# The Impact of Blended Online and Offline Learning on College Students

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*Abstract:* The internet is now part of our lives and online learning resources are becoming more and more available. Sooner or later these learning materials will be used by teachers and students in the classroom, which bodes well for the future of blended learning in all education and training. This paper finds another benefit of blended learning is that it makes it easier to assess students and collect meaningful data. With a wide range of experiences and learning materials available online, the use of technology in the classroom can increase student engagement and motivation. Instead of learning in a monotonous, traditional way, students are able to discuss and communicate in innovative and exciting ways, learning becomes fun, students can become more engaged and motivated, and the efficiency and effectiveness of learning can be greatly enhanced.

*Keywords:* Blended learning, Online learning, Offline learning, College students

## 1. Introduction

Based on today's technological advances, modern education is being driven by the need to diversify education to meet the needs of more learners in the future, and the way education is being reformed. The blended learning model is a new way of learning for students, which combines the various advantages of different learning styles brought together, using traditional offline learning and new technologies in online platforms. It allows the teacher to play a leading role in guiding and inspiring the classroom, while fully reflecting the initiative, motivation and creativity of the students. Blended learning combines the resources of multiple channels on the Internet, information technology resources and traditional classroom teaching resources, and then applies them to learning, which in turn can produce an effective learning model. Blended learning is a disruptive and innovative approach to teaching and learning in the Internet age. It differs from traditional textbook lectures in that students will learn partly through online multimedia learning materials and partly through face-to-face instruction in the classroom. Whereas the current one-size-fits-all approach is unlikely to work for every student, blended learning empowers students to create their own learning path and learn in the mode that best suits them. Students have greater control over when and where they learn as online materials can be accessed from anywhere with an internet connection. A blended learning approach leads to a student-centred environment where students are able to acquire knowledge through individual effort and more meaningful learning contexts, while any gaps in understanding or areas that are still missing can be addressed in time through face-to-face teacher inspiration, guidance and question and answer sessions. With blended learning, students have more control over their learning,

so they have more time in the classroom.Beside,if students have pre-recorded video lectures on homework rather than listening in class, they can have more time to answer questions or review material. Online behavioural tracking and assessment reports can also save students a great deal of time. Blended learning in education can enhance learning opportunities for students and is important for the advancement of education and the enhancement of individual student expertise and competence.

Based on the former study on blended learning, it was found that students can improve their academic performance and professional competence through blended learning [1]. However, the impact of blended learning on college students has not been studied systematically. Therefore, this study will examine the positive aspects of students' selective and blended learning styles on student learning accordingly.

## 2. The Impact of Blended Learning on Studens' Learning Opportunities

### 2.1. Provide Students with a Wide Range of Learning Resources

Due to the rapid development of internet technology, traditionalist learning methods have become more advanced and sophisticated author argued that "there is strong evidence that schools are investing in advanced information technology to expand access to resources and to create more learning opportunities for student learning" [2]. This is not only about gaining greater access to resources but also about adding a broader reach to schools. The choice to adopt online learning has been made to meet the challenge of technological innovation while maintaining the benefits of the original traditional learning methods. Today's technology has led to many free and shared resources on internet platforms. In a modern society where everything relies on knowledge, blended mode learning based on internet platforms is a convenient way for students to access knowledge that is available and accessible to all. Author argued that "with the advent of the internet, access to learners around the world is increasing and creating more opportunities for learners to learn and explore problems with students from other countries, thus to come up with solutions and improve their skills [3]. Today's online learning offers a wealth of multimedia educational resources. This is not only a requirement at a particular stage in the development of information technology in schools but also a necessary way to develop in the information age.

### 2.2. Adapt to Students' Diverse Learning Styles

The main objective of the blended learning approach is that a mixed-mode approach to learning can help learners to have a quality learning experience and to achieve high quality learning gains as well as to promote personal improvement. In a blended learning model, students can choose on their own to learn face-to-face with a teacher in a traditional classroom model, i.e. offline, or they can choose to interact with their peers and classmates in this model. In the current course, as the teacher and students are taught face-to-face, the teacher can effectively observe whether the students have gained and grown in the lesson. During offline lessons, students who do not have self-control can be better disciplined to make the best of the class. This is because students may feel more secure by learning face-to-face with the teacher and experience more intuitive attention and targeted instruction. In offline teaching, there are usually dozens of students learning together. In this learning environment, individual students develop a sense of imitation and competition with each other, which drives the learning atmosphere in the classroom. Author argue that "in blended learning, students are allowed to develop their personalities holistically [4].

Moreover, it allows students to communicate and share, thus diversifying the learning process." Until now, students have also had the option to choose a new online learning mode. This is because this learning mode has become everyday and famous at a particular time. Moreover, in the future, it

could become a regular mode of teaching in higher education and is currently being explored. In this blended learning model, students are thus offered a better choice of learning style At the same time, the choice of learning mode depends on the student's learning content and personal goals. The blended learning model accommodates a broader range of students, who can use a greater variety of learning styles, and fully satisfies the student's choice.

