learning, activities, and instructor roles.

#### 2.1 Study Design

For this study, surveys, using both open and closed ended questions, utilized information about student satisfaction in blended learning environments in an undergraduate course in a blended learning environment. The survey for this mixed methods study was obtained from Blended Learning Tool Kit, an open educational resource. University of Florida and the American Association of State Colleges and Universities created this survey instrument with funding from Next Generation Learning Challenges. The survey measured student satisfaction using much of the same verbiage that the researcher wanted to measure. The researcher felt this tool enabled proper data collection for the mixed methods study.

The participants in this study were 23 students who have taken a blended learning course. The students ranged in age, gender, and college level. The studies in which the students participated in varied throughout subject area and the location of the blended courses varied throughout regional locations throughout New York. The surveys were distributed to the participants through the instructor. The survey measures student satisfaction using the same verbiage that the researcher wanted to measure. The researcher conducted open-ended survey questions as well as likert scale based (closed ended) questions. The participants were given ample time to complete the survey and all completed surveys were kept in a manila envelope. The researcher received these surveys through face-to-face distribution or through email by the instructors.

#### 2.2 Methodology

Each of the research questions shed light on some questions regarding student satisfaction in blended learning environments.

To effectively analyze research question one, the researcher asked the participants pertinent open and closed ended questions relating to the topic within the survey. Through the survey, qualitative as well as quantitative data was analyzed. One question on the survey asked the participants, how satisfied were you with your blended course? Through quantitative analysis of the likert scale or closed ended survey question it can be concluded that 73.9% were very satisfied and 26% were generally satisfied (Figure 1).

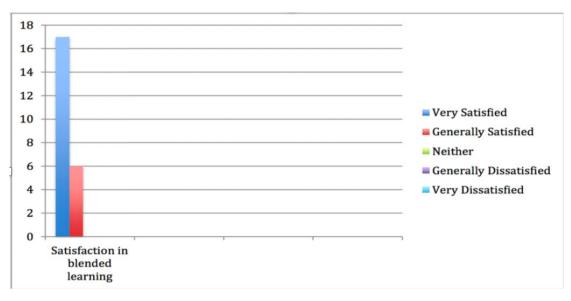


Figure 1. Research Question One Analysis

To further qualitatively analyze the data, textual analysis was used for an open-ended question of what do you like most about the blended course. The participants described many of the factors that serve as their primary reason for taking blended courses. Some of the described factors were flexibility, technology, instructor, fit into their schedule, no other choice, convenience, work at on pace, and face to face as well as online access.

One of the main factors that 48% of the participants identified as why they chose a blended learning environment was the flexibility of the courses (Figure 2). The participants agreed that what they liked was the "flexible work time" (BG2). Another participant (HN3) described the factor as "the flexibility to do work when I want as well as not coming to class as much". Many of the participants also wrote down just the word "flexibility" for their answer.

In addition to flexibility being a factor, 65% of the participants felt that blended courses provided a good "fit" for their schedule (Figure 2). As described by a participant (BG1), "meets my schedule needs". Another participant (BG6) described, "the schedule is what I like about blended courses and the only way that working more than 40 hours a week and taking courses could ever work for me is in a blended model". The other participants discussed that there is "minimal schedule conflict" and "fits well with my schedule".

The idea of convenience playing a role in a participant taking a blended course coincides with some factors that are like flexibility as well as fitting into one's schedule. Approximately 48% of the participants found that convenience was a primary reason that they wanted to take a blended learning course (Figure 2).

Since blended courses can integrate technology with the face-to-face aspect of learning, participants felt that technology was a reason that they wanted to take a blended learning course. A participant described (BC3) that the "ability to access the course anytime via Moodle and via any device" was why he liked blended courses.

In some cases, blended courses were attended because of the instructor. The main reason why students want to take blended courses is that it "provides interaction with the instructor" while still being online for other parts of the course (HN5). Many students took the blended courses because a certain instructor gave it and not necessarily the modality it was given in.

To properly triangulate the data of research question 1, a textual analysis of the data was also conducted. Fifteen out of the 23 students felt that the blended course fit into their schedule and 8 out of 23 students felt the course was flexible. Below is a Figure of the quantitative results (Figure 2).

