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Степень удовлетворённости студентов факультета физической культуры программами смешанного обучения

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Проблема и цель. *Организация смешанного обучения требует наличия виртуального образовательного пространства, позволяющего формировать учебные сообщества. Факультетом физического воспитания Иорданского университета был разработан ряд курсов в формате смешанного обучения, включающих как очные занятия (контактные часы), так и онлайн взаимодействие на базе виртуальной образовательной платформы.*

Цель настоящего исследования – выявить, могут ли режимы смешанного обучения влиять на восприятие студентами образовательных целей, а также на их удовлетворённость учебным процессом.

Методология. *Данное исследование проводилось с применением метода анкетирования. В нём приняли участие 83 студента уровня бакалавриата, осваивающие образовательные программы по моторному научению на факультете физического воспитания.*

Результаты. *В результате исследования был диагностирован высокий уровень удовлетворённости студентов программой смешанного обучения на базе виртуальной образовательной среды (83 %). Также было установлено, что на степень удовлетворённости учебным процессом значительно влияет специфика чередования онлайн и традиционного образовательного контента. Кроме того, наибольшая степень удовлетворённости качеством преподавания была зафиксирована в случаях, когда обучение способствовало повышению уровня учебной самостоятельности студентов.*

Заключение. *В заключении делается вывод о том, что получаемая от студентов обратная связь имеет большое значение для обеспечения успешной реализации смешанного обучения.*

Ключевые слова: *смешанное обучение; удовлетворенность студентов; моторное научение.*

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Students' satisfaction with blended learning programmes in the Faculty of Physical Education

Abstract

Introduction. Blended learning requires a virtual learning environment (VLE), which contributes to establishing learning communities. The Faculty of Physical Education at the University of Jordan has designed a number of courses which incorporate blended learning with contact classes and online components on the e-learning platform. The objective of the present study is to investigate if modes of blended learning affect students' perceived achievement goals and satisfaction.

Materials and Methods. The research model has been tested using a questionnaire survey. The sample consisted of 83 undergraduate sport students pursuing the courses in Motor Learning offered by the Faculty of Physical Education.

Results. It was identified that students were satisfied with blended programmes and online learning environments (83 %). The findings have shown that Blended Learning rotation type (students rotate between online and traditional content within the fixed schedule) significantly affects learning satisfaction. Moreover, teaching quality received the highest satisfaction level when interaction significantly affected self-study.

Conclusions. The feedback of students who are amongst the key stakeholders is essential to ensure a successful implementation of blended learning.

Keywords

Blended Learning; Students' Satisfaction; Motor Learning.

Introduction

The world is rapidly changing. Universities all around the globe are now implementing and investing in Virtual Learning Environment which paves the way to deliver 'Blended learning', learning management systems are used in higher education context. The reviewed literature revealed several definition of blended learning. From training perspective, blended learning can be described as an effective learning model with suitable supporting technology coupled with appropriate mix of teaching techniques. This combines a mix of ICT (Information and Communication Technology) with various delivery methods and learning resources. Blending learning typically consist of 30 % to 79 % online content delivery (Kyei-Blankson & Ntuli, 2014 [6; 11]).

Naaj et al (2012 [9]) and Garrison & Kanuka (2004 [3]) found that BL program encourages a type of communication between lecturer and student that balances between stable cohesive influence and limitless access to information on the Internet. Blended learning allows for further options for students to study in

the place and at the pace of their choice in form of digital communication technologies. Wu et al. (2010 [16]) indicate that BL raises collaboration between students where they define concept of blended learning as "a learning approach that combines between different delivery methods and styles of learning. The blend could be between any form of instructional technology with classroom teaching such as videotape, CD-ROM, Computer Assisted Instruction (CAI) and web-based learning.)

"…its ability to facilitate a community of inquiry. Community provides the stabilizing, cohesive influence that balances the open communication and limitless access to information on the Internet. Communities also provide the condition for free and open dialogue, critical debate, negotiation and agreement – the hallmark of higher education. Blended learning has the capabilities to facilitate these conditions and adds an important reflective element with multiple forms of communication to meet specific learning requirements" (Garrison, 2004 [3, p. 97]).

