

The Significance of Blended Learning in Training

Mona Saud AlThuwaini

The Public Authority for Applied Education Training,
The Higher Institute of Administrative Services, Kuwait

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Abstract: In blended learning, educators combine the conventional learning process with online learning to improve the learning process for learners. The concept was integrated into the traditional learning process after it became apparent that technological advancement is essential. The bottom line is that blended learning integrates face-to-face with technology-based platforms such as online and offline platforms. Society has become more digitalized than it was in the last century, and this has meant that in the workplace, more demands need to be met through training. Thus, training needs to follow online training with the combination of conventional face-to-face training to ensure trainees can meet with the new requirements at the workplace. The focus of this paper will be to focus on the significance of blended learning in training. The paper will establish how blended learning has grown into the learning process today, its significance, models and conceptualizations, and the factors that impact the learning model choice. Flexible learning should be adopted to ensure that trainees play a key role in their training. This way, it becomes more impactful and meaningful in the development and transitions of their professional careers.

Keywords: blended learning, face to face, e-learning, technology.

1. INTRODUCTION

The conventional learning process is transitioning, which requires new ways and methods to improve the learning process. The education system, from the lowest levels to the highest form of schooling, faces challenges such as equality in education and budget deficiencies. This has prompted a review of how the learning process is administered (Smith & Hill, 2018). Learning institutions are beginning to adopt other learning processes, mainly due to the advancement of technology. Blended learning, at its basic, combines both conventional teaching methods and technology-mediated learning; conventional learning involves face-to-face teaching, and technology-mediated learning involves online and offline teaching materials. The blended learning process has become integral in ensuring there is equality between traditional learning process that involves face-to-face and technology-mediated learning process (Smith & Hill, 2018). The logic is that the present challenges have resulted in ensuring a balance between the two teaching practices and that incorporation of the two is the most convenient. Despite the shortcoming of face-to-face, there are some things that human interaction can provide that no computer learning can replicate. One of the strong values the learning process offers is social skills. The teachers' physical aspect instills some aspects that cannot be repeated; some of the behavior and personalities that the teachers exhibit significantly impact the students as they tend to imitate those they respect. Beyond the social skills they learn from people they respect or uphold; they also know from themselves. Learning from co-students significantly impacts the learning process and the values they learn, such as co-existence and respect for different views.

Despite having the above upsides to it the traditional learning mode, there are some negative sides to it, such as having difficulties in the balance between students and teacher's ratio; especially when it comes to finding a balance between students who are at work and educators who have other duties and obligations. Additionally, the physical aspect of students is significantly impacted when people have to work long hours and fail to be physically present (Singh et al., 2021). The

physical part of students, especially working people, has been an issue in the training process; hence, blended learning is adopted to balance their working and learning periods. With the digitalization of learning, it has become essential to adapt to the new changes; however, the traditional learning mode has been left behind and has impacted the quality of education provided in learning institutions. This challenge has impacted the quality of the workforce being realized in the market. Some must continuously be taught through on-job training approaches involving blended learning to meet the market's growing demand. To improve the quality of education and minimize errors that take years to unlearn, ICT-mediated learning is the best option (Vallée et al., 2019). One of the advantages of adopting blended learning is the ease of learning and unlearning; some of the most significant errors of the traditional learning mode are that the errors would take years to unlearn, and this impact the quality of the workforce. Take, for instance, if someone learned something at a tender age and has repeatedly made mistakes since that tender age; it would be safe to assume some of the services or products have been faulted at the earliest stage of the production because the individual was wrongfully trained through the conventional methods. The logic behind blended learning is that it involves blending the best of both learning modes to address the challenges of today. This paper will focus on establishing blended learning, its components, models, and its significance in the learning process during training.

