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ISSN 2304-0777 www.jitbm.com

Confidence - Motivation – Satisfaction - Performance (CMSP) Analysis of Blended Learning System in the Arab Open University **Bahrain**

Dr. Sarmad Mohammad

ITC- AOU - Kingdom of Bahrain

Assistant Professor – Faculty of IT

Dr. Minimol Anil Job

ITC-AOU- Kingdom of Bahrain

Assistant Professor – Faculty of IT

Email; sarmad@aou.org.bh; m.aniljob@aou.org.bh

ABSTRACT

The purpose of this study is to investigate the effect of Arab Open University students' use of blended learning using the metrics of confidence, motivation, satisfaction and performance. A quantitative research methodology is used based on an on-line questionnaire survey. The findings indicated that blended learning has a significant contribution to the students' degree of confidence, degree of motivation, perceived satisfaction and overall performance. The results of this research provided a body of knowledge for educational institutions and faculty to emphasize the importance of the students' confidence and motivation in promoting the use of blended learning and the significance of blended learning to the improvement of the students' learning satisfaction and performance.

Keywords: e-learning, LMS, confidence, performance, motivation, satisfaction

I-INTRODUCTION

With blended learning, universities are able to expand on their current geographical reach in order to capitalize on new perspective students, and to establish themselves as global educational providers. Blended learning in educational research refers to a mixing of different learning environments as shown in Figure (1). It combines traditional face-to-face classroom methods [1] with more modern computer-

mediated activities such as Student Information System (SIS), mobile learning. According to its proponents, the strategy creates a more integrated approach for both instructors and learners. Formerly, technology-based materials played a supporting role to face-to-face instruction. Through a blended learning approach, technology will be more important.

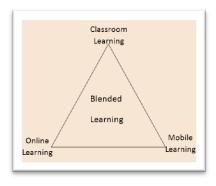


Figure 1: Blended learning methodology

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Blended learning offers a convenient educational alternative that suits today's busy life style. It is assisting the delivery of cost effective, flexible, easily accessible and ever-current education to all ages and social backgrounds, regardless of time and place. These are all reasons many universities and other educational institutions are offering their courses online in order to meet the instructors' and students'

needs. Along with the enormous contribution of blended learning [2][3], there are some concerns regarding the use of blended learning from the students' perspective. This study is done on a sample of the Arab Open University students regarding the factors affecting their use of e-learning and the effect of blended learning on their perceived satisfaction and performance.

II- MEHODOLOGY

This quantitative study has investigated the effect of blended learning on the confidence, motivation in producing satisfaction and performance of the Arab Open University's students. A quantitative research method has been conducted to achieve the study's objectives [4]. This research has been conducted on a sample of 150 students enrolled in the AOU-Bahrain

branch. In order to acquire the required data, a survey was distributed in-person, and through the Internet [5]. The questionnaire contained five point Likert-type scales to gather the participants' attitudes towards the factors affecting their use of blended learning in AOU and its effect on their satisfaction and performance.

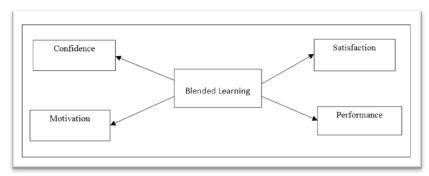


Figure 2: Block diagram of CMSP analysis related to blended learning

Students are the key consumer of blended learning, and they are using the AOU's blended learning resources and facilities to benefit, thus they are the most appropriate group to test this research's hypotheses. Convenience sampling, which is a non probability sampling technique [6][7], was applied. It refers to the sampling by obtaining the units (students) who are most conveniently available, that is available in the campus while distributing the questionnaire in-person, and available on the Learning Management System (LMS) website and

happened to see the announcement for the questionnaire link. It is most appropriate for conducting an Internet survey, as the AOU students are computer and Internet users. Only the students who have access to LMS will see the questionnaire link announced by the LMS administrators, so they can easily visit the survey and solve it [8][9]. Table (1) shows the twenty four items that were included in the questionnaire to measure the research objectives along with the sources where which they have been obtained from.