## 2.3. Increase the Flexibility of Time and Place of Student Learning

In recent years, blended learning model has gradually entered the application stage with the rapid development of information technology in education. The research and practice of blended learning models have contributed to the transformation and advancement of education and learning models, which will be essential to educational reform. Author argue that "online learning styles use electronic communication tools (e.g. email, video, topic discussion boards) to allow learners to clock in and out of learning at their convenience [3]. Synchronous technologies (e.g. webcasts, chat rooms, audio) are similar to face-to-face teaching strategies. No matter where the learner is, as long as they are connected to the internet, they can be the point of entry and reception of information, making access to or exchange of information more accessible and flexible. Online learning is so popular because it can offer more flexible content and access and can prompt learners to submit and clock in on learning and tasks at any time. It is often adapted to learners who cannot be implied to attend traditional face-to-face courses or who have a high volume of tasks more accurately submitted online.

## 3. The Impact of Blended Learning on Students' Learning Abilities

## 3.1. Requirements for Independent Learning Ability

As an essential component of learning competency analysis, self-directed learning has become an important research focus for researchers. Self-directed learning refers to the learning process in which learners learn and acquire knowledge through independent research. In order to promote the reform and progress of learning methods in the information technology environment, improve students' learning ability of independent learning, and develop students' ability to identify problems in learning actively, them and solve them. Author found that "in terms of students' performance in learning courses, students' learning in different Zhang Jie better-reflected students' different learning attitudes" [5]. The more evenly and effectively students studied online resources across different chapters, the more independent they were, and the more serious their attitudes were. The study found that students' learning performance in the current course was significantly and positively correlated with their grades in past semester courses, implying that practical students were autonomous and possessed specific learning abilities. The author has found that the more the compatibility, layout design, video images, sound quality and other such aspects of online platforms are now correspondingly enhanced, the more students' independent learning can be improved [6]. The study shows that students' autonomy and participation in online learning are very high. However, there is also a small number of passive learning states, which are inevitable. This would indicate that many learners have a positive attitude and perception of online learning and see it as a good way to learn. The scientific use of blended learning allows students to take control of their own learning and to develop their own independence and participation, as well as acquiring better learning skills, thus improving the quality of their learning and their overall development.

## 3.2. Requirements for Self-control of Learning

Self-management skills are formed, developed, and expressed by students in their self-education activities. Motivating students to self-manage, protecting their desire to learn to manage themselves

and developing their awareness of self-management are significant in the learning process. Students should always balance learning and life for themselves when developing self-management skills. In blended learning, students are expected to need a proper understanding of self, not only in terms of self-management but also in terms of responsibility for their peers or group members. In blended learning conditions, there are more opportunities to develop self-management skills. Learning is not only a matter of learning but also provides solid conditions for personal management and developing self-education skills. Self-control is a prerequisite for achieving goals [7]. After setting goals, learners may face different temptations that can lead to procrastination situations in Newtown. Self-control is essential for learners' learning because it allows them to delay their momentary gratification in pursuing pleasure. In fact, according to some current research, people with high levels of self-control tend to be more aware of the connection to their goals and free from the problems associated with temptation [8][9]. Thus, self-control in blended learning is critical in moderating the impact of future goals on the distal learning outcomes studied, including academic achievement and impact on the school.

### 3.3. Requirement for Multi-task Management Ability

Modern technology has complicated the situation for many learners as they use face-to-face contact via email and text messages to deal with tasks through blended learning, i.e. online learning mode combined with traditional learning modeIt has become the norm to check personal online messages while working on other tasks. Multitasking is very energy intensive, which is undeniably what researchers are talking about. Switching tasks is not only energy intensive, but frequent switching also tends to cause a loss of efficiency. Multitasking, however, allows learners to schedule by designing primary and secondary tasks and thus dividing them into stages. The result is achieved by accomplishing small goals. Author concluded that from the student's perspective, online learning in blended learning facilitates and is valuable for learners with multiple responsibilities and highly organised lives as individual students [10]. Online learning can therefore be an effective way for learners to develop their personal skills and help them to complete their other learning tasks. Through blended learning, learners' scheduling systems are optimised, and their scheduling systems are improved by taking stock of individual behaviour, observing their learning effectiveness and reviewing the rationality of task slicing by specifying and achieving goals, balancing individual competencies with task matching and scheduling tasks. Blended learning allows learners to develop multi-task management so that they can take on different tasks, split the stimuli and complete them one by one to achieve the final desired value. This will be one of the necessary ways to develop multi-task management.

### 4. The Impact of Blended Learning on Students' Academic Achievements

### 4.1. Changes in Academic Assessment Methods

In a blended learning model, there are new requirements and ways of assessing students. The corresponding assessment methods will be different, possibly online group assessment or online supervision, affecting the individual student's learning outcomes. The traditional learning model was simply an offline paper and pencil response type of assessment, a group working together on a task presentation, and so on. However, the rapid growth of the internet today has brought about more online examination methods. For example, completing a questionnaire online means learners can interact and upload information online using a handheld terminal, and the information is presented in multimedia. Such testing methods have become more diverse and can be divided into different categories. Different assessment methods affect each student differently, and online supervision assesses students based on their perceptions of the basics and questions and monitors progress on the

questions. The online group is a workshop where students present their views in a discussion format. Author argues that based on online learning, students can use online tests as a necessary means of checking the effectiveness of student learning [6]. This new method of testing provides students with a clear picture of their learning outcomes and allows teachers to monitor the learning dynamics of their students. Furthermore, mixed-mode tests, i.e. online and offline assessments, these assessments can be used as an essential basis for student learning. They can help students in their learning process even if they review, and the results of these assessments can play an essential role in facilitating student learning.