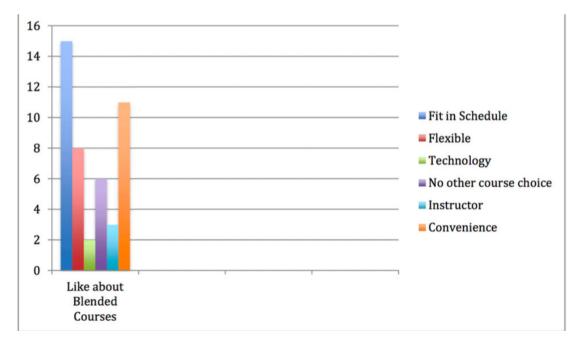


Figure 2. Research Question One Analysis

Analysis of the data both quantitatively as well as qualitatively, indicated that students are generally satisfied with blended learning courses. The open-ended questions revealed that there were many factors that students liked about the blended learning environments such as flexibility, convenience, and others as well. In the closed ended questions, analysis through quantitative means was conducted and

approximately 74% of the students surveyed were very satisfied with the blended learning environment.

Within the survey, open and closed ended questions pertaining to dissatisfaction were asked so that analysis of research question two could be completed. The question asked participants what they liked least about blended courses.

Within the open-ended question of what students liked least about the blended learning environment, some qualitative factors were revealed. Some of the described factors were disconnection, technology, time management, and confusion about material.

Some participants discussed that within blended learning environments there is a disconnection from classmates as well as the instructor. A participant described a "disconnected feeling I get not talking to my professor and classmates" (EH1). Another student discussed that "don't want to email professor because don't want to annoy him/her" (BG6). There were no other reasons for disconnection discussed. Since the blended courses have online components to them, 3 out of the 23 felt that this was a factor that they liked least about this learning environment (Figure 3). One participant described, "sometimes the web/technology portion is down and not working" (BC3). Another participant felt that just "depending on the computer so much" (HN4) was an issue. The last participant described, "technology as being scary for older adults but since it is becoming such a crucial part of society, it is beneficial to start using it" (BG1).

To be successful in the blended learning environment, two participants mentioned the importance of time management. One stated, "make sure that you make time lines and deadlines for yourself" (BC2) and the other stated "stay on top of your schedule" (EH2). These factors were stated in favor of and against the blended course.

One of the factors participants liked least about the blended course was that they were "confused at times" (HN5) and the "readings can be a lot" (BC5). Lastly a participant stated, "sometimes the online module does not line up with what we have been learning" (BG3).

When the open-ended question was analyzed for textual analysis, the number one element that students liked the least about blended learning was nothing. Twelve out of the 23 students wrote this as what they like least in a blended learning environment.

158

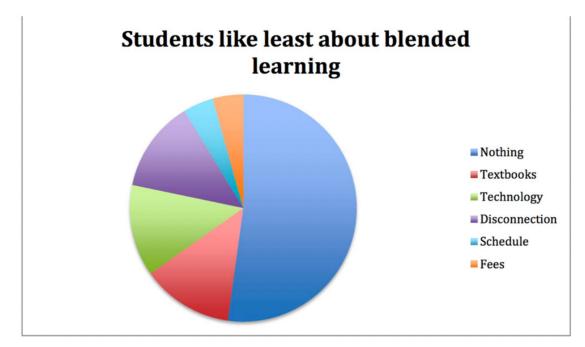


Figure 3. Research Question Two Analysis

The final question to be analyzed in this mixed methods study was how has the instructor role influenced student satisfaction either in a positive or negative way. There were two questions on the survey pertaining specifically to this and it is regarding interaction with the instructor. Participants were asked to grade on a likert scale (closed ended question) if the amount of interaction with the instructor was better, same, or worse in online as compared to face to face and if the quality of interaction with the instructor was better, same, or worse in online as compared to face to face.

Approximately 43% of the participants surveyed felt that within the technology component of the blended course, the quality of interaction with their instructor was better or much better when compared to the face-to-face course (Figure 4). Thirty five percent of surveyed participants felt that that within the technology component of the blended course, the amount of interaction with their instructor was better or much better when compared to the face-to-face course to the face-to-face course.

Within the technology component of the blended course, the quality of interaction with their instructor was the same compared to the face-to-face course was felt by 48% of participants. Fifty two percent felt that the amount of interaction between the two components was the same (Figure 4).

Some of the participants felt differently and felt that there was a decrease in the interaction of the instructor. As seen in Figure 4, nine percent felt that the quality of interaction was worse while 13% felt that the amount of interaction was worse within the technology component of the blended course when compared to the face-to-face course.

When analyzing this question based on quantitative data, the result of the likert scale revealed that approximately 50% of the participants felt that the amount and quality of interaction with students and the instructor remained the same in a blended course as to a face-to-face course (Figure 4).