International Journal of Information Technology and Business Management 29th July 2012. Vol.3 No. 1

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Table 1: CMSP analysis related to blended learning questionnaire metrics.

| Research Metrics | Measure |
|---------------------|---|
| Confidence | 1. I feel confident in the use of various methods in the bended learning technology |
| | 2. I feel confident learning to use a variety of programs (LMS, SIS) |
| | 3. I am capable of learning through a computer-based system |
| | 4. I am able to complete the required tasks using e-learning tools |
| | 5. I am able to complete the assignment submissions using e-learning tools |
| | 6. I am confident that it easy to adopt the blended learning system components |
| Motivation | I like to use e-learning to learn as much as possible in university |
| | 2. I want to use e-learning as well as to attend in a traditional classroom facilities |
| | 3. I like to use online resources to read about new things about subjects that I'm |
| | interested in |
| | 4. I want to use online resources to learn how to solve problems |
| | 5. When I face difficult assignments, I enjoy using online resources to try to figure |
| | them out |
| | 6. I believe that I can improve my professional knowledge or skills through |
| | blended learning courses |
| Satisfaction | I have experienced a new learning environment through e-learning |
| | 2. Blended learning enables me to take more courses than the traditional learning methodology in a year |
| | 3. I believe I would learn more in less time with blended learning |
| | 4. Overall, the blended learning method met my learning expectations |
| | 5. I feel that this course served my needs well |
| | 6. I'm satisfied with blended learning system |
| Performance | 1. My level of learning that took place in the blended learning method was of the |
| | highest quality |
| | 2. I believe that blended learning increased my engagement with the subject |
| | 3. I am sure that blended learning increased my understanding of the subject |
| | 4. Using blended learning helped me to achieve the desired learning outcome |
| | 5. Using blended learning enhanced my learning skills |
| | 6. I anticipate a good grade point average (GPA) in the blended learning course |

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III-DATA ANALYSIS

The students were asked to provide their attitude regarding their confidence and ability of using a blended learning system in their study. The results in figure (3) show that most of the respondents are confident and capable of studying through a blended learning system and use its various tools. For example, 67.3% strongly agreed that they are confident in the use of various methods in the blended learning, 40.7% strongly agreed the

confidence in the use of software systems such as LMS, SIS, 38% agreed in the capability of using the computer based systems tools, 37.3% strongly agreed in the capability of task completion using the tools, 44% agreed in the capability of assignment submissions and 42% agreed in the confidence of blended learning system components adoption. Overall majority of the respondents strongly agreed in the confidence in blended learning.

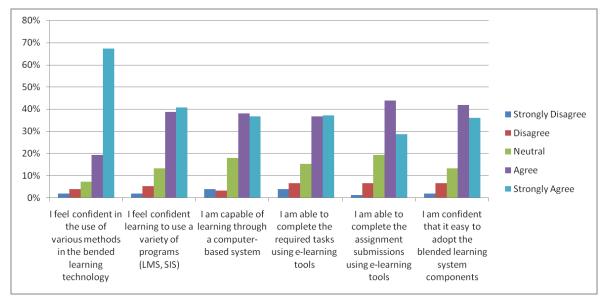


Figure 3: Outcomes of confidence metric and ability to use e-learning

The students were asked to provide their attitude regarding their wants and beliefs when it comes to their use of blended learning [12][13]. The results in figure 4 show that most of the respondents were agreed that they want to use e-learning and that they believe they would improve their skills and knowledge with online resources. For example, more

than 45% of the respondents were agreed that they want to use e-learning to learn about new things and to know how to solve problems. In addition, almost 47% were agreed that they believe they can improve their professional knowledge and skills through e-learning courses.

