

**The impact of blended learning on learners' academic
performance and emotional well-being**

تأثير التعلم المدمج على الأداء الأكاديمي للمتعلمين والرفاهية العاطفية

by

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ABSTRACT

This research seeks to investigate the learners', teachers', and school managements perceptions of blended learning. The study has adopted the mixed method approach to explore the effectiveness of blended learning implementations on middle and high school students in a private school in the UAE. The study sampling participants were 60 students who set for a questionnaire and interview. 18 teachers were requested to participate in the survey. There were also interviews with teachers who had a wide range of experience in teaching via blended learning. Teachers' attitude toward blended was investigated against students' attitude to compare the findings and achieve the goals of this study.

Based on the data analysis, the study has concluded that teachers reported a positive attitude toward blended learning, while students indicated a negative attitude to the blended learning implementation. The study findings indicated that students encountered sophisticated challenges that negatively impacted their academic progress and emotional well-being.

الملخص

يسعى هذا البحث إلى التحقيق في تصورات المتعلمين والمعلمين وإدارة المدرسة للتعلم المدمج. اعتمدت الدراسة نهج الطريقة المختلطة لاستكشاف فعالية تطبيقات التعلم المختلط على طلاب المدارس المتوسطة والثانوية في مدرسة خاصة في دولة الإمارات العربية المتحدة. كان المشاركون في أخذ العينات من 60 طالبًا تم تعيينهم لاستبيان ومقابلة. طُلب من 18 معلمًا المشاركة في المسح. كانت هناك أيضًا مقابلات مع معلمين لديهم مجموعة واسعة من الخبرة في التدريس من خلال التعلم المدمج. تم التحقيق في موقف المعلمين تجاه المخلوط مقابل موقف الطلاب لمقارنة النتائج وتحقيق أهداف هذه الدراسة.

بناءً على تحليل البيانات، خلصت الدراسة إلى أن المعلمين أبلغوا عن موقف إيجابي تجاه التعلم المدمج، بينما أشار الطلاب إلى موقف سلبي تجاه تطبيق التعلم المدمج. أشارت نتائج الدراسة إلى أن الطلاب واجهوا تحديات معقدة أثرت سلبًا على تقدمهم الأكاديمي ورفاههم العاطفي.

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CHAPTER 1: INTRODUCTION

Nowadays, the concept of blended learning has become a controversial topic among educators, educationalists and policymakers. Blended learning includes face-to-face strategies of learning and instructions in a combination with digital and communication technologies. This paper explored blended learning and investigated the topic from different points of view: learners' perspectives, instructors' and teachers' perspectives, and leadership members' perspectives.

This research will mainly focus on the effectiveness and progress of middle and high school learners in the blended learning and online learning environment. The study will target middle and high school learners of both genders: male and female. The experiment will focus on the learners' attitudes toward online and blended learning. It will also investigate whether or not a blended learning environment has positively impacted students' academic performance as well as their well-being.

The study investigated the learners for 4 weeks, during that period of time learners have been taught through the blended learning mode. The students have been thoroughly interviewed and observed to examine the effectiveness and implementation of the hybrid and blended learning mode vs face-to-face learning model. The collected data has brought valuable information about the advantages of blended learning in the process of learning English as a second language. It has also defined the obstacles and constraints in the implementation of blended learning model that learners and educators have encountered throughout the teaching and learning process in the ELA classroom.

In order to obtain valid results, Learners have been divided into two groups. The experimental group who was taught using blended learning and online learning. The experimental group were basically taught using the technology-mediated learning environment. Teachers have used enriched technology support such as live conferences, online activities, online group discussions. The second group or the controlled group was the face-to-face learners. The controlled group were traditionally taught. They have physically attended the school and have been observed and evaluated based on the class attendance and classroom tasks and activities.

The design of the study has obtained the mixed method research. The data was collected and analyzed based on qualitative and quantitative tools; such as questionnaire with the learners and their ELA instructors, and interviews with the experimental group: online or blended learning group. Throughout the data analysis, it was observed that experimental learners have transferred a negative attitude towards the online and blended learning environment. However, the controlled group or the face-to-face learners have shown a more positive attitude towards the instructional pedagogical and practices that have been used by their educators while they were physically attending on campus.

1.1 The significance of the study

Blended learning is a new method of teaching where a combination of technology-based learning and distance learning is integrated. Dubin (1976) confirmed that it is an essential process to model a theory and a specific framework on any new learning model. The models and studies will create a common language and facilitate the researchers' attempts to discover and explore certain activities in the academic community. Grahams (2013) confirmed that there is limited evidence to explore the effectiveness of blended learning use and theory. However, some research studies have explored the theories of transactional distance learning (Moore 2013).

