**The Use of Blended Learning Strategy by the Students of the College of Basic Education in Kuwait**

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**Abstract:**

One of the most significant developments in the twenty-first century is the new forms of blended learning, as it is capable of providing learning for all people and overcoming spatial and temporal barriers thanks to its ability to mix different educational patterns that suit the learner’s circumstances.

The present research aims at identifying the blended learning strategy through the opinions of the students of the College of Basic Education and shedding light on the current university educational setting to encourage students to practice the different learning techniques that are based on the blended learning philosophy. It also aims at revealing the field difficulties that impede the use of this type of advanced learning formats, and enhancing teachers’ and students’ digital skills.

The research used the descriptive, analytical method through which an electronic questionnaire was administered in consideration of the health conditions and precautionary measures and in keeping with the health instructions regarding social distancing. The sample involved 244 male and female students from the College of Basic Education in Kuwait. The research instrument was designed following the 3-point Likert scale. It consists of three axes. The first axis deals with blended learning as a new learning strategy. The second axis deals with the requirements of its application. The third axis deals with the most important obstacles and difficulties facing the students (males – females) in applying this type of learning.

The data were analyzed statistically using SPSS version 25. In the light of the review of relevant literature and the field statistical findings reached, the research results indicate that blended learning is one of the new learning strategies that have been used to solve learning problems during the Corona pandemic throughout the whole world. Blended learning also activated and enhanced competitiveness among the students, made the university environment attractive, and met the teaching needs in the digital world. Among the most important requirements of blended learning are technical experts who are qualified and trained to use blended learning platforms to achieve blended learning outcomes which meet students’ academic excellence and encourage them to study. Among the difficulties that faced the use of this type of learning are the insufficiency of the technicians required to use electronic media are insufficient, and the need to re-specify and develop technological courses so that they can conform with the modern digital teaching methods. There are no statistically significant differences in F-values (p<0.05) or in T-values (p<0.05) for the demographic variables under study.

In the light of the findings researched by the researcher, some suggestions and recommendations were made to develop the university educational process under this type of blended learning.

**Key Words**: Blended learning – requirements – obstacles

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**Introduction:**

The digital revolution in the field of information technology has led to the development of the programs offered by the educational systems which aim at preparing human cadres that keep up with international changes depending on interactive self-learning so that they may have high technological professional skills; making the learner an effective actor in the teaching/learning process, and making the teacher a guide who enhances the learner’s motivation and incorporates it into modern learning strategies like blended learning instead of traditional learning which relies on memorization and instruction (Al-Sa’id, 2017).

Blended learning is defined as a form of learning which combines electronic learning and classroom (traditional) learning in one framework in which computer-based or network-based methods are employed in lessons, lectures and training sessions which are often held in classrooms equipped with network connections (Zaitoun, 2005).

**Research Problem and Questions:**

The present research was concerned with shedding light on the various aspects of blended learning/teaching strategies from the point of view of male and female students at the College of Basic Education in Kuwait. The research sought to find answers to the following questions:

1. What is the blended learning strategy as a new form of learning in college education for the students of the College of Basic Education in Kuwait?
2. What are the requirements of implementing the blended learning system that should be met by the students of the College of Basic Education in Kuwait?
3. What are the obstacles and difficulties that face the students of the College of Basic Education and that impede the use of blended learning at the College of Basic Education in Kuwait?
4. Are there any statistically significant differences in the demographic variables?

**Research Objectives:**

The present research seeks to achieve the following objectives:

1. identifying the blended learning strategy through the views of the students of the College of Basic Education;
2. shedding light on the university educational atmosphere at the College of Basic Education through students’ practice of this type of learning; and
3. encouraging students to practice different e-learning styles such as flipped learning, Edmudo, and green learning.

**Significance of the Study:**

Blended learning is one of the forms of learning (training) which combines e-learning and classroom (traditional) learning in one framework in which computer-based or network-based methods are employed in lessons, lectures and training sessions which are often held in classrooms equipped with network connections.