2. BLENDED LEARNING

Blended learning is a learning style that combines online and electronic media with traditional face-to-face learning. The concept ensures that online technology is integrated, goes beyond, and is crucial in transforming learning. The basic tenets of this learning method are to ensure that both technology and teaching educate each other. The concept may be summed as bridging the digital and conventional learning gap. With such an evolution, it has become apparent that technology is the ultimate future learning process (Singh et al., 2021). Although this may seem the case, the ultimate conversion from conventional to full digitization is far from occurring. As explained above, digital learning cannot replicate some human elements. Blended learning has revolutionized the learning process, especially in institutions of higher learning. Initially, it would have been a struggle to juggle professional, personal, and work life, and this contributed significantly to burnout and slow career progression. However, with some institutions adopting blended learning, the training process has resumed, and organizations' output has not been affected. Before blended learning, students had to rely on the physical presence of the instructors to teach and provide the learning materials, which one would then have to take home and work on them and return them. However, this trend is being reversed, with more learning institutions taking on a different path and taking on blended learning. Students can have relationships amongst themselves and personalized ones with the teacher. Educationists and researchers argue that students better understand the teaching patterns of blended learning compared to other learning processes. Blended learning is tailored to ensure students go beyond their comfort zone and venture past the classwork to complete an assigned duty (Vallée et al., 2019). The logic is that blended teaching enables students to cultivate imitiveness within themselves, which enhances critical thinking. The bottom line is that blended learning is ideal for individuals who appreciate the role of a tutor but are within the confines of their comfort. This learning mode has become essential, especially after globalization and digitization. The pandemic has also proven the significance of blended learning and the importance of integrating it into the education system.



Fig 1: blended learning (Traditional and Online Learning, 2020)

3. SIGNIFICANCE OF BLENDED LEARNING IN TRAINING

Convenience and Access

In an ideal learning environment and when done correctly, blended learning ensures that individuals can gain more access and it becomes more convenient; some of the elements in the learning process are that individuals can interact and communicate more with others, which includes communicating with co-students and teachers. With the adoption of electronic and social media as part of the learning process, students can interact with each other more conveniently, improving the quality of learning. This learning mode is essential, especially during this era of digitalization and globalization, where students may be far from the physical campus and thus will require to get in touch with other students and teachers (Krismadinata et al., 2020). The logic behind this is to avoid incidences where people have stagnated within their careers due to a lack of career progression due to a lack of further education and training. To avoid incidences of staying in a dead-end career, training programs have been designed by various learning institutions to ensure that full-time working individuals can have access to and convenience of learning at their comfort without failing to meet their professional and personal obligations. This concept of learning is meant to offer flexibility for those working and students who cannot access onsite learning courses. The flexibility ensures that students and teachers communicate and avoid incidence where labor output is affected because people have to choose between working and going to school (Vallée et al., 2019). The convenience offered by this learning mode is that individuals can reach their maximum effectiveness as they do not have the burden of juggling their various duties and obligations. Take, for instance, how the unforeseen impact of the pandemic had on education. The entire learning process was brought to a standstill, and this impacted how blended learning was and would be considered in the future. The pandemic reinforced the need to address the need to adapt to new changes within the education system, especially the inclusion of ICT-mediated learning as a critical learning component.

Improved Learning

Blended courses have proven more effective than face-to-face, or online courses taught stand-alone. Instruction combining that involves both face-to-face and e-learning has yielded more results and has played a significant role in the uptake of the learning mode in most learning institutions. One of the ways that the learning mode helps with learning is through enhanced instructional design that ensures the courses are designed by educationists and instructional designers who provide that the course can address any issue during the period or training. Most courses, especially face-to-face, are not instructional compared to blended courses, which are meant to ensure that the course meets the present needs. The assumption is that any course is designed to meet the requirements and new demands; thus, it undergoes a redesign to meet the needs (Krismadinata et al., 2020). Compared to face-to-face learning mode, blended learning is designed to be instructional, and thus students rely mostly on the resources, activities, and assessments. In face-to-face learning mode, students are guided more by the teachers.

Additionally, more learning resources are available, making developing learning possible. Since most of these resources are readily available to students through online platforms, and can conveniently learn the course without interference. Due to the automated assessment and learning materials being available through online sources, students can follow through and design their learning pattern, which serves them best. This aspect of learning is essential as different students tend to have different learning needs; by having an individualized learning pattern, students can achieve and benefit equally (Vallée et al., 2019). The learning environment is crucial for students; for instance, in a face-to-face learning environment, some students fail to participate in class for fear of intimidation, which impacts their contribution, which is an essential part of their learning (Singh et al., 2021). For students to be engaged with their school work, they must engage with everyone, including their learning counterparts and teachers. In blended learning, students comfortable with the face-to-face learning mode can interact comfortably. Those comfortable with online learning can engage with their peers without the fear of intimidation or being reprimanded. Furthermore, the number of tasks and time are easily tracked in an online platform such as a website, making it the most convenient form of learning. Blended learning provides more learning as it is more instructional, and there is increased access and guidance throughout the learning process.