Moore (2013) confirmed in his transactional distance theory the interconnection that learners and their teachers is on a physical distance from each other. Moore's theory defined transactional learning as required communicative strategies and a structured learning setting. In order to control the extent of the transactional distance, Moore's theory was based on three factors: teachers' and instructors' dialogue, the planned or structured situation, and learners' autonomy. In addition, the theory has illustrated that when the dialogue between the learners and their teacher is developed, the pace of the transactional distance reduced. Learner's autonomy or independence is another key element in Moore's theory; he defined the learners' role to be more active. The learning goals and experiences are to be decided by the learners. Thus, the learners are more decisive in the online learning setting. The more transactional distance, the less learners' autonomy in the learning situation.

With the emergence of Covid 19, many educational attempts have been developed to overcome the crisis. Online and blended learning has become significant components of the educational learning process. Learners nowadays are set on different learning modes where the learning setting required learners to be physically distanced from their teacher. In this regard, there is a need to explore the impact of blended learning and online learning on the learners' educational progress and emotional well-being. Since there is a lack of studies on the effectiveness of blended learning in the UAE context, this study will provide a focused review of the technology-mediated model's impact on middle and high school learners.

Additionally, the study will focus on the learners' attitude towards blended learning and whether it positively or negatively influences them in terms of their emotional well-being. Thus, learners will be observed in a face-to-face setting and online classes. The learners will be interviewed in order to record their responses on how effectively they gain knowledge through blended learning. The questionnaire is a quantitative method where learners and their teachers will reflect on the success of the implementation of the blended learning strategies, content, and technological facilities. Many researchers have given hope and promise to the significance of blended learning as a new learning teaching approach. Greer, Rowland, and Smith (2014) described blended learning as a learning model where learners are required to set in an instructional online setting to learn and gain knowledge through technology-mediated platforms and activities blended with the traditional face-to-face setting.

Although many instructors use the technology as a direct teaching instruction in their classroom, there is no clear evidence on the quality and effectiveness of the learners' achievement in the ELA online classroom comparing to the onsite classes. Means, Toyama, Murphy, & Baki (2013) sees learners who adopted the blended learning have shown more effective technology usage. The study also has concluded that learners have built more autonomy and independence on their learning and learn independently on their own pace.

In conclusion, the blended learning is a new implemented teaching approach in the UAE context. UAE has promised to be a leading country in the innovative educational learning. According to the country's 2021 vision, the educational sector has built a strategic plan that based its core

around innovation, technology, and scientific method. Many adoptive strategies and planning have taken place within the educational sector to serve the 2021 vision. In this regard, blended learning has been one of the focused components where technology is combined with traditional learning. However, the limitation of the studies and the shortage of reviews on that topic should be highly considered.

1.2 Overall aim of the study

Blended learning has become a basic requirement and a new trend of learning. In this context, educators and experts tend to implement new teaching strategies and innovative techniques to meet the learners' requirements and needs and improve educational teaching programs using technology-mediated learning or blended learning.

This paper seeks to investigate the effectiveness of blended learning in a private school in the UAE. The sole objective of the study was achieved by observing the learners in middle and high school stages and recording their attitudes and interactions in both modes of learning: face-to-face vs blended learning. In addition, the study has focused on the learners' perspective and attitude toward learning English as a second language using the blended learning mode. The study has also examined the leadership perspectives toward progress and learners' academic growth using the blended learning environment. The leadership point of view helped identify the challenges and obstacles that the school and teachers have encountered to effectively implement the blended learning strategies.

The study has been conducted in a school where technology is embedded in teaching. Students use iPads to learn and perform their projects and assignments. The school has embedded technology-mediated activities, conferences, and video casting using "Schoology". The whole school learners are using their iPad to learn and to utilize the school educational resources. The learners are to attend their classes via video conferences based on a scheduled timetable. Teachers utilize different technical platforms such as Quizzes, Class Kick, Padlet, Nearpod to deliver the course content. There is an evident success on the students' attendance in both stages:

elementary and middle and high school. The attendance rate on the online session has a success rate of 98% on a daily basis.