The types of blended learning are: face-to-face, (driver content mostly delivered traditionally), rotation (student rotate between online and traditional content on fixed schedule), flex (content delivered online with traditional sessions providing (if needed) online lab sessions at a traditional location), self-blend (student chooses to take online course to supplement traditional learning), and online driver (lectures delivered mostly online with some voluntary traditional application) (M. B. Horn and H. Staker, 2011 [4]).

Higher education institutions adopt blended learning as a formal education program, in which a student learns partly through online delivery of content. Instructions with some element of student's ability to have control over time, place, path, and/or pace etc. can be available, aided by textbooks, manuals, recitations, demonstrations, quizzes, and examinations. The courses are offered can be considered as blended if they incorporate 30 % to 79 % of online content delivery (Horn and Staker, 2011 [4]).

Blended learning in Faculty of Sport Sciences provides the perfect combination of online and traditional content on fixed schedule, which is ideal for those balancing their study work alongside other professional or sporting commitments. Student put theory into practice through applied studies and measurement as well as sport-specific models. Furthermore, blended learning program provides opportunities to develop student management skills in motor learning and understanding knowledge (Alawamleh, 2018)[1].

Johnson et al. (2014 [5]) reports that "the Internet is capturing more and more of our time each day – with total hours spent online via PCs, laptops, mobiles and tablets growing from 5.55 % in 2012 to 6.15 % in 2014". In a major meta-analysis of research on blended and online learning for the U. S. Department of Education Means et al. (2011 [8]) reported that blended instruction has been more effective, providing a rationale for the effort required designing and implementing blended approaches. When used by itself, online learning appears to be as effective as conventional classroom instruction. Rienties et al. (2015 [12]) indicates that satisfaction with blended learning represents a key concern for higher education stakeholders, they are becoming

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[1] Alawamleh A. Blended learning in physical education school, 2018. URL: http://newsletter.ju.edu.jo/Lists/In TheSpotLight/Disp_Form.aspx?ID=10&Issue=2018-08

an increasingly competitive market. Student satisfaction has become an important component of Quality Assurance and Quality Enhancement. Many student in Canadian universities preferred blended learning (Owston et al., 2006 [10]). Castle and McGuire (2010 [2]) found that students show greater satisfaction in blended courses than in traditional lectures.

Faculty of Physical Education at the University of Jordan modified a physical education modules to suit VLE (Virtual Learning Environment) settings. Currently the Faculty offers more than 35 blended learning courses for undergraduate and graduate students. Learner satisfaction can be easily attained by implementing distinguishable factors involving interacting with the blended learning by students, and to evaluate student's satisfaction is of great importance to higher education institutions as it helps them to pinpoint the strengths and to identify areas for improvement, especially in sport science institutions.

The aims of the study are to present reactions of students undergoing an ICT-based blended learning environment in the Motor learning course, and to measure the extent of students' satisfaction with the blended course that they participated in for sixteen weeks. To investigate the level of satisfaction based on benefiting from the course, lecture quality, ability to use the VLE (E-learning), enhancing learning, confidence in using E-learning and the ability to interact with other students during days of lectures, Monday through Tuesday.

Hypotheses

There are differences in the overall level of satisfaction with blended learning based on enhancing learning ability to use VLE (E-learning), lecture quality, confidence, interaction,

benefit. Another factor was the day a lecture is given.

Materials and Methods. Population and Sampling

This study was conducted in the University of Jordan, School of Physical Education. A total of (83) undergraduate sport students (41 males, 42 females) were divided into two groups (A) 40 and (B) 43, including those who attended the ninety-minute lectures on Mondays and Wednesdays, and those who attended the sixty-minute lectures on Sundays, Tuesdays and Thursdays (ninety-minute and sixty-minute for a lecture which is equal to 180 minutes for both three-session or two-session lecture per week). The same lecturer taught both classes. For this project, the station rotation model was used, the students rotate on a fixed schedule or at the lecturer's discretion between learning modes; one of which is online learning. For example, Thursdays were online meeting while Sundays and Tuesdays were the face-to-face technique. Blended learning included activities such as small-group, full-class instruction, group projects, individual tutoring, quizzes, assignments and short writing assignments.

The online section was inclusive of analysis videos, which are available online, or creating some videos related topics. Students were given time to work on online reading assignments, forum outside the classroom. Students submitted all tasks electronically, and they were able to keep track of their progress and marks.

All students were dealt with individually, and all the data were systematically coded and processed using SPSS. The study was granted approval from the University of Jordan, Faculty of Physical Education; all participants submitted their written consent to take part in the study. Participants completed the questionnaire independently under the researcher's supervision.

