Blended learning: A way of effecting student’s academic performance

Payal Beri

Abstract
Blended learning is a term concerned with transmitting knowledge. It is an approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods. It requires the physical presence of both teacher and student, with some elements of student control over time, place, path, or pace. Academic achievement or (academic) performance is the extent to which a student, teacher or institution has achieved their short or long-term educational goals. This paper includes some major studies, which indicates that blended learning is very helpful for students’ academic performance. This paper helps us to find out whether blended learning put less or major effect on students’ academic Performance. The present paper analyzes the effect of blended learning (BL) on the academic performance of students.

Keywords: blended learning, student academic performance, E-learning

Introduction
Previous theories expounded in the literature had defined blended learning as "the learning that is facilitated by the combination of different modes of delivery, models of teaching and styles learning and founded on transparent communication amongst all parties involved with a course". Blended learning is also used interchangeably as hybrid learning or mixed learning in academic theories. However, all of these concepts broadly refer to the integration "blending" of e-learning tools and techniques. Blended learning generally has many advantages over traditional way of learning and transmitting knowledge (Face-to-Face); the cost effectiveness is one of the most advocated advantages for both the accrediting learning institution and the students. This advantage will improve the education process. Flexibility and time management of blended learning is perceived as another main advantage of the blended learning. On the other hand, some of the severe limitations of the blended learning will be also considered before initiating such type of learning method. These considerations are various in natures but controlled such as computer and internet access, limited knowledge in the use of technology, and study skills. Blended learning has many advantages over e-learning; the most important one is that Blended learning participants being able to socialize face-to-face interaction in order to motivate the less independent student. In relation to learning styles, a dependence on the conversation within the learning process may become an obstacle to those students who are not capable of discussions. Effective discussions are an important element of Key Skills courses (Verbal Communication), which in turn are indispensable for apprentice employability. Adoption of the conversational framework would require interactive lectures that are extended to online discussions. Students are expected to do more reading outside the face-to-face sessions and interact with their peers online. For example, the discussion about answers related to homework questions. Blended learning is researched by various scholars for identifying the effectiveness of its role in learning and transmitting knowledge. One of the research study conducted by (Hawkey. R, & Beresford. N, 2009) which searched for Blended learning in an English Course held at the University of Fberara Italian in collaboration with the University of Cambridge. The results of the study concluded that blended-learning has a significant impact on both teachers and students. Blended-learning involves a combination of self-Jamming computer-based courses with classroom organisms. The study employed a sample of 92 teachers and students who voluntarily took part in this study. The result of the study showed that blended learning was
Positive and significant for both students and teachers. Majority of students perceived that the session helped them to improve their skills in the English language and make progress in self-evaluation. Study also indicates that teacher’s role and their experience in the session will make them more effective. One of the major findings of the study is that blended learning has positive effect on student’s study process. Another finding of this study is that teachers found it enjoyable and stimulating for them and would be happy to repeat this method of learning in the future. Blended learning has an advantage of commensurate with communities in developing countries that did not have the fully electronic environment. A specific time and place for learning and that what students prefer so far. Blended learning focused on the knowledge and skills aspects, conscience without the impact of one on the other. It also maintains a high level of origin4l link between the student and the teacher which presents the basis of the educational process. Learning has the potential to make an impression as a pulse for the education system of the country. Exploring previous studies disclose that some studies have examined the impact of blended learning on this interaction between students and teachers. Other studies aimed