1.3 Theoretical framework

1.3.1 Gardner's theory of Multiple Intelligence

This paper will rely its basis on Gardner's Multiple intelligence theory. Gardner's theory claimed that human intelligence is derived from different components that are not separated into entity. (Gardner 1983) divided the Multiple intelligence into eight categories of intelligence as follows:

1. Logical-mathematical
2. linguistics
3. spatial
4. musical
5. Kinesthetic
6. Personal
7. intrapersonal

(Gardner 1983) argued that learning is affected by different intelligences. He explained that cultural and genetic components play a significant role in varying the strengths and weaknesses of the intelligence. In addition, Gardner argued that culture and traditions have an impactful consequence on the development of the intelligence. Thus, the theory assumed that the manners and values of societies may lead to a development in some skills due to peoples' different personal intelligences and style.

Studies have demonstrated a solid relationship between the multiple intelligence theory and teaching in the classroom. Gardner's argued that the eight factors of intelligences are correlated in order to produce an active learner in a society. Therefore, teachers and educators should incorporate an extensive variety of competencies when teaching.

Another implication of Gardner's theory in terms of content, he emphasized that the learning content and presentation should integrate different types of intelligence. For example, if the lesson is about the American civil war, the teacher might display media such as a movie about the civil war. The content of the lesson might ask the learners to read a story about people's lives during that time. The quality of the presented material enables the teachers to enhance a more positive attitude towards blended learning and online learning. In addition, Triggering and integrating different types of intelligence will improve a deeper understanding of learners' skills.

There is no doubt that learners have different qualities of cognitive skills that varied in strengths and weaknesses. The difference in strengths and intelligence indicates how learners understand and learn. It will also guide educators to accommodate different strategies and pedagogies to engage learners in blended and online learning. Researchers have discovered a significant relationship of cognitive science by studying the function of the brain and the different learning styles. Students, who are learning in different learning styles classroom, should be classified and assessed based on different features, such as learners' motivation, learners' age, and the instructional strategies used in the classroom. In conclusion, different research on cognitive science suggested that learning is a productive and active process where multiple intelligence is blended with cognitive abilities in order to allow the mind to decide how to learn and what to learn.

1.3.2 Blended learning and the constructivist theory

The constructivist theory defined learning as a mental and cognitive process where learners are involved in a communicative activity to build their own knowledge (Pritchard 2008). Anderson & Dron (2010), considered social interaction as a productive method that fosters the learners' ability to learn and gain knowledge. The constructivists confirmed that learning happened when learners communicate with the surrounding environment. Technology and digital

communication have become significant factor in developing the social-communicative learning environment. Thus, early theories about distance learning have considered online learning as a technological advancement. Moore & Kearsley (2011) explained that blended learning is a combination of technology-based education and social- driven situational activities merged together in a structured design in order to engage the learners' interests and build their learning experience.

Additionally, constructivism sees blended learning as an interaction of synchronous and asynchronous learning activities. In this regard, blended learning can be defined as a series of social interactions where learners connect and interact with the learning situation to their reality. The blended constructivist learning environment has defined specific factors that help learners develop an effective learning experience. Constructivism anticipated that learners who are socially involved in the learning environment are expected to develop personal skills such as self-efficacy, self-motivated, and autonomy. They believe that social interaction is a key element that advances learners' academic achievement. Constructivists also argued that in order to foster the learners' learning experience, there should be social interactions between learners and their instructors. In addition, they defined the instructor's role to be a facilitator and guide who facilitates the learning content in a student-centered environment. Learners' responses to different social structural influences develop their learning self-efficacy.

1.3.3 What is the relation between blended learning and Self- Determination theory?

The Self-dependent theory (SDT) is defined as a theory that digs deep into motivation and has been implemented in many domains. One of those domains is education and learning. The SDT theory suggests that human beings are born with three major psychological needs that determined human growth and self-development. Those three elements are autonomy, competence, and relatedness. In regards to the blended learning approach, SDT is playing a critical role in building the learners' self-autonomy. Reeve (2016) explained the importance of autonomy as an internal feeling that helps learners to understand, recognize, and strengthen their personal motivation.

Many researchers have investigated the impact of SDT on learners' academic achievements. Some researchers such as Kaplan (2014), Kaplan and Mad jar's (2017) have studied the influence of SDT on learners' self-improvement and autonomous motivation. The theoretical frame of the studies has reported the positive reaction and attitude of the participants who were selected from a diversity of cultural settings. The students also revealed the positive effect and improvement of autonomous motivation on the learners' self-exploration and engagement in the learning classroom. Thus, the SDT theory and blended learning are closely related. Blended learning based on the SDT studies helps improve learners' self- autonyms as previously mentioned.