Flexible Cost

The cost of education is at an all-time high, resulting in many people failing to meet their personal goals of progressing in their careers due to a lack of training or furthering their education. From a financial aspect, blended learning is cheaper for both the learning institution and the students. Learning institutions argue that running the entire institution raises the cost of education, which is then passed on to the students raising the cost of education. Since blended learning involves leveraging various learning resources, education and time costs have been significantly reduced. The longer the course takes, the costlier it becomes for those learning.

Additionally, the cost implications of ensuring that companies pay for staff training are relatively higher in institutions that apply a face-to-face learning model (Singh et al., 2021). Institutions that use blended learning have an advantage for companies; individuals undergoing training take fewer days to complete the learning, which impacts the financial aspect, as it saves without affecting productivity. For learning institutions, it is relatively easier to run some facilities that raise the cost of education, such as running a library. Centralized learning databases are central to blended learning, as they can change the learning materials anytime there is an update. From a financial aspect, this is crucial as individuals are kept up-to-date with the current learning material. Learning errors have a significant financial aspect, as companies have unqualified staff who affect production (Smith & Hill, 2018). However, with a relatively more straightforward correction in the centralized learning institution, learning institutions can avoid incidences where an error in learning can affect production. The bottom line is that blended learning is effective and efficient due to its capacity to reduce cost; both learning institutions and companies can get the value of their investment without impacting their productivity (Krismadinata et al., 2020). One of the ways that they ensure this is possible is by determining the scale of reach by determining the distance of the blended learning services, and this is done by assessing the spread of the users. Instructional designers in charge of designing the program ensure that the most critical component is prioritized first; the logic is that by prioritizing the content, individual learning from the program focuses on the most essential, with the ongoing course development taking place gradually (Vallée et al., 2019).

Furthermore, a review and update with newly blended learning concepts ensure that the training program costs relatively lower. The assumption is that an update reduces the overall cost without having to keep on repeating irrelevant learning materials. The program's designers ensure that it is designed to minimize the price by being effective and efficient.

4. CONCEPTUALIZING BLENDED LEARNING

Synchronous and Asynchronous Activities

To better understand how blended learning takes place, it is essential to look into the learning activities; some key concepts include synchronous activities. Synchronous activities refer to when blended learning takes place simultaneously, and this involves having classes take place both in online and onsite classes. This is common in classes where students partake in face-to-face classes while they are physically away from the onsite classes (Krismadinata et al., 2020). The students join other schoolmates through video and web conferencing; the unique part about this learning style is characterized by applying different technologies to facilitate student interaction and communication when solving problems. Often, students are invited through online portals such as Skype on their electronic devices and can remotely engage in the classes; meanwhile, the lecturer remains on campus and can converse with both students. This mode of learning is essential, especially for those people who may be working in distant places and have to join classes while working and can learn alongside their counterparts, with the exemption that they pay less. It is convenient for them to get the same set of services similar to those in the school (Vallée et al., 2019). Due to technological advancement, it has become unnecessary to define synchronous classes as classes with both place-based and online classes. Internet-based conferencing has evolved and can comfortably handle multiple real-time engagements; this means that people can easily engage from different locations, making it easier to brainstorm any ideas they may be having during class discussions.

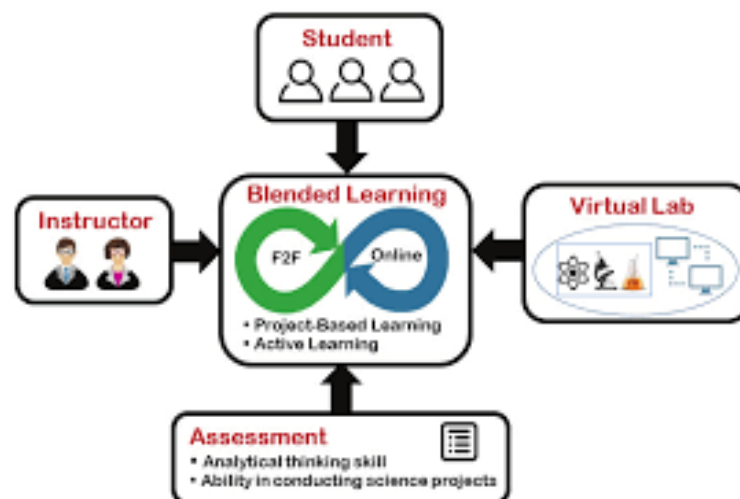


Fig 2: blended learning (Northwest, n.d.)