The blended learning process includes three interrelated components: social, cognitive, instructional and the Internet as a technological and information component. Blended learning is considered effective in learning concepts, as it combines both online and offline learning models. The online models often occur through the internet, while the offline models occur in traditional classrooms (Al-Si’oudy, 2016). In other words, it is a type of learning in which different communication means are used together to teach a certain course. These means may involve a mixture of direct lecturing in the lecture room, online communication and self-learning.

**Uses or Objectives of Blended Learning:**

* It can be relied on in teaching/learning during emergency crises like the Corona Pandemic; thus, it can increase the effectiveness of the teaching/learning process.
* It employs more than one means for gaining knowledge, so a student can choose the means that suits his/her abilities and skills, thus enhancing the quality of the educational process.
* It enhances the active role of the learner through combining individual and cooperative activities and projects.
* Blended learning helps to enhance and strengthen human and social relationships and attitudes of learners during learning with their colleagues, teachers and parents.

Despite the multiplicity of names given this type of learning (i.e. blended learning, mixed learning, hybrid learning, etc.), its meaning is the same.

**Blended Learning Models (according to Al-Si’oudy, 2016):**

1. The Reciprocal Learning Model which includes classroom reciprocal learning, computer lab reciprocal learning, flipped classroom, individual exchange.
2. The Flex Learning Model in which students rotate through classes according to their own needs and not a specific schedule.
3. The Selective Learning Model in which the student chooses the method that suits his/her abilities.
4. The Enriched Virtual Model in which the students are the center of online learning.

**Components and Requirements of Blended Learning:**

Blended learning is not new, though its components in the past were confined to traditional classrooms (including lecture rooms and laboratories), textbooks and pamphlets. Today, however, different learning formats can be matched and are not restricted to the following:

Synchronous Physical Formats: teacher/trainer-directed classrooms and lectures, manual workshops and laboratories, field trips.

Synchronous Online Formats (Live E-Learning): Instantaneous e-learning, online conferencing, virtual classrooms, online symposia and broadcasting, coaching, direct messages and simulation.

Self-Paced, Asynchronous Formats: documents and webpages, computer-based or online training units, cyber learning communities, and discussion groups. This requires equipping classrooms with a computer and a data show, having a learning content management system (LMS), having an e-evaluation system, making available dialogue boards to speak with experts in the field, and defining websites that can contacted.

**Blending Learning and the Corona Crisis:**

The world has been suffering from COVID-19 since 2020 and is still suffering from its frightening variants. It has caused 1.6 billion children and students to stop attending school, and this has led to a worldwide educational crisis because students have lost learning the basic skills which they need in practical life. The World Bank’s indicators also show poverty of education, increased drop-out rates, and lack of equality in educational systems. The World Bank Blogs have also indicated the negative effects on children in low income countries. Online learning strategies show disturbances in the lives of children, their parents and their teachers (Saavedra, Jaime, 2020).

**The Positive Role of the Pandemic in Education:**

COVID-19 has allowed students to have time to develop social and affective skills and has helped citizens contribute to containing this crisis through voluntary work. It has also enhanced family bonds in society and has shown parents’ role in containing the crisis. Mass media education has increased through the messages sent through radio, TV and instant text messages. Learning platforms have been increasingly used to increase teachers’ digital skills, and parents have participated in achieving educational goals online, and this has enhanced the skills of using technology very effectively to enhance the educational system (Saavedra, Jaime, 2020).

**Research Terminology:**

**Blended Learning:**

The present research defines “blended learning” as a learning format which combines traditional learning and online learning and in which the student relies on self-learning and cooperative learning through performing his/her activities, assignments and dialogues through virtual environments. The study conducted by Ketsman (2019) discussed the concept and effects of blended learning. The term has come to combine different learning and technical techniques.