Similarly, a study has been conducted at Indonesian University comparing the academic achievements and performance of learners who have been learning through technology-based flipped classrooms and other learners who were only taught using the traditional model. The study by Zainuddin and Perera (2019) concluded that learners who have been taught using the flipped classroom have shown a higher level of self-determination, motivation, and relatedness compared to those who used the traditional learning model.

CHAPTER 2: LITERATURE REVIEW

2.1 What is blended learning?

In the age of technology, education has been rapidly developed by new teaching methodologies. The 21st century has shown great technological advancement while information is progressively expanding. Technology advancement has been observed in many fields such as science, artificial intelligence, and education. The development of technology has established many responsibilities and brought more opportunities to the educational system. The world is becoming more technology-based where information becomes more valuable. Thus, the urgent need for easy and flexible access to information has resulted in more technology development that gives dissemination of this information.

Blended learning is considered a combination of different teaching models. The teaching models are interconnected in a meaningful context. Garrison (2004) defined blended learning as a mixture of classroom activities, online resources, and educational instructions that collaborate to enhance the learners' abilities and their learning outcomes. Holden & Westfall (2006) confirmed that blended learning required the integration of instructional media into the classroom. The researchers argued that blended learning should follow a variety of technology-mediated resources and media to support the learners and meet their educational needs.

Moreover, Laster (2005) defined blended learning as a pedagogical combination of face-to-face classroom activities and online instructional tasks. Peters (2009) argued that in order to achieve the ultimate purpose of blended learning, there should be organized and well-planned integrations of multiple delivery models of learning. Bonk and Graham (2006) defined blended learning as a systematic approach that combined face-to-face instructions with digital and technological instructions. They argued that face-to-face or the traditional learning model involves the physical attendance of teachers and learners based on the synchronous learning environment. On contrary, blended learning focuses on a computer-mediated model of learning in an asynchronous environment.

Additionally, blended learning and online learning are not considered new models of learning. The emergence of blended learning started in 2003 which evolved the knowledge industry and content delivery Rooney (2003). In a study that was conducted by Dean, Stahl, Sylwester and Peat (2001), the researchers investigated the impact and effect of blended learning on a particular physician's course. The researchers have concluded that the teaching courses had been completed in half of the time of the actual duration that would take in the traditional learning program. Many researchers have investigated the effectiveness of blended learning and online learning. one of the research studies was conducted by Means, Toyama, Murphy, and Baki (2013) who argued that blended learning and online learning have a positive impact and a significant development on the learners' performance in comparison to the traditional learning or face- to - face model.

The above discussion revealed different perspectives and definitions in terms of blended learning instructional strategies and pedagogical practices. Further definitions of blended learning elicited from several researchers' perspectives are explained as follows:

(Laster 2005) argued that blended learning is a pedagogical combination of face-to-face learning activities and classroom instructions along with profound media and online instructional tasks. Laster's definition conveyed an educational point of view of online and blended learning. On the opposite side, Holden & Westfall (2006) argued that blended learning required an instructional implementation of multiple media and technology integrated with the traditional teaching strategies regardless of the synchronous or asynchronous learning models.

2.2 Blended learning studies on K-12 and higher education.

Online learning has gained a rebuttable familiarity among higher education instructors and learners. Taplin, Kerr & Brown (2013) argued that learners have shown a great interest in blended learning in higher education due to the flexibility and adjustable instructions that allow higher education professionals to address a wide range of learners. In addition, blended learning is now acknowledged as a method to improve pedagogical instruction. Another reason that grated blended learning is its renowned popularity laid behind the low-cost fees. Learners in higher education are seeking low-cost educational systems, thus, blended learning might assist those who can't afford it because of financial conditions.

There are some researches that target k-12 learners on personalized blended learning. The majority of blended learning studies were conducted in peer-reviewed research. The studies on the blended learning topic have been conducted in online universities, pre-secondary stage, and technical education programs. Brodersen & Melluzzo (2017) have conducted a study that explores the effectiveness of blended learning on learners' outcomes k-12 based on differentiated learning instructions. Tomlinson (2001) argued that differentiated learning instructions are an effective tool to engage learners. Tomlinson (2001) explained that differentiated activities should be tailored to the course content. consequently, the differentiated instructions will guide the learners to acquire academic skills and trigger their interest for more active learning.

2.3 The relationship between blended learning and learning style

Although blended learning implies a combination of face-to-face and online instructions, this type of integration should be planned and adopted in a logical manner. Researchers have revealed that the definition of blended learning serves a limited guideline. The fact of a limited definition of blended learning has led educationalists and experts to study the impact of learners' learning styles on online and blended learning.