Contrary to synchronous, asynchronous activities occur when learning does not take place together; this is common when students living in different time zones learn at their time and pace. One of the characteristics of asynchronous is that learning materials are provided online, where learners can read and engage in classwork through the internet (Bruggeman et al., 2021). Additionally, students can maintain a communication channel without meeting amongst themselves. Furthermore, they designate their communication channel, which may be through a chat room where only those invited can access the messages sent over the platform. This mode of communication is meant to give students the convenience they need; they can learn without being restricted by the time differences and availability of tutors and other students. Individual students are given the prerogative of deciding when and how to utilize the learning materials (Krismadinata et al., 2020). Blended learning involves providing structure to the students and thus has requirements and deadlines that students must meet. Depending on the tutors, some may offer some leniency and flexibility, while others are stricter. However, in the independent chat rooms, they can engage with each other, post, discuss, and communicate solutions; this is courtesy of the online learning management system designed to ensure that school activities can be posted. Students can comfortably engage each other in these learning spaces, making the class feel more dynamic. Despite being in different places, such spaces will make students from different regions develop rapport among themselves, where they can share various social aspects. This engagement aims to ensure students develop a sense of belonging, often through a place-based engagement such as an onsite campus.

Inclusive, Quality, and Quantity Conceptualization

In this conceptualization model, blended learning is considered an inclusive way of learning, as it caters to combining face-to-face with online learning. Educationists have argued that blended learning has consistently indicated the inclusive approach; this is essential with the digitization of society, where essential elements such as education have been integrated with technology for effectiveness and efficiency (Singh et al., 2021). Since the inception of learning management systems, learning institution has openly adopted blended learning; this means the learning institution's capacity to grow has been expanded without adding more buildings intended to house more students as learning and living spaces. Moreover, it has become apparent that with the adoption of blended learning, students from different places or regions can access the same platform as the students learning in place on campus. Blended learning is meant to serve as an inclusive element, which is supposed to ensure that students and teachers are included in the same space of learning; therefore, they can engage together to develop a learning pattern that will serve individual needs and requirements without having to affect other (Bruggeman et al., 2021).

Furthermore, educationists argue that since there are no two learning designs that are similar to each other; therefore, the quality of these designs should be carried out thoughtfully to ensure that every tutor and student gets the value of what they are learning. Organizations pay a significant amount of money to ensure that their employees are trained and provided with a quality learning experience, which will translate to more productivity and prove a return on investment. Blended learning ensures quality education and training and should ensure that both face-to-face complement each other with digital learning. A working individual should not be penalized for being unable to be physically available in a classroom, especially among students working or in a different place or region. With blended learning, it is crucial to understand that the amount of work is reduced compared to the conventional learning process (Krismadinata et al., 2020). The reduced amount of work means people in training can follow through with the program, as reduced work means there is reduced time required to study, and one can focus on other vital issues. The traditional campus's learning hours have been significantly reduced. As a result, the individual can focus on other areas such as working and their personal lives. During training, the most crucial period has enough time to adjust and balance school work, personal issues, and work. Individuals undergoing training are provided with enough learning materials, such as self-study modules, which enable them to focus on their school work relatively easily, making blended learning the essential learning tool.

5. MODELS OF BLENDED LEARNING

Face-To-Face Model

One of the importance of blended learning is that it helps to meet the diverse needs of students; each student has their own needs that must be addressed individually. For instance, in a classroom there are students who seem to struggle while others are average and others are gifted. All these categories of students have different needs; hence, when educators began adopting blended learning, several models have since been developed. One such model is the face-to-face model, which has been instrumental in meeting the demands of students at different levels. Rather than having gifted students remain at the

same levels as the average and struggling students, this model is devised to have gifted students proceed beyond the standard learning (Bruggeman et al., 2021). The logic is that teachers will apply online resources to ensure that struggling and average students have been provide with the additional assistance they may require. The teacher understands the group and would assign individual groups with different resources based on their assessment. This model's basic tenets are to add context to what the tutor educates. It is highly sorted because it reaches students who seem to have fallen behind with their training; this is often the case, especially among working people. Tutors understand that individuals may fall behind due to some obligations; since the model provides more peer-to-peer interactions, the students have other platforms, such as chat rooms, to easily communicate with each other (Singh et al., 2021). Almost all learning materials will be provided offline, and the online element only deals with some of the issues. For instance, whenever a student fails to attend classes, the tutor sends learning materials to ensure that the students catch up with the rest of the class (Vallée et al., 2019). Since it is inexpensive to adopt, most institutions have deployed this learning model as it only needs a few digital devices to begin.