**Theoretical Framework:**

Having reviewed Arabic and English studies relevant to the topic of the present research through research engines and Arabic and English educational data bases, the findings of theoretical and literary studies can be summed up in the following points:

* Teachers have enhanced blended learning strategies through synchronous courses and training methods that help understand this type of blended learning.
* Empirical studies have been conducted in recent years which have witnessed the outbreak of COVID-19 to prepare a blended learning manual in order to combine online technology learning strategies with classroom activities needed to be offered in this type of learning, identify the concept of blended learning, its importance, the rationale of its use in universities and schools, its requirements and obstacles, and the real current situation of blended learning in educational post-graduate studies.
* Learning applications have been done in the areas of formal and informal education and in online learning/teaching areas. Technology has helped set up and implement new virtual learning environments to enhance teachers’ and managers’ ability to implement appropriate methods to enhance digital learning skills.
* Previous research and studies have published the results of the application of the experiences of Arab and foreign countries which set out to develop university education to integrate traditional and technological systems in different fields of education such as statistics programs, disabled student programs, e-courses and educational technology courses.
* Blended learning research has shown the relation between what the teacher and the student enjoy in blended learning as a participant in the educational process rather than a recipient as is the case in the traditional system.
* Some university educational studies have been concerned with identifying pre-service teachers’ views regarding blended learning techniques and comparing it with traditional learning to highlight its effect on university students’ academic achievement.
* Most pre-university and university educational systems have applied digital system platforms as an effective means to overcome the educational crisis during COVID-19.

**Research Plan and Method:**

The present research used the descriptive, analytical method and followed the following plan:

* Preparing the theoretical framework of the research in the light of foreign and Arabic studies relevant to the topic of this research.
* Preparing the research tool which aims at achieving the research objectives and testing its validity and reliability.
* Administering the research tool to the representative sample.
* Collecting data online and analyzing it using SPSS (Version 25) to perform ordinary statistical operations.
* Tabulating, analyzing, interpreting and discussing the data.
* Preparing the results of the pilot study to reach the research results.
* Reaching the research results which answer the research questions.
* Making suggestions and recommendations in the light of these results.

**Research Procedures:**

**Research Tool:**

The researcher used a questionnaire that was designed as a three-point rating scale: (Agree = 3), (Somewhat agree = 2); and (Disagree = 1). It consists of three main parts as follows:

**Part (1):** General information including demographic variables (sex or gender, e-courses, practicing self-learning, practicing blended learning, and online communication.

**Part (2):** Close-ended questions on the three-point rating scale divided into three axies as follows:

**The first axis** includes questions 5 through 10 (i.e., 6 questions), and these questions revolve around the blended learning strategy as a new learning format at the College of Basic Education in Kuwait

**The second axis** includes questions 11 through 16 (i.e., 6 questions), and these questions revolve around the requirements of implementing blended learning at the College of Basic Education in Kuwait.

**The third axis** includes questions 17 through 21 (i.e., 5 questions), and these questions revolve around the obstacles and difficulties that impede the use of blended learning by the students of the College of Basic Education in Kuwait.

**Part (3):** Question 22 which is an open-ended question about other difficulties that face the students when practicing blended learning.

**Remark:** In administering the main questionnaire, the Corona Virus circumstances, precautionary procedures, difficulty of administering the questionnaire in a paper form and safety procedures were taken into account. Therefore, the questionnaire was administered online.

**Research Sample:**

**Table (1): Characteristics of the Research Sample**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Main Elements of the Variable** | **N** | **Percentage (%)** |
| Sex/Gender | Male | 29 | 11.9 |
| Female | 211 | 86.4 |
| Total | | 244 | 100% |
| Major | Scientific Departments | 138 | 56.6 |
| Literary Departments | 84 | 34.4 |
| Applied Subjects Departments | 20 | 8.2 |
| Total | | 244 | 100% |
| Practice during the Corona Pandemic | Yes | 186 | 76.32 |
| No | 55 | 22.5 |
| Total | | 241 | 100% |
| Online Communication | With colleagues | 31 | 12.7 |
| With teachers | 50 | 20.5 |
| With friends | 161 | 66 |
| Total | |  | 100% |
| No response | | 2 | 0.8 |
| Total | | 240 | 100% |

The questionnaire forms were administered online to groups of male and female students at the College of Basic Education, Public Authority for Applied Education and Training, Kuwait. 244 male and female students majoring in teaching methodology responded to the questionnaire after screening and cancelling incomplete ones. Table (1) shows the characteristics of the sample as follows:

Sex/Gender: The number of male students was 29 with a percentage of 11.9% of the total number of the sample. The number of female respondents was 211 students with a percentage of 86.4% of the total number of the sample.