It was noticed that the difference in learning style plays a significant role in the learning process. Students' learning is impacted by many stimuli, one of them is technology and multimedia. The technology-mediated learning has proved to be an effective learning method for better educational content delivery. To this end, using technology and video casting will help visual learners and enhance their engagement when having a blended model of learning.

A learner's type of personality can determine the facilities and teaching style and techniques that the teacher implements in the classroom. Lin, Cranton & Bridgllall (2008) confirmed that the personality types based on Carl Tung's theory had a critical impact on the learners' attitude towards blended and online learning. For example, an extrovert learner will develop certain skills compared to an introverted learner. Extrovert learners will engage in more active learning skills while extroverts would be less active and passive in some cases. Lin, Cranton & Bridgllall (2008) suggested teachers and instructors should improve more instructional strategies and

practices that allow learners with different personal characteristics to be engaged in the blended learning environment.

2.4 Blended learning in accordance with academic achievements.

Blended learning has gained more popularity among researchers. In terms of literature review, there are limited studies that investigate the effectiveness of online and blended learning on academic achievement in the K 12 stages. However, many researchers have investigated the learners' achievements in terms of their interests and motivation. Briley (2012) investigated the impact of self-interest and self-motivation on learners' performance and achievement. The study has concluded that learners with higher interest have shown significant academic progress than their mates who are low self-motivated in the learning environment.

Furthermore, using technology is not a new tool in teaching. Many teachers have utilized the technology in their classes and embedded the technology as a direct instructional tool. However, blended learning integrated the technology in a purposeful meaning. Learners use technology to independently learn and build their own knowledge at their own pace. Means, Toyama, Murphy and Baki (2013) confirmed the positive impact of the purposeful usage of technology on the learners' academic progress.

On the other hand, A report was published in 2015 by Christensen Institute on how blended learning has impacted the learners' outcomes and test scores. The case study has investigated 12 schools, the report has concluded that schools that have implemented the technology-mediated learning model under specific measurements and conditions have shown growth in the learners' products and outcomes. Another report was launched by the Rochester Institute of technology on the effectiveness of the blended learning environment. The report has concluded that approximately 95% of the online learners had successfully completed the course work and achieved higher scores than those face-to-face learners. In a large-scale study of the University of Central Florida, the researchers have indicated that learners in the blended learning setting have achieved a higher success rate compared to those who have attended the course physically on campus (Dziuban 2006).

In a recent study conducted by Kazu and Demirkol (2014) on 12th-grade students to investigate the effectiveness of blended learning on the learners' performance. The study has underpinned its basis on the student-centered strategy in relation to the web-based learning model. The study explored the learners in the biology course where learners were divided into two groups: experiment group and control group. The experiment group was taught in a blended environment while the control group was traditionally taught on the school campus. The study has concluded that the pre-test conducted at the beginning of the study has not shown any progress in the learners' academic achievement in terms of the blended model and face-to-face learning environment.

Educationalists have explored many aspects that might affect the quality of a blended learning environment, yet, the challenge was to determine the significant characteristics of blended learning settings that directly impact its effectiveness. Clark (1983) confirmed that studies on the impact of media tools associated with blended learning have not found any significant difference in the quality of teaching. The studies have rather focused on the teaching pedagogies that distinguish multiple learning differences and enable a meta-analysis to determine the effective components of the blended learning model. A dissertation conducted by Paul (2001) compared the difference between online training in accordance with blended and face-to-face learning settings. The study analysis has indicated a slight difference in favor of the blended learning setting over the online training courses. Other studies were conducted to investigate the blended learning outcomes in accordance with the online class instructions vs the traditional class instructions (Sitzmann 2006).

The exploration of the blended learning effective factors has surpassed academic achievements. Larson and Sung (2009) have argued in their study that learners who are entirely taught in a blended learning setting have shown more self-interest and self-motivation on the subject matter than those who study in a face-to-face or purely online environment. Finally, Sitzmann (2006) and Means (2009) indicated in their studies that the time assigned to learners might have an effect on the learning outcomes. Other non-experimental studies have taken place to investigate the success rate of online, traditional, and blended learning models. The University of Central Florida was a leading institution in blended learning adaptation and implementation. The

institution report has concluded that the success rate in blended learning was exceeding both traditional and online learning models.