Fig 3(a): blended learning models (Blended Learning – Why Is It the Best Learning Approach, 2019)

Rotation Model

This blended learning model uses online and in-person teaching in lecture halls and classrooms. Unlike other blended learning models, the rotation model has a different approach, encompassing a fixed schedule for each learning mode. The online classes have a different set time, and the in-person teaching has its time set differently. The time it takes during online classes is supplemented with the same time as in-person teaching. The educator is solely responsible for the time allocated to either learning model (Krismadinata et al., 2020). However, having a fixed schedule does not necessarily mean this learning approach has no room for flexibility. The educator can decide on station rotation, where a small group of students is rotated for a project. This approach gives the tutor an idea of what the students may need and gives the educator a grasp of where the student may need more assistance. To offer more flexibility, the approach applies the flipped classroom, where students go with their research and work on them in the comfort of their space and time (Singh et al., 2021). They can table their findings only when they return for the scheduled in-person teaching schedule. One of its main characteristics is that this learning model of online teaching meets individual needs. This way, the tutors can offer the necessary learning material to supplement the student's lack of learning. Uniquely, smaller collaborative work is supported by the tutors, and this helps the student develop long-term relationships, which is practical in developing their social skills.

Additionally, through this model, collaborative and independent learning is a common feature throughout this approach. This approach is unique as it helps students develop critical thinking as a tool and to understand the role of IT as a tool in learning (Singh et al., 2021). The rotation model is also essential in ensuring that students gain experiences throughout their course, especially when it comes to the rotation during a project where a smaller group of students are divided between working throughout the project.

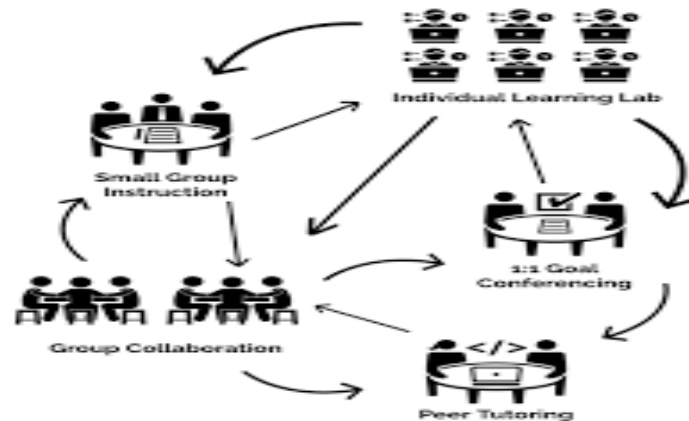


Fig 3(b): Rotational model (Bruggeman et al., 2021)

Flex Model of Blended Learning

This blended learning model is unique as it does not rely on remote education but on computers. Most learning materials are provided through digital platforms but done in in-person learning mode. Unlike other models with a fixed schedule, students can come and go as they wish. Learning institutions have computer software and hardware installed on their computers, and students can access the computers as they wish (Singh et al., 2021). The uploaded software guides the students throughout the entire process, which means they have autonomy over the amount of work they work on, despite being in the same place as the rest of their counterparts. The flex model offers the flexibility previously provided by other non-traditional learning models, where students were not obligated to attend lessons. In this approach, a tutor or educator might readily assist students in areas they may need help. The tutor offers support whenever required but cannot engage the student formally, such as educating them. It is vital to understand that despite much of the learning being done in-place learning, much of the content is derived from online resources. Such resources include but are not limited to video presentations, online quizzes, and documentaries. The bottom line is that this approach is student-led, and any learning efforts ensure the students receive as much as they can grasp in their space and time. Students best suited to this model have difficulties learning in traditional classes and thus must find a way to supplement their learning by ensuring they have resources (Krismadinata, 2020). The most common challenge is when working individuals cannot attend classes due to their commitments. Since the tutors are readily available, the students do not need tech skills; they can ask for help anytime. Due to ease of establishment and technological advancement, the flex model is one of the most convenient forms of a blended model. Despite the high initial cost of making this program work, the idea that the computer will remain under the school property makes it ideal (Vallée et al., 2019). The logic is that for the program to be more effective, every student needs to have a computer, making the initial cost high, but in the long run, it is relatively inexpensive. The bottom line is that the flex model of blended learning has proven that the traditional sense of schools can be made away with and, in its place, be replaced.



