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Research Article

Effectiveness on the Use of Blended Learning Approach (BLA): Its Implications on the Students' Performance

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ABSTRACT

The study was conducted to assess the effectiveness of Blended Learning Approach (BLA) and its implication on the students' performance. The study utilized the descriptive-evaluative research design and it was conducted at Sultan Kudarat State University-Kalamansig Campus. Further, this study utilized simple random sampling to select the number of respondents. Twenty-three (23) teachers and twenty-nine (29) students during the 2nd semester, A.Y 2020-2021 were used as the respondents of the study. A researchers-made questionnaire was utilized to collect the data. The data were analysed using Statistical Package for the Social Sciences (SPSS) Software V21 x64. Statistical tools used were the frequency and percentages counts, mean, and grand mean. The Pearson-Product moment correlation coefficient was also utilized.

The level of effectiveness of blended learning approach was fairly effective as assessed by both teachers and students. The students' performance was described as above average. Further, the effectiveness on the use of blended learning approach has a significant relationship with the students' performance.

It is recommended that that the teachers' expertise in using the said approach is indispensable. Thus, the SKSU-Kalamansig campus must maintain if not improve their performance in using the blended learning approach in various field of disciplines. Further, the institution must design a monitoring strategy relative on the use of blended learning approach for the sustainability of its effectiveness in developing students' performance.

Keywords: *Blended Learning Approach, Component, Instructional Component, Learning Environment Component, Media, Students' Performance*

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Introduction

The educational landscape is undergoing tremendous change. The technical advancements of the twenty-first century and their pervasive incorporation into our culture, together with widespread access to the internet, have fundamentally altered teaching in just a few years.

The Covid-19 pandemic has had a severe impact on Commission on Higher Education, such as schools closed their premises in response to the lockdown measures. Although the Commission on Higher Education institutions swiftly find ways to substitute face-to-face instruction and examinations, as well as the safety and legal status associated with them. Perhaps most significantly, the crisis casts doubt on the value of school education, which encompasses networking and social possibilities as well as intellectual material. To remain relevant, schools must redesign their learning environment in such a way that digitization complements and strengthens student-teacher and other interactions. However, despite the difficulties teachers and students face, online learning, distance learning, and modular continuing education have become a panacea for this ongoing pandemic. The school encountered many challenges like internet connectivity, inability to disseminate information sometimes, not literate in google platforms, and border lockdown.

Blended learning is becoming the new standard, with schools all over the country redesigning in response to covid-19. While students remain in their homes, blended learning blends traditional face-to-face training with parts of internet instruction. Additionally, it aspires to provide students with the best of both traditional and online learning experiences.

The Philippines was facing a critical situation due to the health crisis. The education sector is one of the most affected sectors of our society due to the global pandemic. The risk of infections in the academic community has become a concern for higher education institutions—the conduct of classes needed to be suspended immediately. The challenge was how to teach and learn beyond face-to-face instruction. Universities plan and deliver programmers of study. The landscape has shifted dramatically, and universities are seeking to manage risks, ensure sustained high-quality services and a pleasant student experience, while maintaining service continuity during uncertain times. Ensure learning continuity, meet present and future coronavirus social distancing regulations, and engage students positively all benefit from efficient use of digital technology. The usage of learning tools can be beneficial for a range of pedagogical objectives. The blended component may seek to increase students' time spent on a task, improve their information literacy abilities, pique their interest before to a class, or allow them to work at their own pace following the lesson. There is an urgent need to investigate alternative innovative modes of learning that will enable the transition from traditional to flexible modes of teaching and learning. Due to the fact that learners vary in terms of time, pace, and location, these options enable multiple delivery modes to be matched to their specific needs. Students will choose the delivery mode most convenient to them as early as the time they enroll. Additionally, it strengthens the web-based elements and maximizes the effectiveness of classroom teaching. Blended learning enables students to prepare for the course in the classroom, and it can be more efficient because students can debate subjects outside of class with their lecturers and classmates.

As previously mentioned, the Covid-19 pandemic had an impact on everyone's lives, especially educational institutions. Government agencies have taken steps to ensure that student's education is not disrupted. Implementing a blended learning strategy on the use is one of these actions. However, the blended learning approach challenges the administration, teachers, and students since some have run into issues with blended, such as internet connectivity, gadget availability, and others. Others lack technological expertise in the use of various learning platforms found in blended learning, and thus the effectiveness of this method can impact teachers' performance, especially students. Further studies and debate are needed to determine the feasibility of using this method. Moreover, whether or not the ef-

fectiveness of using a blended learning approach directly impacts students' academic success.