Additionally, in 2009 a meta-analysis was conducted by the US Education Department exploring the difference between online teaching and traditional face-to-face teaching. The report has investigated 50 studies from different states. The report concluded that the learning outcomes of online and blended learning with clear instructions had a significant influence + 0.20% compared to the traditional learning outcomes. Some other analyses suggested the influence of the educator or the instructor on the effectiveness of the blended learning outcomes; however, Bernard's studies have contradicted that conclusion and explained that human interaction is not a significant factor in the success of acquiring knowledge. Shea and Bidjerano (2011) conducted a study that explored the BL effectiveness using teaching strategies and pedagogies; such as instructions, design, and course facilities, and social strategies; such as communication between the instructor and learning. The study findings concluded that BL learners have shown a higher rate of success in the cognitive components comparing them to the online and traditional learning environment.

In conclusion, by observing all the above studies, it could be inferred that the unlimited access to information and the unrestricted boundaries in terms of information access and ideas in virtual reality has resulted in remarkable progress in the learners' academic progress and increased their overall academic grades. Hopper (2003) confirmed that the success of the teaching course is determined by the given feedback, the purposeful usage of technology, and the cyber web in the learning environment. Not only blended learning has provided learners with new opportunities to gain information, but it has also expanded the possibilities of more interactions between the learners and their teachers.

2.5 The impact of blended learning on learners' satisfaction and learning skills.

Graham & Dziuban (2008) in his study argued that higher education students have encountered challenges due to the emergence of online learning in combination with traditional academic learning. The researchers have confirmed that blended learning has resulted in a high level of achievement and satisfaction for both learners and instructors. They called blended learning

“The best of both worlds” due to the fact that faculty members found blended learning an effective step to start a face-to-face learning program and easily expand it while using the online components.

Graham & Dziuban (2008) emphasized that in order to expand a high-quality experience in blended learning, there is a need for a well-planned approach that is based on a clear instructional theory, qualified instructors, developed courses, and a continuous formative and summative assessment. The study highlighted the significance of blended learners’ outcomes compared to face-to-face learners. It was also noticed that learners’ capabilities and flexibilities have increased when learning in a blended learning model. In addition, the consistency in using the technology has resulted in more digital literacy for both learners and their instructors which will help both parties throughout their entire courses.

On the other hand, blended learning has not only benefited both learners and instructors, but it has also provided the academic institution with vivid details on how to effectively use the classrooms and found more innovative ideas to reduce the on-campus traffic. Moreover, the study has suggested that blended learning can be effectively used to improve the quality of learning outcomes and decrease academic costs. One of the challenges that faced the institution was the critical need for more multimedia-equipped tools to cover all the blended learning classes scheduled at the same time. Graham & Dziuban (2008) have noticed that the blended learning programs were creatively conducted and planned. The blended course has sorted out some difficulties with shared course classrooms that used to be on campus.

2.6 Counterargument on blended learning benefits

Conversely, Graff (2003), not all students have reflected a positive reaction toward the blended learning model. He argued that some studies and investigators have found that learners with high instinctive skills were struggling to adapt to the blended learning community. The researcher indicated that some elements were not highlighted such as the class size and learners’ behavioral discipline which might cause biased results when considering the blended learning benefits and students’ satisfaction.

To defend the previous point, a study conducted by Rovai and Jordan (2004) has confirmed the high efficiency, positive reaction, and high-rate sense of community of the fully online programs comparing them to face-to-face and on-campus learning. Other researchers such as Vingare (2002) investigated the students' satisfaction with blended learning. The study findings have indicated the learners' high satisfactory level in the blended learning model. Not to mention, the benefits of blended learning on learners' understanding of real-life world situations. In Khur (2013) study, the definition of blended learning has explained the importance of blended learning. Holden & Westfall (2006) confirmed that blended learning is considered a means of transferring knowledge using multiple media sources. This definition underpins the importance of blended learning as a mixture of traditional learning face-to-face and distance learning using media that supports the instructional pedagogies used in the learning and teaching classroom.

2.7 What are the factors that play an important role in blended learning implementation?

The blended learning model has proved impactful results when applying the following factors:

1. Communication and interaction

Osguthorpe and Graham (2003) confirmed that face-to-face learning enabled verbal and non-verbal interactions between learners. They explained that face-to-face learning easily connects the learners and brings better communication among them. In this regard, Moore, Murphy, and Simonds (2007) argued that blended learning should create a safe and motivating environment where all students are engaged and productive.

2. Flexibility

Horn and Staker (2017), blended learning is a teaching approach where students determine the when, how, and where they learn; thus, learners are learning in their own pace.