## 4.2. Impact on Student Academic Expectations

Blended learning is an innovative learning system that combines the strengths of the formal classroom with the advantages of modern technology. Blended learning is a space for collaborative learning, where learners have to work hard and have the right attitude to learning. This is because it encompasses different modes of learning that are not only about learning knowledge but also about breaking through. There are certain expectations of achievement in academics. Online learning is about gaining a great deal of knowledge about learning and becoming proficient in internet technology. The author concluded that "students not only gain knowledge through blended learning but likewise enhance personal professionalism and self-motivation, self-responsibility for personal achievement" [4]. The expectation of offline learning can be experienced as face-to-face interaction helps develop a robust value system. Working together, sharing ideas, expressing emotions, socialising, etc., are more easily developed in traditional learning. Students can learn not only from books but also through interaction with teachers and peers. Students gain academic success, learn respect in small groups with their peers, learn more collaborative skills in the gym, and learn social skills during breaks. This is necessary for students to achieve more than just academic success. Nevertheless, compared to the old days when online or offline was not enough to accommodate all students, today's mixed online, and offline learning model allows students to have more opportunities, more learning resources and more freedom to adapt to their learning style, which will change their expectations of a learning experience.

## 4.3. Impact on Student Satisfaction with Academic Performance

Blended learning is an innovative learning model for a new era that brings together the strengths of multiple learning styles in today's educational context in order to optimise students' learning development. It relies heavily on traditional classroom learning and the new Internet platform of online learning. Blended learning is a learning method used by university students in the learning process. However, the difference lies in the way the learning experience is designed. Authors reported that different people have different understandings of blended learning [11][12]. Learners can adapt and positively respond to academic achievement in this blended mode environment. For example, some students adapt to the online learning model, while others adapt to the learning style. However, other students enjoy the blended learning model and will increase their satisfaction with learning better and achieving better. Some people simply prefer traditional learning methods, but others are interested in online learning, while others use a combination of traditional and online learning methods to help them improve. The authors note that the online learning approach is a focus for continued research, however how far it progresses is likely to be determined by the learners who are adopting it [13]. Research has found that adapting to new methods while maintaining the original method's benefits positively impacts student performance. Author report that blended learning positively impacts learning and that post-assessment results are higher than pre-assessment [1]. This may be because different students have a different sense of experience with the course.

## 5.    Conclusion

This study analyses the impact of online and offline blended learning models on the academic performance, professional competence and learning opportunities of university students, with the original meaning of blended learning being blended or combined learning, i.e. the combination of various learning styles. The concept of blended learning has been introduced in recent years in corporate training in developed Western countries. With the development of information technology, more and more attention is paid to online learning as a learning method, but sometimes there are problems with relying solely on online learning, such as low learning efficiency for certain content. As a result, many companies are turning to blended learning solutions. There is no specific definition of blended learning and people from different backgrounds have different understandings of blended learning. Blended learning is the use of multiple communication media to deliver knowledge and information within a single learning programme to optimise the efficiency of learning and the cost of the learning programme. It is concerned with optimising learning outcomes, using the right learning style for the right person at the right time, to meet the learning styles of different people (or learning communities) so that students can acquire the right knowledge and skills and it is a disruptive and innovative approach to teaching and learning that has emerged in the Internet age. Students can complete parts of their learning through online multimedia learning materials, but also through face-to-face tutorials in the classroom. Through blended learning, students can learn at their own pace. It is a mix of structured and unstructured learning. It is an approach to learning that combines distance learning with traditional learning, offering the positive aspects of each modality and maximising the overall effectiveness of learning. Online has a wealth of learning resources, and offline activities can consolidate and translate online knowledge learning. Online learning is not an adjunct or an addition to the overall learning activity, but necessary activity for learning. Offline learning is not just a replication of traditional classroom learning, but a more in-depth learning exploration and learning activity that builds on previous online learning. There is no uniform requirement or model for the reform of blended learning, but it has a unifying quest to make the most of the advantages of online and offline learning, thus transforming traditional learning for students and changing the way students use too much lecture in the classroom in order to avoid leading to a lack of initiative and cognitive engagement. The problem is that students' initiative in learning is low, cognitive engagement is inadequate, and learning outcomes vary too much between students. However, the primary disadvantage of blended learning is its lack of relevance, as the ultimate purpose of learning is to meet the development needs of the business, and the blended mode of teaching has a high degree of extensive use and is prone to a lack of practicality. This paper advances academic progress on the impact of blended learning on student learning and provides a favourable reference on the learning practices of blended learning. Therefore, there is a need to continue to conduct in-depth research on blended learning in the future.

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