Statement of the Problem

This study aimed to assess the effectiveness of Blended Learning Approach (BLA) and its implication on the students performance in Sultan Kudarat State University-Kalamansig Campus for the 2nd semester, Academic Year 2020-2021. Specifically, this study sought to find answers to (1) level of effectiveness of using the blended learning approach as assessed by the teachers and the students; (2) students' academic performance; (3) the significant relationship between the effectiveness of use of blended learning approach and the students' performance.

Review of Related Literature

Blended Learning Models

Numerous definitions of blended learning have emerged in response to the advancement of information and communication technology. Blended learning is a term that refers to how teachers maximize the utilization of both face-to-face and online learning. Blended learning is a rewarding learning design that engages students both in and out of the classroom; it is vital to create a learning model that integrates online, offline, and face-to-face instruction (Schober et al., 2012).

blended learning incorporates many aspects of face-to-face instruction, such as individualized learning, social engagement, direct engagement, and the use of e-learning to make learning more adaptable than traditional instruction. Blended learning is used in the classroom and integrates material and learning. Blended learning can provide an autonomous, interactive, and meaningful learning environment and can be utilized as a forum for conversation, inquiry, feedback, information exchange, and evaluation. Blended learning allows students to have flexible free time, making it easier to comprehend the learning material.

The Blended Learning application can be used to facilitate online conversation, information exchange, and evaluation. Torrisi-Steele (2011) asserts that blended learning is strengthened by student-centered learning experiences enabled by harmonic integration, which combines face-to-face and technology-assisted online learning. Blended learning is a method of instruction that incorporates various approaches and technology to deliver a more effective and efficient learning experience. Blended Learning typically combines two or more distinct learning techniques. However, the majority of current designs are based on online learning. This blended learning approach enables teachers to integrate face-to-face and online learning to allow students and teachers to communicate directly in an infinite amount of space and time (Köse, 2010). has identified three characteristics of blended learning, which include the following: Face-to-face instruction: Teachers and students are in the same condition and at the same time in a face-to-face educational environment.

Blended learning enables students who contribute to lesson planning to enhance their creative and critical thinking abilities successfully. Additionally, blended learning enables students to be self-sufficient when studying topics outside of the classroom. Without the assistance of an instructor, self-learning delivers continuous feedback. Students may quickly access their grades and track their progress. Thus, the teaching function shifts from that of a facilitator who assists in monitoring and assessing learners' progress to that of a facilitator who enables learners to learn autonomously (Berga et al., 2021). Blended learning is a pedagogical strategy that blends the efficacy and opportunity of classroom socialization with the potential of the online environment's active learning; it does not always match the ratio of the delivery modality.

Blended Learning and Student's Learning Outcomes

Performance, motivation, satisfaction, and knowledge construction are all examined in this study. Motivation is included as an outcome in this scenario because, just as cognitive features such as course grades can be used to quantify learning outcomes, affective factors such as intrinsic motivation can also be used to measure learning outcomes (Kuo et.al, 2013). According to research, higher motivation

among online learners results in increased persistence in their courses.

According to Sankaran and Bui (2001), less motivated learners do poorly on knowledge tests, whereas those with a high motivation score well academically.

According to Lim and Kim (2003), learner interest as a motivator increases learner involvement in learning, resulting in increased learning effectiveness in blended learning.

Learner satisfaction has been identified as a significant factor in the effectiveness of blended and online course, and dissatisfaction may result from learners' inability to use the learning management system effectively as a learning tool, as Islam (2014) puts it, users may be dissatisfied with an information system due to its ease of use. In an online graduate course, it was discovered that a lack of fast feedback from instructors contributed to student discontent. Additionally, discontent was exacerbated by technical issues and confusing course instruction.

Once addressed, these characteristics can contribute to learner satisfaction and eventual effectiveness in e-learning and blended learning. Blocker and Tucker (2001) also discovered that learners struggled with technology and had insufficient peer interaction, resulting in dissatisfaction with these design components. Interactions between students and teachers are

Online courses are well-known for their ability to provide satisfaction. Swan (2001) found that positive student-teacher interactions were significantly associated with student satisfaction, while positive learner-learner interactions resulted in greater levels of course satisfaction. According to Naaj et al. (2012), learners were satisfied with technology, namely a video-conferencing component of blended learning, on a meaningful scale of 3.7. Student satisfaction with professors was found to be 3.8 on average in the same study. Askar and Altun (2008) discovered that learners were satisfied with blended learning's face-to-face sessions, with t-tests and ANOVA results indicating that females scored higher than males in terms of satisfaction with the blended learning's face-to-face setting.