Major: The number of respondents majoring in scientific subjects was 138 male and female students with a percentage of 56.6%. The number of respondents majoring in literary subjects was 84 male and female students with a percentage of 34.4%. The number of respondents majoring in applied subjects was 20 male and female students with a percentage of 8.2%.

Practice during the Corona Pandemic: 186 of the male and female students who responded to the questionnaire practiced blended learning during the Corona Pandemic with a percentage of 76.32%, while 55 male and female students (22.5%) did not.

Online Communication: 31 male and female students (12.7%) communicated online with their colleagues, while 50 students (22.5%) communicated with their teachers, and 161 students (66%) communicated with friends.

Thus, the above analysis shows that the sample is balanced in terms of sex, major and online communication with colleagues, teachers and friends. The majority of the respondents practiced blended learning during the Corona Pandemic.

**Research Population:**

The research population involves students who study teaching methodology courses to identify the extent to which they are aware of electronic teaching methods.

**Results and Discussion:**

**Research Question (1): What is the blended learning strategy as a new form of learning in college education for the students of the College of Basic Education in Kuwait?**

**Table (2)**

**Frequencies, Percentages, Means and Standard Deviations Ranked Descendingly for the First Axis of the Second Part of the Questionnaire**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Serial No.** | **Item** | **Response** | | | | | | **Mean** | **SD** | **Rank** |
| **Agree** | | **Somewhat Agree** | | **Disagree** | |
| **F** | **%** | **F** | **%** | **F** | **%** |
| 5. | Blended learning is a form of intelligent learning for the knowledge society. | 107 | 43.9 | 118 | 48.4 | 17 | 7 | 1.63 | 0.61 | Last |
| 6. | The blended learning philosophy keeps up with international digital systems. | 103 | 42.2 | 110 | 45.1 | 27 | 11.1 | 1.68 | 0.66 | Third |
| 7. | It continuously connects curricula with educational developments in the knowledge society. | 109 | 44.7 | 105 | 43 | 27 | 11.1 | 1.66 | 0.67 | Fourth |
| 8. | It achieves the university student’s self-leaning ambition. | 122 | 50 | 85 | 34.8 | 34 | 13.9 | 1.63 | 0.71 | Fifth |
| 9. | It creates competitiveness among students. | 93 | 38.1 | 91 | 37.3 | 56 | 23 | 1.84 | 0.77 | First |
| 10. | It makes college an attractive environment that encourages cooperation between students, teachers and parents. | 107 | 43.9 | 91 | 37.3 | 44 | 18 | 1.70 | 0.74 | Second |

The mean score on the first axis is 1.70 and the standard deviation is 0.47.

Table (2) shows the frequencies, percentages, means and standard deviations ranked descendingly according to the mean score on the first axis which revolves around the blended learning strategy.

The data in table (2) shows that blended learning is one of the new learning strategies that have been innovated to solve educational problems during the Corona Pandemic throughout the world. It also enhanced competitiveness among students, made college an attractive learning environment and met teaching needs in the digital world.

**Research Question (2): What are the requirements of implementing the blended learning system that should be met by the students of the College of Basic Education in Kuwait?**

**Table (3)**

**Frequencies, Percentages, Means and Standard Deviations Ranked Descendingly for the Second Axis of the Second Part of the Questionnaire**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Serial No.** | **Item** | **Response** | | | | | | **Mean** | **SD** | **Rank** |
| **Agree** | | **Somewhat Agree** | | **Disagree** | |
| **F** | **%** | **F** | **%** | **F** | **%** |
| 11. | Blended learning requires specialized learning platforms to achieve its goals. | 185 | 75.8 | 43 | 17.6 | 13 | 5.3 | 1.28 | 0.55 | Last |
| 12. | Blended learning urges students to achieve academic excellence. | 110 | 45.1 | 87 | 35.7 | 44 | 18.0 | 1.72 | 0.75 | First |
| 13. | Blended learning meets the needs of the increasing number of students. | 116 | 47.5 | 81 | 33.2 | 42 | 17.2 | 1.69 | 0.75 | Second |
| 14. | Blended learning requires qualified technical experience. | 145 | 59.4 | 75 | 30.7 | 21 | 8.6 | 1.48 | 0.65 | Third |
| 15. | Blended learning requires reconsideration of curricula and syllabi so that they may be compatible with its requirements. | 167 | 88.4 | 58 | 23.8 | 16 | 6.6 | 1.37 | 0.60 | Fourth |
| 16. | Blended learning requires supporting the infrastructure (maintenance – coping with emergent situations during the teaching process – alternatives). | 170 | 69.7 | 60 | 24.8 | 11 | 4.5 | 1.24 | 0.56 | Fifth |