Fig 4: flex model (A Deeper Look at the Flex Model - Blended Learning Universe, 2016)

Online Lab School Model

This is a blended learning model that involves having students come to their place of school and access digital platforms through which they can learn. During these visits, paraprofessionals may guide the student instead of actual teachers. Teachers are a resource for students to access digital platforms such as videoconferencing (Krismadinata, 2020). This model is best suited for adults studying for their professional training programs; this way, they would not fail to attend classes, and when it's convenient, and there is support staff to educate them, they can quickly learn. This model is essential, especially when students are partaking in many classes. The assumption is that students often fail to learn due to the lack of tutors on a certain subject. Instead of missing the entire class, the student may go to the online lab and learn from there, as often, there are individuals in the computer labs trained as paraprofessionals to offer support (Krismadinata, 2020). The advantage to this is that it provides the advantage of flexibility, subsequently, convenience. For instance, if an institution offers several courses, it may adapt this learning model. It would be easier for them to introduce classes taught in different languages as it would be convenient to access classes with different languages for students studying and living abroad. The ability to hire specialists makes this model unique to training individuals without going the extra mile, saving the school a lot of money. The bottom line is that the model is flexible and convenient, especially when offering more courses. With extensive computer lab, it imparts not only those who are part of the learning but the entire institution.

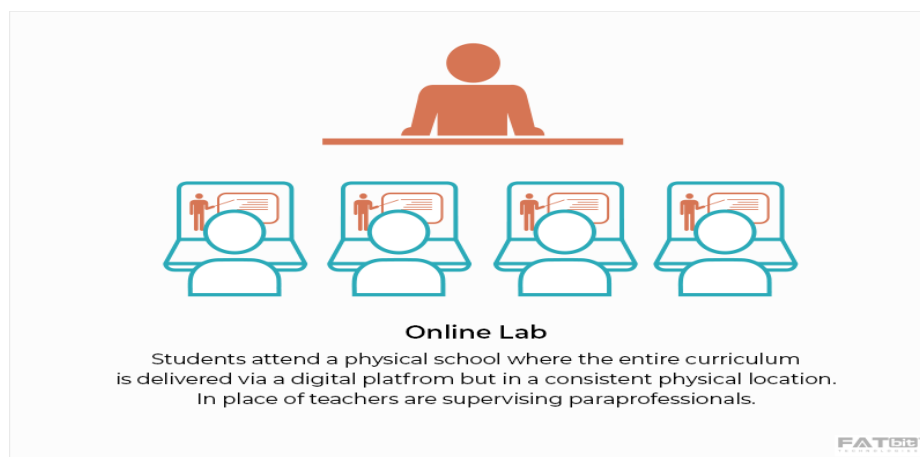


Fig 5: online lab (Blended Learning – Why Is It the Best Learning Approach, 2019)

Self-Blend Model

As the name suggests, self-blend is a model of blended learning that values the role of the student; unlike, other models that the teacher controls, this model primarily relies on online learning. Additionally, students have control over what they learn, how, and when they do it. Although the computer labs may be situated on the campus and there are teachers to offer assistance, what the students learn is entirely on them. Unlike in situations where students have to be available as long as they are in a place with internet coverage, they can complete the entire course without going to the classroom. The basic tenet of this approach is that students can choose what they learn; this is essential as sometimes students may need to study a certain course but lack someone qualified to teach them. Without impacting the school arrangement, students can quickly get their teachers and complete their courses online (Krismadinata, 2020). Often institutions that rely on this teaching model choose amongst the plethora of devices and platforms through which they can offer learning to their students. Students with robust internet connections can engage in zoom sessions with other students and discuss any subject they choose. This learning model is common in adult education as it suits certain lifestyles; some individuals work at night and would like to join a class during the day. Some adults work from home; this is an essential tool in their education as they do not have to move from the comfort of their homes. Often these online courses have foundational classes, which are then provided with the support of a tutor who can assess their work. In some instances, the completed courses are added alongside others one might have completed during the in-place teaching. After combining the courses, the institution's senate can decide whether one has completed a standard qualification, a certificate, or a degree. This unique model offers students some form of flexibility, especially among students who have failed to catch up or feel they need more specialization (Vallée et al., 2019). Teachers do have a role in educating learners through this model; however, having a face-to-face teaching moment with students is uncommon. It is only when students seek some form of clarification that the teacher can engage them, students.

Companies employ this essential learning model, especially when introducing a new product in the market or service. Available digital devices can be used to deliver the content and have students assessed by their tutors from the comfort of their devices.