When blended learning is compared to traditional face-to-face training, it is discovered that learners do similarly well in both environments and are unaffected by the mode of delivery (Kwak et al., 2013). Another study discovered that when traditional course delivery is combined with online learning, the learning experience and performance improve (Stacey & Gerbic, 2007). This type of improvement may be indicative of blended learning's efficacy. On the other hand, our study does not focus on better performance but instead on the potential usefulness of blended learning by examining grades earned throughout a blended learning experiment. In this study's context, a score of 50 is regarded as a pass; learners who achieve this level will be deemed to have passed. It will help us conclude the effectiveness of blended learning.

Theoretical Framework

This study was founded on Obukhov's (n.d.) theory of blended learning, which states that it combines various elements of face-to-face teaching, such as personalized learning, social interaction, direct interaction, and e-learning to make learning more flexible than conventional learning. Blended learning is used in the classroom and integrates material and Learning (Buran & Evseeva, 2015). Blended learning can provide an autonomous, interactive, and meaningful learning environment and can be utilized as a forum for conversation, inquiry, feedback, information exchange, and evaluation. Blended learning allows students to have flexible free time, making it easier to comprehend the learning material. The Blended Learning application can be used to facilitate online conversation, information exchange, and evaluation. According to Torrisi-Steele (2011), blended learning is enhanced by student-centered learning experiences made possible via harmonic integration, which mixes face-to-face and technology-assisted online Learning. Blended learning is a method of instruction that incorporates various approaches and technology to deliver a more effective and efficient learning experience. Blended Learning typically combines two or more distinct learning techniques. However, the majority of current designs are based on online learning. This

blended learning approach enables teachers to integrate face-to-face and online learning to allow students and teachers to communicate directly in an infinite amount of space and time. Kose (2010) Has identified three characteristics of blended learning, which include the following: Face-to-face instruction: Teachers and students are in the same condition and at the same time in a face-to-face educational environment.

Conceptual Framework of the Study

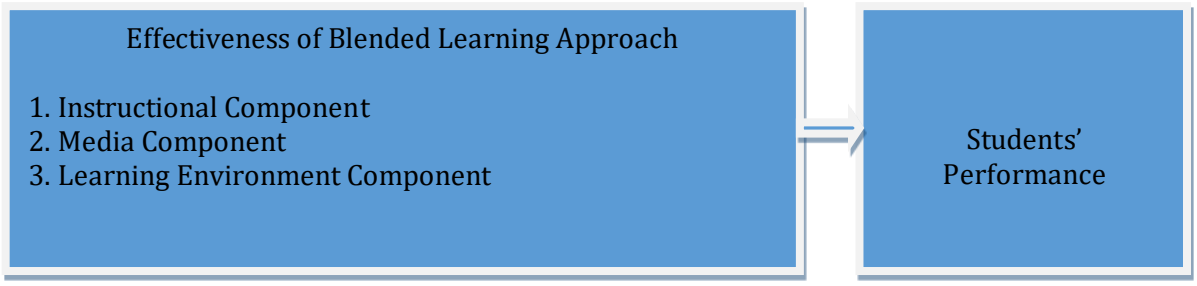

Figure 1. Schematic Diagram Showing the Relationship of Effectiveness of BLA and Students' Performance

Methods

This study utilized the descriptive-evaluative research design and it is appropriate in this study because this assessed and described the effectiveness of blended learning approach relative to instructional, media, and learning environment component.

The study was conducted at Sultan Kudarat State University-Kalamansig Campus. Further, this study utilized simple random sampling to select the number of respondents.

The sampling size of the study was fifty-two (52) respondents. One group consisted of twenty-three (23) teachers and the other group consisted of twenty-nine (29) students during the 2nd semester, A.Y 2020-2021. Hence, there were fifty-two (52) who were used as respondents of this study.

Two parallel instruments were used in this study. One was used for teacher-respondents and the other one was used for the student-respondents. Items in this questionnaire were formulated upon reviewing the related literature and other secondary sources such as articles and news. Items were validated by the subject experts.

Results and Discussion

Table 1. Level of Effectiveness on the Use of Blended Learning Approach as Assessed by the Teachers

Item	Mean	Description
Instructional Component	2.67	Fairly Effective
Media Component	3.29	Fairly Effective
Learning Environment Component	3.09	Fairly Effective
Overall Mean..	3.01	Fairly Effective

Table 1 shows the level of effectiveness on the use of blended learning approach as assessed by the teachers. As seen in this table, the instructional component got a mean rating of 2.67, described as fairly effective. The media component was rated 3.29 by the teacher-respondents, described as "fairly effective while the learning environment component was rated 3.01, described as "fairly effective" by the teacher-respondents.