3. Collaboration and discussion

Lev Vygotsky, a Russian Psychologist and considered the father of social constructivism school, he pointed out that learning occurs through social interaction and dialogue with others. In this

process, he believed that people build up knowledge through social interaction, and that happens through using language and social-communicative tools (Vygotsky 1978). The meaningful results of social communication are believed to be used in different real-life experiences Marsh & Ketterer (2005). Therefore, collaboration is a major element of blended learning where students collaborate and work in pairs or groups. However, there should be scaffolding and personalizing tasks to ensure that students can work independently under the teacher's guidance. (Vygotsky 1978) argued that collaborative assignments enhance students' problem-solving and decision-making skills.

According to (Leathy 2005), teachers should include effective discussion topics and questioning that trigger students' critical thinking skills. Instructors also need to enhance reflection and self-assessment in the learning environment which will develop students' evaluation skills.

4. Constructive Feedback

Constructive feedback is a significant element of the learning process. According to (Ladyshevsky 2013), teachers must provide students with constructive feedback that assess students' learning experience and enhance their performance. It was noted that using technology as a method to assess and give constructive feedback in some apps such as Nearpod has positively impacted the learners. The traditional face-to-face learning either delay or does not support immediate feedback while blended learning has enabled immediate feedback that enriches the learners' experience.

5. Assessment

Assessment is considered one essential element of teaching and learning. Blended learning has been proven to have untimed options and educational strategies evolvement because it naturally leads to a developed form of traditional teaching (Throne 2003). In addition, blended learning has given more opportunities in teaching English as a second language. The language 4 basic skills are taught in many different methods; thus, teachers and instructors can use a variety of teaching methodologies and implement them to teach reading, writing, listening, and speaking skills. (Marsh 2012) argued that teaching English skills might occur in many different ways.

Gimeno-Sanz (2010), argued that blended learning brings out an easier and faster method of assessment. Students usually like to check their answers; so blended learning provides a better opportunity for teachers to check the learners' progress and highlight their academic achievement. This process has become easier and available through assessment links and access to computerized reports.

According to a study conducted by the University of Manchester 2010 on the effectiveness of using blended learning through language assessment, it was found that the computerized diagnostic assessment results have easily enabled the teacher to highlight the non-native speakers' language weaknesses. The study has recommended the importance of embedding computerized assessment into the curriculum. The process of marking the assessment using technology proved to be easier and faster than the traditional and manual assessment that involved human resources. The study has also pointed out the accuracy and efficiency of the result analysis process that technical support. Finally, the study has found that blended learning has supported teachers to improve the level of formative assessments; particularly the larger group of students. The study concluded that the combination of traditional assessment and computer assessment has increased the opportunities of an appropriate, effective and consistent assessment.

CHAPTER 3: METHODOLOGY

3.1 Introduction

Irny and Rose (2005) methodology represents the theoretical structure and procedures of the study. It is meant to systematically find a solution to a problem. The methodology is the way that a researcher logically organizes his steps to respond to his research questions (Kothari 2004). There is a distinction between research methodology and research method. Kothari (2004), research methodology provides the theoretical structure that the research is based on; whereas the research method indicates all the researcher's techniques that have been used to perform his study operations. It is very significant to a researcher to define the exact tools and techniques that would help answer his research questions. Not only a researcher needs to know the tools, but he also needs to know which of these tools and techniques are appropriate and which are not relevant to his research.

Alok and Mishra (2017) confirmed that the research methodology includes all the strategies used by the researcher to answer his research questions. The methodology is a scientific examination that enables the researcher to solve a problem. To conclude, the methodology has a wider scope than the research method. The methodology is deeper and includes several dimensions that varies based on the study problem.

This section of the research will explain the design and tools that have been used. It will also describe the research methods and techniques that entail the research questions. In this section, there will be a significant description of the data collection, sampling, and research population. In addition, it will demonstrate the challenges and obstacles that have been encountered.

This paper used the descriptive research type. Kothari (2004), descriptive research includes surveys and searching the facts by using different methods. Kothari confirmed that the main purpose of the descriptive research is to seek a real-life phenomenon as it appears in the present time. In addition, the paper used the mixed -method approach. Thus, this study is a mixture of

the qualitative and quantitative types of research that collect and analyze data to answer the research questions.

3.2 Research objectives

This paper is mainly seeking the effectiveness of the blended learning and its implementation during the pandemic Covid 19. It also seeks to identify the students' and teachers' perception and attitude towards the blended learning instructions.