to measure the quality of e-learning. The most important point of the study is to gain insight on the effectiveness of blended learning on academic achievement for students and their attitudes towards this type of learning. Around the turn of the twenty-first century, the term blended learning (BL) emerged as a new trend in teaching models and learning styles. Initially, BL was defined as "the mixture of e-learning and classroom learning" (Masie, 2006, p.22) by the training field, as a promising alternative to e-learning because of the limitations in terms of fostering "interaction, context, and remediation" (Masie, 2006, p.22) of the latter. Subsequently, Graham (2006) [6] elaborates BL as a combination of face-to-face instruction and computer-mediated instruction, Considered as the “new normal” mode of training (Norberg, Dziaban, & Moskal, 2011), the effect of BL on student performance has been researched in different contexts, e.g. higher education, adult education, and workplace training. The results have shown a positive impact of BL (Larson & Sung, 2009; Lopez-Perez, Pdrez-L6pez, & Rodriguez-Aiza, 2017), but questions remain unanswered as to the impact of BL on student performance as a function of disciplines, in higher education particularly, and methods of end-of-course evaluation. Answers to this question bear research and practical significance. First, there is an imbalance observed in studies on the effect of BL across disciplines, which results in the variation of the BL effect. Graham (2006) [6] posits that as a combination of traditional face-to-face instruction and online learning, BL allows for more interactive and reflective knowledge construction. Multi-format resources, archived discussions, instructor’s changing role as facilitators, and more time and scaffolding for discussion and reflection in this learning mode have been augmented by technologies (Mebane, porcelli, Iannone, Attanasio, & Francescato, 2008). As a learning approach, Kose (2010) proposes that "Blended learning is a learning approach that contains different types of education technique sand technologies" (p.2795). This means that the nature of BL greatly depends on what instructional design aims to achieve. According to Graham and Robins on (2007), if the goal is to increase access and convenience, the use of technologies merely helps to alleviate space and time barriers. However, when student instructiveness and improved pedagogy are the focus, it is expected that a student-centered approach coupled with frequent online. Interaction and feedback is more evidenced than just using the online learning platform as a communication channel. Despite the differences in BL conceptualization, researchers in the field take BL as an innovative approach to optimizing student learning (Kose, 2010). On the one hand, the approach provides students with a more efficient learning environment where they can have more interactions and learning support with the availability of online learning facilities (Kose, 2010).On the other hand, it is believed that BL can enhance the quality of face-to-face meetings (seat time) provided that students can benefit from the online learning activities and resources (Kose, 2010). To conceptualize and effectively operationalized BL for the purpose of their meta-analysis, Bernard et al. (2014) define BL as a "mix of classroom instruction (i.e., face-to-face) and out-of-class online learning where the online work substituted for class time" (p. 91). In this study we adopt Bernard's et al. (2014) definition of BL and Allen and Seaman's (2009) [8] recommendation for the configuration of the proportion of the blends such that the course content delivered online ranges between 30 percent and 79 percent. The lower end of the range is sufficient to eliminate studies "of incidental uses of the Internet, such as downloading references and turning in assignments"(Means, Toyama, Murphy, & Bakia, 2013, p.5) and to differentiate BL from pure online learning (Allen & Seaman, 2009) [8]. Blended learning is a natural development to the growing accessibility of e-learning, online resources and the continued need for a human component in the learning experience. A blended learning approach ensures that the learner is engaged and driving his other individual learning experience. This approach also helps cater to the individual needs of the learner, most students have unique learning styles and a blended approach is more likely to cater to those needs than a traditional classroom teaching experience. All students no matter their age learn differently and teaching methods should reflect this, by designing teaching programmes in a way that reaches visual, auditory and kinetic learners alike. With the heavy integration of technologies, we’ll be able to improve teaching, information retention, engagement, responsibility and enjoyment. Students never outgrow their learning styles, meaning blended earning is more important than ever, no matter what the industry is, from schools to corporations, in all walks of life.