An overall mean of 3.01, described as "fairly effective" implies that the blended learning approach is effective in providing quality education even in times of educational crisis. This further implies that this approach is effective in delivering the lesson among the students. It allows students to demonstrate their knowledge

and skills even in asynchronous mode of delivery. Graham et.al (2013) support this finding by stating that BL fosters a more collaborative and engaged learning environment that alleviates students' anxiety and dread of making errors.

Torrisi-Steele (2011) asserts that blended learning is strengthened by student-centered learning experiences enabled by harmonic integration, which combines face-to-face and technology-assisted online learning. Blended learning is a method of instruction that incorporates various approaches and technology to deliver a more effective and efficient learning experience. Blended Learning typically combines two or more distinct learning techniques. However, the majority of current designs are based on online learning. This blended learning approach enables teachers to integrate face-to-face and online learning to allow students and teachers to communicate directly in an infinite amount of space and time (Salendab, 2021). has identified three characteristics of blended learning, which include the following: Face-to-face instruction: Teachers and students are in the same condition and at the same time in a face-to-face educational environment.

Table 2. Level of Effectiveness on the Use of Blended Learning Approach as Assessed by the Students

Item	Mean	Description
Instructional Component	3.06	Fairly Effective
Media Component	3.32	Fairly Effective
Learning Environment Component	3.08	Fairly Effective
Overall Mean	3.15	Fairly Effective

As seen in this table, the effectiveness of blended learning approach has three components. The first component is the instructional which got a mean rating of 3.06, described as "fairly effective" by the student-respondents. This means that BLA uses various teaching strategies and assessment tools to effectively achieve the objectives of the lesson. The second component is the media rated as "fairly effective" (3.32) by the student-respondents. The use of media and others educational technologies were perceived to be effective and these media are congruent to the objectives and teaching strategies. The third component is the learning environment which was rated 3.08, "fairly effective" by the student-respondents.

The over all mean of 3.15, described as "fairly effective" by the student-respondents suggest that the BLA provides them the opportunity to use their knowledge and skills and for them to participate actively in class discussion. The use of BLA enhances students' motivation and reduces anxiety level of students during online and offline session. This will improve the personal and collaborative work of the students.

This conformed the idea of Mustapa et.al (2015) that blended learning improves pedagogical productivity, knowledge accessibility, collaborative work, personal development, and cost efficiency; it simplifies corrections and helps resolve attendance-related concerns

Table 3. The Distribution of Students' Grades

Grades	Frequency	Percentage	Description
90-92	22	76%	Above Average
87-89	5	17%	Above Average
84-86	2	7%	Average
Total	29	100%	
Mean Grade	89.79		Above Average

Highest Grade: 92 Lowest Grade: 84

As displayed in table 3, there were twenty-two (22) students or seventy-six (76) percent whose average grades ranged from 90-92 (Above Average), while the other five (5) students or seventeen (17) percent got an average grade ranging from 87-89 (Above Average). The remaining seven (7) percent or two (2) students got an average grade ranging from 84-86 (Average). The highest grade obtained was ninety-two (92) while the lowest grade obtained was eighty-four (84). The calculated mean grade was 89.79, described as "above average"

Table 4. The Correlation between the Effectiveness of Use of Blended Learning Approach and the Students' Performance

Paired Variables	Correlation Coefficient r	Description
Effectiveness of BLA and Students' Grades	0.41	Moderate (Significant)

r to be significant at 0.05 level of significance

Table 4 reflects the relationship between the effectiveness of use of blended learning approach versus the students' performance (grades).

As reflected, there is a moderate significant relationship between the effectiveness of use of blended learning approach and the students' performance. This is shown by the computed r-value of 0.41 at 0.05 level of significance. This means that the students' grades have something to do with the effectiveness of use of blended learning approach. This suggests that the teachers must utilize this approach in teaching-learning process because the use of this approach predicts the development of students' performance. This further suggests that if the teachers employ this approach, there will be a positive impact or influence on the students' performance or grades.

The result was intensified by Salendab et.al (2021) as cited by Mustapa et.al (2015) who said that blended learning improves pedagogical productivity, knowledge accessibility, collaborative work, personal development, and cost efficiency; it simplifies corrections and helps resolve attendance-related concerns. Blended learning also provides various advantages and is also more productive than traditional learning.

Conclusion

It is concluded that the level of effectiveness of blended learning approach relative to instructional, media, and learning environment components as assessed by both teachers and students were perceived to be fairly effective and it played a vital role in the development of students' academic performance even in times COVID-19 pandemic.

It is recommended that the teachers' expertise in using the said approach is indispensable. Thus, the SKSU-Kalamansig campus must maintain if not improve their performance in using the blended learning approach in various field of disciplines. Further, the institution must design a monitoring strategy relative on the use of blended learning approach for the sustainability of its effectiveness in developing students' performance.

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