The mean score on the second axis is 1.48 and the standard deviation is 0.40.

Table (3) shows the frequencies, percentages, means and standard deviations ranked descendingly according to the mean score on the second axis which revolves around the requirements of implementing the blended learning system that should be met by the students of the College of Basic Education in Kuwait.

The data in table (2) shows that among the most important requirements of blended learning is the presence of experienced technical cadres that are qualified and trained in using blended learning platforms to achieve blended learning goals including students’ academic excellence and learning motivation.

**Research Question (3): What are the obstacles and difficulties that face the students of the College of Basic Education and that impede the use of blended learning at the College of Basic Education in Kuwait?**

**Table (4)**

**Frequencies, Percentages, Means and Standard Deviations Ranked Descendingly for the Third Axis of the Second Part of the Questionnaire**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Serial No.** | **Item** | **Response** | | | | | | **Mean** | **SD** | **Rank** |
| **Agree** | | **Somewhat Agree** | | **Disagree** | |
| **F** | **%** | **F** | **%** | **F** | **%** |
| 17. | The belief in blended learning philosophy is not clear. | 61 | 25 | 131 | 66 | 19 | 7.8 | 1.82 | 0.55 | First |
| 18. | The human technical cadres needed to use electronic media are not adequate. | 19 | 44.7 | 101 | 41.4 | 30 | 12.3 | 1.67 | 0.68 | Second |
| 19. | The networks used in the laboratories are poor. | 130 | 53.3 | 88 | 36.1 | 21 | 8.6 | 1.54 | 0.65 | Third |
| 20. | Some classrooms do not have data shows. | 159 | 55.2 | 60 | 24.6 | 21 | 8.6 | 1.44 | 0.64 | Fourth |
| 21. | E-courses need to be developed to be compatible with modern teaching methods. | 176 | 72.1 | 49 | 20.1 | 14 | 5.7 | 1.32 | 0.58 | Last |

The mean score on the third axis is 1.55 and the standard deviation is 0.41.

Table (3) shows the frequencies, percentages, means and standard deviations ranked descendingly according to the mean score on the third axis which revolves around the obstacles and difficulties that face the students of the College of Basic Education and that impede the use of blended learning at the College of Basic Education in Kuwait.

**Results of the Three Axes of the Research:**

**Table (5)**

**Statistical Results of the Three Axes of the Questionnaire**

|  |  |  |  |
| --- | --- | --- | --- |
| **Axes** | **Mean** | **SD** | **Rank** |
| The First Axis | 1.77 | 0.47 | First |
| The Second Axis | 1.48 | 0.40 | Last |
| The Third Axis | 1.55 | 0.41 | Second |

The full scale mean score is 1.58 and the standard deviation is 0.33.

Statistical analysis of the three axes of the second part of the questionnaire indicates that the blended learning strategy has become necessary in the digital age under online learning to address educational wastage and reduce the spread of COVID-19. The first axis comes first with a mean score of 1.77 and a standard deviation of 0.47. The third axis regarding the obstacles and difficulties that impede the use of blended learning comes second with a mean score of 1.48 and a standard deviation of 0.40. The most significant obstacles and difficulties are inadequacy of human technical cadres needed to use electronic media, and the need to develop e-courses so that they may be compatible with modern teaching methods. The second axis regarding the requirements of implementing the blended learning system that should be met by the students of the College of Basic Education in Kuwait comes third and last with a mean score of 1.55 and a standard deviation of 0.41.

**Research Question (4): Are there any statistically significant differences in the demographic variables?**

The results of the study show that there are no statistically significant differences in F-values (p≤0.05) on the variables of major and social networking.