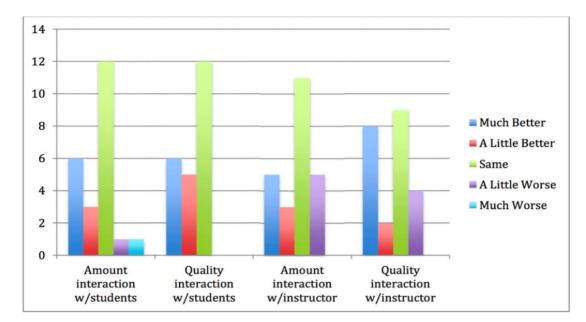


Figure 4. Research Question Three Analysis

#### 3. Limitations

Some of the limitations of the study were that the participants in the study might not be honest and forthcoming in their surveys. Some may not want the researcher to know the truth about the blended learning environment that they are in, especially since the researcher worked in the same school that the surveys were conducted in.

#### 4. Discussion

Throughout colleges and universities, blended learning has been evolving and changing. Sinclaire (2010) found that higher education has seen a rise in this type of programming. In higher education, there are "over 4.6 million students, mostly at the undergraduate level, were enrolled in at least one online course" (Sinclaire, 2010, p. 2). It is significant to our society that there is student satisfaction in blended learning environments being obtained since there are som many students involved in this type of learning.

This mixed methods study sought to understand the underlying reasons for student satisfaction in blended learning environments. Through the literature review many factors were stated regarding student satisfaction as well as dissatisfaction in these environments. Some of the areas where research has indicated that students were satisfied with blended learning were in flexibility, feedback, and learning activities (Francis & Shannon, 2013; Hahessey et al., 2014; Halverson et al., 2012). Through the research, students have discussed their dissatisfaction with blended learning. They have discussed the delivery of material, collaboration, and group work (Osgerby, 2013). Research also examined the role of instructor in satisfaction as well as dissatisfaction of blended learning (Shen et al., 2013).

In analysis of research question one, participants were asked through an open-ended question, why they were satisfied with the blended learning environment. The participants indicated the reasons why they chose to learn in a blended learning environment. Most the participants felt that there were many positive reasons for taking blended courses. The qualitative factors that had influenced them were flexibility, technology, instructor, fit into their schedule, no other choice, convenience, work at on pace, and face-to-face as well as online access. In the closed ended questions, analysis through quantitative means was conducted and approximately 74% of the students surveyed were very satisfied with the blended learning environment. Many of the students felt varied on why they chose to learn in these environments but overall, the experience was positive, and they were satisfied in learning in this fashion because of the factors described prior (Waha & Davis, 2014; Hannessey et al., 2014; Liu et al., 2014).

In analysis of question two, the participants were asked why they were dissatisfied with the blended learning environment. The students surveyed did not indicate any prominent factors that they did not like regarding blended courses. Some of the other areas that students were dissatisfied with were: disconnection, technology, time management, and confusion about material. Participants found that at times they were disconnected from the instructor or their classmates. They felt that the use of computers to get through the class was a hindrance since the system may go down at times. Other participants stated that they were confused with the material at times and felt awkward in contacting the instructor.

In analysis of research question three the instructor role was analyzed for a positive influence or a negative one. Most students felt that this role enhanced their online experience. Some felt that the online experience remained the same. It is interesting that students revealed that in some instances the interaction for both students and instructors was better in an online environment. Only a few indicated that the instructor role made it worse. The instructor role can influence how students handle a blended course. Students need to feel supported by their instructor so that they are successful in the course.

During the analysis of the three research questions, positives and negatives about the blended learning environment emerged. Through this research, it was discovered that the participants were generally satisfied with the blended courses. As several participants suggested, there were huge benefits to blended learning such as flexibility, convenience, and working at your own pace.

Some of the areas that participants indicated there was dissatisfaction in the blended courses were: disconnection, technology, time management, and confusion about material. There was also an analysis of if the instructor role influenced the satisfaction in the course and majority of the participants indicated that it was either better or stayed the same.

#### 5. Recommendations for Further Study

My focus for this mixed methods study was on student satisfaction or dissatisfaction in blended courses within a specific college. Other studies could be conducted in a wider variety of colleges and

universities to see how student satisfaction or dissatisfaction is within blended courses. An examination of blended courses with similar stipulations of meeting times and online components should be conducted at some point during the school term.

Another recommendation would be for a study based on blended courses themselves. It would be important to examine how under the umbrella of blended courses; how many different types of blended courses are being conducted as well as in what ways they are being blended. This comparison would provide great value to the educational community to see if the format of the blended courses may in fact influence student satisfaction or dissatisfaction.