Fig 6: self-blend model (Langston, 2021)

The Online Driver Model

The online driver classes are best suited for adults who find school unappealing or impossible to attend. Although one might get this learning model through various digital devices, the educational techniques still apply despite being pre-installed in some software and hardware. Most learning occurs online, especially in institutions that have already adopted this form of learning; the entire process is online (Krismadinata, 2020). There are certain elements, such as DVDs, which students can purchase online, after which they can study even without being online. Documentaries also play a crucial role in educating as some are considered learning materials with coursework within them. The online driver model learning applies the synchronous concept where some of the content is provided by online content. This is common when the entire class is held over a live-streaming platform (Bruggeman et al., 2021). Every individual in the online platform gets the same teachers and learning simultaneously. Additionally, teachers often assign the students tasks they can work on individually as they set their own pace. Afterward, the students submit the results to the teachers for evaluation.

Furthermore, the tutors can set examinations online, after which students are expected to work and submit in the same portal, the idea being to assess their understanding as they continue partaking in the course. Several assessment tools, such as plagiarism checkers, can be found online, which assist educators with determining whether the students grasp the course. This blended learning model is practical only for adults, as there is limited contact with teachers, and it would be inappropriate for young students. From a professional point of view, this model is effective as it would cater to the needs of those working in remote areas and who would like to further their education. Vice-versa, the institutions offering these courses will likely benefit as they would increase the number of students without putting up with administration costs for new students.



Fig 7: online driver model (Langston, 2021b)

6. FACTORS AFFECTING THE ADOPTION OF BLENDED LEARNING

Teaching Staff

Teachers play a crucial role in influencing blended learning; one of the key roles is their willingness to adapt to new changes. Blended learning is only adaptable as the teacher who endorses it alongside the administration. Once teachers become open to the idea of blended learning, its uptake becomes relatively more straightforward, which shows that the teachers' attitudes play a crucial role in ensuring that a potentially positive change is fully adopted (Bruggeman et al., 2021). The teachers must be trained and be well versed with technology and its role in education; this means they need to be prepared and should transfer their knowledge to the student with relative ease. Students would communicate better with their tutors if they felt that the use of technology by the teachers is effective and helps them achieve better outcomes. However, the teaching staff have recently become conversant with technology and have been championing its adoption.

Advancement in Technology

Technological advancement is a critical area that has seen the rise of blended learning. Technology, such as healthcare and banking, has taken over most basic institutions in the last century. It is catching up with the education system and shaping how we view education. Most learning institutions have adopted technology and have, in the past, been championing the inclusion of technology in teaching (Bruggeman et al., 2021). Blended learning has become feasible due to the great strides we have made as a society in technology. Distance is no longer an issue, and individuals can connect as long there is connectivity and receive the same quality of education they would have realized if they were in-place learning. Technology has made it possible for people in different time zones to come together, learn, and achieve the same quality of education.

Individual Learning Styles

One of the crucial things, especially when it comes to adult learning, is that every individual has their learning style. For instance, every individual who has their schedule due to commitment and connectivity issues and thus would require to be treated differently if they are meant to undergo training. Some companies with workers living in different areas may develop a training program to bring everyone on board with current technology or products (Bruggeman et al., 2021). In such instances, organizations have to design a blended learning model which should cover the needs of their employees who are in training. Some learning institutions have adopted the flex model, where students choose what they want to study. Some of these models' concepts are that students can choose what they want to learn rather than being imposed on some course. Additionally, individual students are different, each with particular strength of learning, and thus cannot be placed within the same class. Blended learning resolves the issue of imbalance when it comes to individual needs.

Desired Outcomes

Arguably, no students would enroll in a course only for them to fail; thus, before applying to any institution, learners should be away from the learning modes in that school. The same analogy applies to learning institutions, and they should understand their students better to develop a curriculum designed to help them achieve their goals (Bruggeman et al., 2021). Most blended learning models are designed for individual students, while some are designed to be replicated on a broader scale. Depending on what the learner or institution may prefer, there is a model designed to offer their desired outcomes; this is crucial as students and educators have to factor in some elements such as convenience, cost, and flexibility.

7. CONCLUSION

The outcome is that blended learning combines conventional learning, commonly known as face-to-face and online learning. With technological advancement and acceptance of other societal elements such as healthcare and banking, education must embrace technology; since the inception of learning management systems within learning institutions, the adoption of blended learning has expounded exponentially. Arguably, the role of teachers cannot be replicated by online learning, as some aspects, such as social skills, can only be duplicated by human connection. Educationists and learners who began blended learning wanted technology to integrate with teaching and go beyond transforming the process. With digitization and globalization, it has become apparent that there is a need to reevaluate how education is pursued. Blended learning pushes students to grow past their comfort zone and become great and innovative people. Arguably, when everything is done correctly, especially the designing part, blended learning offers more convenience and access compared to any other form of learning. In a globalized world, the workplace has become competitive, and the only way to move past or avoid competition is through further learning. However, considering the time and cost it might take to complete, adopting blended learning as the most appropriate way to learn despite working would be convenient.