Literature Reviews
Obiedat, R., Eddeen, L.N., Harfoushi, O., Montaha, A. H., Koury, A., &Alassaf, N. (2014)[1] conducted study on Effect of Blended-Learning on academic achievement of students in the University of Jordan. Conventional sampling technique is employed due to the subjectivity of the issue. A sample of 427 students from King Abdulla II School for Information Technology at Jordan University are randomly selected. SPSS10 software is used to make statistical analysis. The robust checks of the result are made through arithmetic average, standard deviation statistics and Pearson correlation matrix. Statistical results of the study report that there is a significant and positive impact of blended learning on academic achievement of the students in university of Jordan.
Hubackova Sarka, & Semradovallona (2016) conducted a research on Evaluation of blended learning and analyzed that blended learning is not only acceptable but very favored by students. The students of today accept new technology rapidly and learn easily to handle it. Blended learning as a combination of contact teaching using some constructivist principles and electronic format of teaching is a suitable and required way even for foreign language teaching.

Vo Hien Minh, Zhu Chang, and Diep Nguyen A. (2017) conducted a study on The effect of blended learning on student performance at course-level in higher education: A meta-analysis and concluded that BL demonstrates a small summary effect (g+: 0.385, p < .001) compared to traditional teaching methods. A significantly higher mean effect size was found in STEM disciplines (g+: 0.496) compared to that of iron-STEM disciplines (g+:0.210). Nevertheless, the weighted mean effect sizes reveal no significant differences regarding of end-of-course assessment methods, namely one-moment and multiple-component assessment. The finding confirms that BL is significantly. Associated with greater learning performance of STEM disciplined students than with traditional classroom practice.

Ceylan, V. K., & Kesici, A. E. (2017) [5]. Conducted a research on Effect of blended learning to academic achievement. This study was carried out with a total of 53 students enrolled in the experimental group and control group in the 6th grade classrooms during the 2AV/2015 school year in a middle school in southwest part of Turkey. The design of the study includes quantitative method. Academic achievement test and product evaluation scale were used as quantitative data collection sources. Quantitative data was collected through the evaluation of student’s projects that they developed during the process of the study and the academic achievement tests. During the data analysis phase, independent t-test, frequency and ANOVA tests were used. As a result of this study, it is concluded that blended learning environment had generated a significant difference in students' academic achievement on behalf of experimental group. Implications of the study for the educational environments were discussed.

Thomas Darrin (2018) [4] conducted a research on Blending learning behavior and on university students academic performance in Thailand. A cross-sectional design was employed by extracting data from the learning management system of the study site. The analysis included t-test, ANOVA, and multiple regressions with a sample size of 181 students from 13 different courses offered at the university. Results indicated that there is a weak association between blended learning behavior and academic performance. Absences were significant but tardiest and click use of the learning management system were not significant. This implies that any benefits of blended learning are found in other ways than in the ir association with academic performance.

**Conclusion**

This study examined the association of blended learning with academic performance of the students. Blended learning is also used interchangeably as hybrid learning or mixed learning in academic theories. It is believed that BL can enhance the quality of face-to-face meetings (seat time) provided that students can benefit from the online learning activities and resources. As a combination of traditional face-to-face instruction and online learning, BL allows for more interactive and reflective knowledge construction. Multi-format resources achieved discussions, instructors, changing role as facilitators, and more time and scaffolding for discussion and reflection in this learning mode have been augmented by technologies. There is a significant and positive impact of blended learning on academic achievement of the students in university of Jordan. Blended learning as a combination of contact teaching some constructivist principles and electronic format of teaching is a suitable and required way even for foreign language teaching. BL is significantly associated with greater learning performance of STEM-disciplined students than with traditional classroom practice. Blended learning environment had generated a significant difference in student’s academic achievement. On behalf of experimental group. But one of the study results indicates that there is little relationship between the two. This indicates that the benefits of blended learning may be found in other ways rather than just through academic performance. Helping students to improve academically involves more than just using a learning management system. It is critical that educators consider strategies for the beneficial management system. As the world continues to move towards an online platform, learning management systems use will continue to grow and perhaps become almost mandatory of tertiary institutions. One of the major findings of the study is that blended learning has positive effect on students’ study process. Another finding of this study is that teachers found it enjoyable and stimulating for them and would be happy to repeat this method of learning in the future.

**References**