Another study could be conducted analyzing the implementation of a prototype-blended course into colleges or universities. The model would be constructed out of all the best practices of this mixed methods study, such as flexibility, interaction of instructor, face-to-face components and so on.

A longitudinal study on blended courses should be considered. This analysis should occur over a two to four-year period. This would enable more of an in-depth analysis of student success as well as satisfaction in blended learning environments.

#### References

- Carloni, G. (2013). Content and Language Integrated Learning: A Blended Model in Higher Education. International Journal of Technology, Knowledge & Society, 9(4), 61-71. https://doi.org/10.18848/1832-3669/CGP/v09i04/56358
- Garrison, D. R., & Vaughn, D. (2008). *Blended Learning in Higher Education: Framework, Principles, and Guidelines.* John Wiley & Sons, San Francisco, CA.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105. https://doi.org/10.1016/S1096-7516(00)00016-6
- Glazer, F. (2011). New pedagogies and practices for teaching in higher education: Blended learning across the disciplines, across the academy. Sterling, VA.
- Hahessy, S., Burke, E., Byrne, E., Farrelly, F., Kelly, M., Mooney, B., & Meskell, P. (2014). Indicators of Student Satisfaction in Postgraduate Blended Learning Programmes: Key Messages from a Survey Study. AISHE-J: The All Ireland Journal of Teaching & Learning in Higher Education, 6(3), 1941-19423.
- Halverson, L. R., Graham, C. R., Spring, K. J., & Drysdale, J. S. (2012). An analysis of high impact scholarship and publication trends in blended learning. *Distance Education*, 33(3), 37-41. https://doi.org/10.1080/01587919.2012.723166
- Kezar, A., & Glazer, F. (2011). New Pedagogies and Practices in Teaching Higher Education: Blended Learning: Across the Disciplines, Across the Academy. Stylus Publishing.

- Liu, Q., Hu, R., Zhan, X., & Yan, W. (2014). Evaluation of Students' Satisfaction and Attitudes Toward Blended Learning in Medical Education: A Survey in Randomized Controlled Trial Course. In Proceedings of The European Conference On E-Learning (pp. 679-684).
- Lothridge, K., Fox, J., & Fynan, E. (2013). Blended learning: Efficient, timely, and cost effective. *Australian Journal of Forensic Science*, 45(4) 407-416. https://doi.org/10.1080/00450618.2013.767375
- Obiedat, R., Eddeen, L., Harfoushi, O., Koury, A., AL-Hamarsheh, M., & AlAssaf, N. (2014). Effect of Blended-Learning on Academic Achievement of Students in the University of Jordan. *International Journal of Emerging Technologies in Learning*, 9(2), 37-44. https://doi.org/10.3991/ijet.v9i2.3220
- Osgerby, J. (2013). Students' Perceptions of the Introduction of a Blended Learning Environment: An Exploratory Case Study. *Accounting Education*, 22(1), 85-99. https://doi.org/10.1080/09639284.2012.729341
- Şahin-Kızıl, A. (2014). Blended instruction for EFL learners: Engagement, learning and course satisfaction. JALT CALL Journal, 10(3), 175-188.
- Sinclaire, J. (2010). Student Satisfaction with online learning: Lessons from organizational behavior. *Research in Higher Education Journal*, 1-20.
- Sockalingam, N. (2012). The Relation between Student Satisfaction and Student Performance in Blended Learning Curricula. *International Journal of Learning*, 18(12), 121-134. https://doi.org/10.18848/1447-9494/CGP/v18i12/47842
- VanDerLinden, K. (2014). Blended learning as transformational institutional learning. New Directions for Higher Education, 165, 75-85. https://doi.org/10.1002/he.20085
- Vesisenaho, M., Valtonen, T., Kukkonen, J., Havu-Nuutinen, S., Hartikainen, A., & KÄrkkÄinen, S. (2010). Blended learning with everyday technologies to activate students' collaborative learning. *Science Education International*, 21(4), 272-283.
- Waha, B., & Davis, K. (2014). University students' perspective on blended learning. *Journal of Higher Education Policy and Management*, 36(2), 172-182. https://doi.org/10.1080/1360080X.2014.884677
- Wang, Y., Han, X., & Yang, J. (2014). Revisiting the blended learning literature: Using a complex adaptive systems framework. *Educational Technology & Society*, 18(2), 380-393.
- Wu, J., Tennyson, R., & Hsia, T. (2010). A study of student satisfaction in a blended e-learning environment. *Computers and Education*, 55(1), 155-164. https://doi.org/10.1016/j.compedu.2009.12.012