Moreover, the labor force has significantly been affected after it has become apparent that people are no longer employable for failing to meet the current threshold of education and training. To better understand how blended learning works, it is essential to understand some basic tenets, such as synchronous and asynchronous activities. In synchronous activities, where learning takes place in onsite and online classes, students are invited through portals such as skype or zoom meetings from where they can meet and discuss some of the issues through the online platform. Asynchronous activities are in contrast to synchronous activities as it relies on ensuring people leaving in different areas or time zones can get the same learning. But, just as with synchronous activities, students need different communication channels, such as chatrooms where they can post and discuss any issue. There are several blended learning models, such as face-to-face, rotation, flex, online lab school, and the self-blend model. Several factors have led to adopting blended learning: the teaching staff, desired outcomes, technological advancement, and individual learning styles.

REFERENCES

- [1] *A deeper look at the Flex model - Blended Learning Universe*. (2016, February 19). Blended Learning Universe. <https://www.blendedlearning.org/a-deeper-look-at-the-flex-model/>
- [2] *Blended learning - A Transformative Force in the Realm of Education*. (2022, August 4). FATbit Blog. <https://www.fatbit.com/fab/blended-learning-transformative-force-in-realm-of-education/>
- [3] *Blended Learning – Why is it the best Learning Approach*. (2019, June 23). Designing Instructions for ELearning. <https://designinginstructionwithk.com/2019/06/23/blended-learning-why-it-is-the-best-learning-approach/>
- [4] Bruggeman, B., Tondeur, J., Struyven, K., Pynoo, B., Garone, A., & Vanslambrouck, S. (2021). Experts speaking: Crucial teacher attributes for implementing blended learning in higher education. *The Internet and Higher Education*, 48, 100772. <https://doi.org/10.1016/j.iheduc.2020.100772>
- [5] *Individual Rotation Progression*. (n.d.). The PL Toolbox. <https://www.thepltoolbox.com/individualrotation.html>
- [6] Krismadinata, K., Verawardina, U., Jalinus, N., Rizal, F., Sukardi, S., Sudira, P., Ramadhani, D., Lubis, A. L., Friadi, J., Arifin, A. S. R., & Novalindry, D. (2020). Blended Learning as Instructional Model in Vocational Education: Literature Review. *Universal Journal of Educational Research*, 8(11B), 5801–5815. <https://doi.org/10.13189/ujer.2020.082214>
- [7] Langston, A. (2021a, March 18). *The Self-Blend Model of Blended Learning Explained*. ViewSonic Library. <https://www.viewsonic.com/library/education/the-self-blend-model-of-blended-learning-explained/>
- [8] Langston, A. (2021b, March 25). *The Online Driver Model of Blended Learning Explained*. ViewSonic Library. <https://www.viewsonic.com/library/education/the-online-driver-model-of-blended-learning-explained/>
- [9] Northwest, E. (n.d.). *Using Project-Based Blended Learning to Engage Career and Technical Education Students*. Education Northwest. Retrieved March 4, 2023, from <https://educationnorthwest.org/insights/using-project-based-blended-learning-engage-career-and-technical-education-students#:~:text=Project%2Dbased%20learning%20immerses%20students>
- [10] Singh, J., Steele, K., & Singh, L. (2021). Combining the best of online and face-to-face learning: Hybrid and blended learning approach for COVID-19, post vaccine, & post-pandemic world. *Journal of Educational Technology Systems*, 50(2), 004723952110478. <https://doi.org/10.1177/00472395211047865>
- [11] Smith, K., & Hill, J. (2018). Defining the nature of blended learning through its depiction in current research. *Higher Education Research & Development*, 38(2), 383–397. <https://doi.org/10.1080/07294360.2018.1517732>
- [12] *Traditional And Online Learning*. (2020, February 14). ELearning Industry. <https://elearningindustry.com/key-differences-online-face-to-face-traditional-learning>
- [13] Vallée, A., Sorbets, E., Cariou, A., & Blacher, J. (2019). Effectiveness of Blended Learning compared to Traditional Learning in Medical Education: a systematic review and meta-analysis (Preprint). *Journal of Medical Internet Research*, 22(8). <https://doi.org/10.2196/16504>