**Part (3) of the Questionnaire:**

Question (22) is an open-ended question about other difficulties that face the students when practicing blended learning.

Table (6) shows the responses that the students focused on and emphasized in question (22) of the third part of the questionnaire from their practical experience with the blended learning method. The following are the most significant responses mentioned by the students and ranked descendingly according to their percentages.

In short, blended learning is a new learning experience and has become a teaching reality in schools and universities to avoid the outcomes of COVID-19 and save the educational wastage resulting from the long official holidays due to the rapid and sudden spread of the pandemic in a short time. The most significant obstacles and difficulties are lack of training of students and teachers in using educational platforms in teaching. On the other hand, technical support of electronic devices is lacking and very slow and personal devices are so expensive that some students cannot afford to buy them.

**Table (6)**

**Frequencies and Percentages of the Students’ Responses to the Open-Ended Question**

|  |  |  |  |
| --- | --- | --- | --- |
| **Serial No.** | **Statement** | **Frequency (F)** | **Percentage (%)** |
| 1. | Lack of both students’ and teachers’ adequate teaching experience through educational platforms. | 170 | 69.67 |
| 2. | The internet and programs are always poor during classes. | 150 | 61.47 |
| 3. | Increased costs and assignments, besides the operation of cameras, which causes embarrassment to students (males and females). | 130 | 53.27 |
| 4. | Difficulty of conveying information and the costs of advanced electronic devices. | 110 | 45.8 |
| 5. | Difficulty of communicating with the teaching staff due to poor internet connection. | 100 | 40.98 |
| 6. | Individual differences are not taken into account, which makes it difficult to convey information. | 50 | 20.49 |
| 7. | The electronic programs supporting the courses are not efficient. | 30 | 12.29 |
| 8. | Dysfunctional microphones make it difficult to interact with the lecturer. | 20 | 8.9 |

**General Results:**

The present research aimed at identifying the blended learning strategy through the opinions of the students of the College of Basic Education and shedding light on the current university educational setting to encourage students to practice the different learning techniques that are based on the blended learning philosophy. It also aimed at revealing the field difficulties that proved to be among the most remarkable obstacles which impede the use of this type of advanced learning formats. The researchers administered an online questionnaire to 244 male and female students at the College of Basic Education in Kuwait.

The results of the present research showed that blended learning is one of the new learning strategies that were developed to solve learning problems during the outbreak of COVID-19 throughout the world. It also enhanced competitiveness among students, made college an attractive learning environment, and met teaching needs in the digital world. Among the most important requirements of blended learning are technical experts who are qualified and trained to use blended learning platforms to achieve blended learning goals including students’ academic excellence and their learning motivation. Also among the most important requirements of blended learning are the presence of human technical cadres needed to use electronic media, and re-specification and development of e-courses so that they may be compatible with modern digital teaching methods.

Blended learning is a new learning experience and has become a teaching reality in schools and universities to avoid the outcomes of COVID-19 and save the educational wastage resulting from the long official holidays due to the rapid and sudden spread of the pandemic in a short time. The most significant obstacles and difficulties are lack of training of students and teachers in using educational platforms in teaching. On the other hand, technical support of electronic devices is lacking and very slow and personal devices are so expensive that some students cannot afford to buy them. The results of statistical significance tests indicated the following:

* There are no statistically significant differences in F-values (p≤0.05) on the variables of major and social networking.
* There are no statistically significant differences in T-values (p≤0.05) on the variables of sex and practice.

**Suggestions and Recommendations:**

The following are the most important suggestions and recommendations of the present research:

* Holding training courses for the teaching staff members to train them in using blended learning for its positive effect on students’ achievement and motivation.
* Encouraging students and teachers to practice blended learning methods to avoid the defects of the teaching methods of the old curriculum.
* Reconsidering the infrastructure so that it may be compatible with e-learning techniques and patterns.
* Holding workshops and training courses for teachers and students to acquaint them with the blended learning environment and provide them with practical skills in the teaching/learning process.
* Re-specifying general courses for all practical, theoretical and applied colleges in digital teaching methods and using educational platforms in teaching.

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