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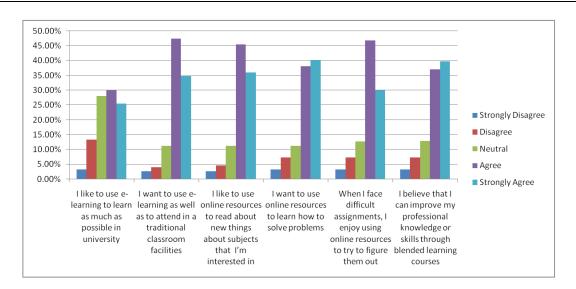


Figure 4: Outcomes of motivation metric towards the use of blended learning

The results in figure 5 show that the majority of the respondents are satisfied with e-learning in which they've experienced a new learning environment through e-learning with an agree percentage of 51.3. Almost 38% of the respondents were agreed, and 15.3% were strongly agreed that they will gladly take

other courses online if they had the opportunity [10][11]. Moreover, almost 45% were agreed that the e-learning course served their needs well, and about 40% were agreed that the e-learning method met their learning expectations.

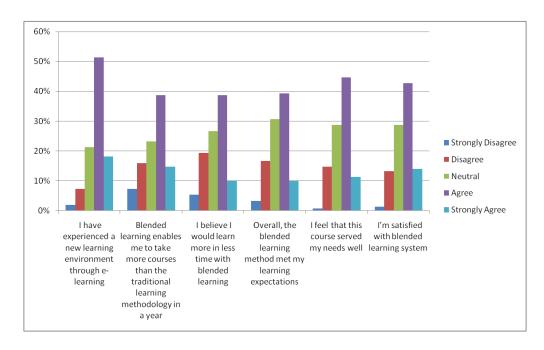


Figure 5: Outcomes of satisfaction metric with e-learning

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The students were asked about their performance with e-learning in terms of increased engagement and understanding, enhanced skills, and achieved learning outcome and grades [6]. The results in figure (6) shows that most of the respondents were agreed or neither agreed nor disagreed with the items provided, that is they are not mostly disagreeing that their performance would be improved with blended

learning. For example, 29% of the respondents were agreed that blended learning increased their understanding of the subject, whereas 23.3% were disagreed. On the other hand, a moderate agree percentage of 38% went with that the use of elearning enhanced the respondents learning skills, and about 34% were anticipating a good grade point average (GPA) in the blended learning course.

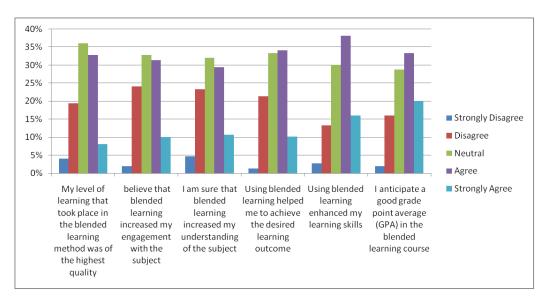


Figure 6: Outcomes of students' performance metric with e-learning

IV- CONCLUSION

This research aimed at investigating the effects of blended learning on the Arab Open University students on their confidence, motivation, perceived satisfaction and performance. The results achieved support that the measures confidence and motivation have a positive and significant effect on the AOU students' use of blended learning. Also it is found that blended learning have a positive impact on students' performance and satisfaction.

The literature revealed that many factors have been found to affect the use of blended learning

confidence and motivation. On the other hand, blended learning was found to affect both students' perceived satisfaction and performance. The current research was conducted to investigate the effects of the Arab Open University students' use of blended learning on their degree of confidence, motivation, perceived satisfaction and performance. Confidence and motivation have a great positive effect on the AOU students' use of blended learning. Also the research findings regarding the effect of the blended learning on the students' perceived satisfaction and performance were significant.

29th July 2012. Vol.3 No. 1

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