Study instruments and validation procedure

The instrument was adapted from various sources which have been proven to be reliable and valid. The alpha reliability coefficient of the scale was found as 0.93 indicating that the instrument was reliable (see table 1). A questionnaire was designed by the University of Jordan blended learning group and validated by four experts at the Faculty of Physical Education. Statements in the questionnaire were categorized into six main domains; lecture quality, benefit, learning, confidence, interaction, and ability to use VLE.

The scoring for the questionnaire was established following the five-point Likert Scale: strongly agree, agree, neutral, disagree, and strongly disagree, with scores of five points.

Table 1

Internal consistency Cronbach's Alpha reliability for the Satisfaction on Blended Learning Domains

Items	Domains	Number of Statements	Cornbach's alpha value
22,11,4,2,1	Learning	5	0.91
6,8,7,9	Self confident	4	0.85
10,3	Interaction	2	0.60
15,12,13,14	Ability to use the VLE (E-learning)	4	0.71
20,18,19,17,16	Lecture quality	5	0.92
5,21	benefit	2	0.80
	Total	22	0.93

Results and Discussion

In order to address the research hypotheses of the present study, table (1) provides basic statistics regarding the mean and Std. Deviation for each domain. The extent of students' satisfaction with the blended course that they participated in for sixteen weeks was high, M was (4.17). The majority of students were satisfied with BL with 83.4%. The study found that the quality of lecture was most important in influencing student satisfaction, such as lecturer has competence in motor learning; instructional strategies that lecturer used stimulated the students to explore, discover, and think critically. Some statements asked students if the lecturer has good motivation skills, or lecturer guides students along a continuum of learning from awareness of new techniques to adapt and apply such techniques in their own professional settings. For example, one of the lecturee quality statement was 'my professor can use online learning environment confidently'. The researcher found that students who were motivated and invested their effort in the blended learning course were more likely to express higher satisfaction with the course (Svanum & Aigner, 2011 [13]). Other important factor influencing student's satisfaction was the degree of benefiting from the course, it received 88.6 %; 'I feel that I learnt a lot through blended learning course'. Figure (1) shows blended learning satisfaction domains. The results also showed that 76.4 % of students were satisfied with the ability to use Virtual Learning Environment.
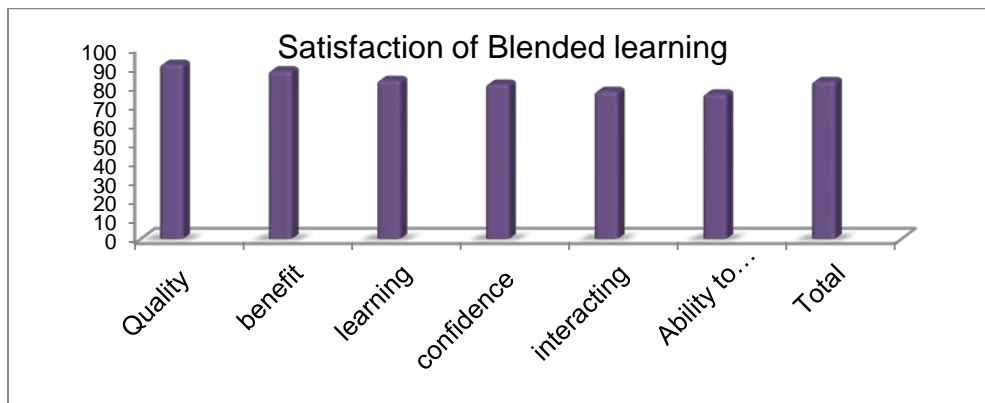
Fig. 1. Blended Learning Satisfaction on Motor Learning Courses

Table 2

Means and Standard Deviations of Satisfaction level on Blended Learning Courses

Items number	Domains	Mean	SD	Percent %	Place
20,18,19,17,16	Lecturer quality	4.61	0.61	92.20	1
5,21	The degree of benefiting from the course	4.43	0.71	88.60	2
22,11,4,2,1	Enhancing learning	4.18	0.87	83.60	3
6,8,7,9	Self -confident	4.08	0.87	81.60	4
10,3	Interaction	3.89	0.97	77.80	5
15,12,13,14	Ability to use the VLE (E-learning)	3.82	0.82	76.40	6
	Total	4.17	0.64	83.40	

Blending learning program encourages the type of communication and interaction between lecturer and student. There are a variety of ways for students to collaborate online, via Moodle, ED-MODO etc. The current study showed interaction Although students encountered some technical problems, they preferred to deal with the possible challenges instructors and learners face in factor was 77.8 % of students. Some researchers indicted that blended learning increases collaboration between students and Lecturer (Naaj et al., 2012 [9]; Garrison & Kanuka, 2004 [3]; Wu et al., 2010 [16]; Vaughn, 2014 [15]). In current study, enhancing learning through (E-learning) using blended instruction has been more effective 83.6 % of students rated it. The degree of benefiting from the course of using blended instruction was 88.6 %.

The U. S. Department of Education found that blended instruction combining online and face-to-face elements had a larger advantage than purely online instruction (Means, Toyama, Murphy, Bakia & Jones, 2010 [7]). Because of the flexible structure of online learning instruction, students can control when and where they learn. They are able to spend more time on unfamiliar or difficult content by self-monitoring their time and pace of learning (Aslanian & Clinefelter, 2012 [1]).

Table 3

Differences on Satisfaction level of Blended Learning Courses regarding the course day

Items	Domains	Participations Days	N	M	SD	T	SIG
22,11,4,2,1	Learning	M,W	40	4.10	0.90	0.76	0.448
		S,TU,TH	43	4.25	0.85		
6,8,7,9	Self confident	M,W	40	3.89	0.94	1.88	0.063
		S,TU,TH	43	4.25	0.78		
10,3	Interaction	M,W	40	3.86	1.03	0.20	0.836
		S,TU,TH	43	3.91	0.93		
15,12,13,14	Ability to use the VLE (E-learning)	M,W	40	3.86	0.71	0.39	0.694
		S,TU,TH	43	3.78	0.91		
20,18,19,17,16	Lecture quality	M,W	40	4.79	0.39	2.55	0.013
		S,TU,TH	43	4.46	0.73		
5,21	Benefit	M,W	40	4.58	0.57	1.77	0.081
		S,TU,TH	43	4.30	0.80		
	Total	M,W	40	4.18	0.59	0.14	0.882
		S,TU,TH	43	4.16	0.68		

To identify the differences on satisfaction level of blended learning courses regarding to the course day, the T-Test was used to determine if there is significant difference between two groups which may be related to the course day. The results indicated that there were no significant difference between two groups, only on lecture quality domain. The students were more satisfied with Monday and Wednesday lectures than Sunday, Tuesday and Thursday lectures. Lectures on these days take one hour per day, and every Thursday there was online meeting, whereas Monday and Wednesday lectures take one hour and half per day for the first month (no online class after one month), the meeting schedule is face-to-face on Monday lectures, and Wednesday lectures were online. For sport students, blended learning course provides the perfect combination of online and traditional content on fixed schedule, which is ideal for those balancing their studies alongside other professional or sporting commitments. Student put theory into practice through applied studies and measurement, sports-specific modules. Furthermore, blended learning program provides opportunities to develop student management skills in motor learning and understanding knowledge and self-study.

Conclusions

The main aim of the study was to determine the BL satisfaction level in motor learning course. Blended learning environment at the University of Jordan is designed to provide the student with an opportunity to gain or enhance self-study, it is just one example of how technology, including Internet, coupled with increasingly powerful and portable computers can be leveraged to enrich the learning process. In 2017 the University of Jordan modified a physical education module to where it can be presented with a virtual learning environment. The researcher implemented blended learning on motor learning courses for undergraduates for sixteen weeks in School of Sport Sciences. Most students generally preferred the use of the videos which are available online, and to create some videos related to motor learning issues. BL environments allow students to learn at their own pace and place.

The results found that students were satisfied with blended program and online learning environments; satisfaction was generally high with 83.4 %. Future research might also be conducted to determine students' satisfaction levels including theoretical and practical courses. It would be beneficial to replicate this study with a larger population sample in other faculties. Although this study endeavored to assess students' blended learning satisfaction level in school of Sports Sciences, the results of this study and the research that supports it provide a strong rationale for why including blended learning in sport school or in higher education programs is important. Further, focusing on high quality lectures, improving the ability to use VLE (e-learning) and creating opportunities for students to develop their self-study could also help sport institutions to maintain high levels of student satisfaction on blended learning.

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