The objective of the research was basically founded based on a triangulation method of three main scopes of the educational triangle. The triangle includes the teacher, the student, and the administration and school management. Figure 1 below explains the triangle of the research method.

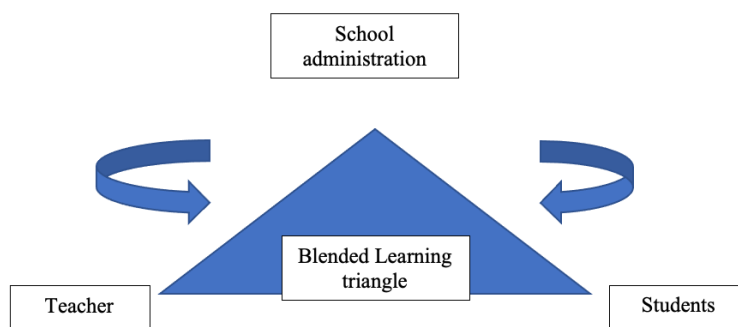


Figure 1: Triangle of the research method

In order to answer the research questions, the study has utilized a variety of tools and instruments. The instruments used in this research based on the research questions and how to respond to them. The research method tools were carefully selected to meet the standards of the scientific research where the study is logically structured. The main standing point of this research is to examine the effectiveness of the blended learning on the learners' academic and emotional well-being. Thus, the followings are the main research objectives:

1. Examine the learners' and teachers' perception towards the blended learning.
2. Evaluate the impact of the blended learning instructions on students' academic progress.
3. Identify the challenges and obstacles when implementing the blended learning strategies and instructions.

3.3 Research questions

This study has adopted the descriptive research method. Aggarwal (2008), the main purpose of descriptive research is to gather information about a specific problem or phenomenon and make logical interpretations considering the current situation. Best and Kahn (2007) assert that the descriptive research required specific types of investigation where gathering information and analysis of the empirical data enrich the knowledge. Thus, this descriptive research is mainly gathering information, making interpretations, analyzing the data, and making comparisons to solve the problem and identify the significant relationship in a descriptive form.

The following are the main research questions:

1. Question 1:

What are the main differences between the teachers' and learners' perceptions in terms of blended learning and its implementation?

2. Question 2

Does blended and online learning positively or negatively impact the learners' academic and emotional well-being?

Based on the literature review, the data gathered in chapter 2 are to examine the effectiveness of blended learning and its implementation. It is convincing evidence against the research topic; of whether blended learning is the proper educational approach that schools should adopt during pandemics. To this end, it is convincible to suggest that blended learning has made a significant difference in learners' academic performance. However, there is a scarcity of evidence on the research topic in the UAE context. Thus, this study will attempt to examine the impact of blended learning on learners' academic performance and emotional well-being in a private

school in UAE. The significance of this paper relied on the fact that it considers the female learners' perception of blended learning in the middle and high school stages.

3.4 Sampling and Participants

Singh and Masuku (2014), asserted that sampling is a subdivision of the total population to assess the basic features and characteristics of the whole community. The samples should be concise which would enable faster data collection with a low budget. Based on Bryman (2004) and Cohen et al. (2000), confirmed that the research sample should include a population of real life.

Kim (2018), argued that random sampling is more effective in the research than the week sample participants. He recommended that a larger sample of the total population would result in significant data.

This paper has obtained a purposeful sample when gathering the data. Bogdan and Biklen (1980), asserted that the researcher has the complete authority to select the sample participants based on the research needs. In this term, the selected sample was chosen based on academic level and age. The participants in the purposeful sample are those who have experienced the situation and acquired a solid background in a similar environment. Thus, this paper has chosen a particular sample participant who has experienced blended learning during Covid 19 and undergone blended and online learning approximately for 2 consecutive years.

This paper has also obtained the case study approach method where an in-depth investigation of certain phenomena occurred. According to Jupp (2006), the case might be a social phenomenon, an event, a group, or an institution. The case is either descriptive or explanatory based on the research questions. Cohen (2000) and Punch (1998) confirmed that the case study examine a specific phenomenon and make interpretations in details and in the same context and setting. To this end, the study has developed the topic through a mixed research method of qualitative and quantitative approach to investigate the effectiveness of the blended learning on middle and high school students in a private school in UAE.

3.5 Sampling procedures

Sampling can be defined as a particular process where participants of a large population are selected in order to collect data for a study. The sampling stages can be summarized based on the following Figure 2.

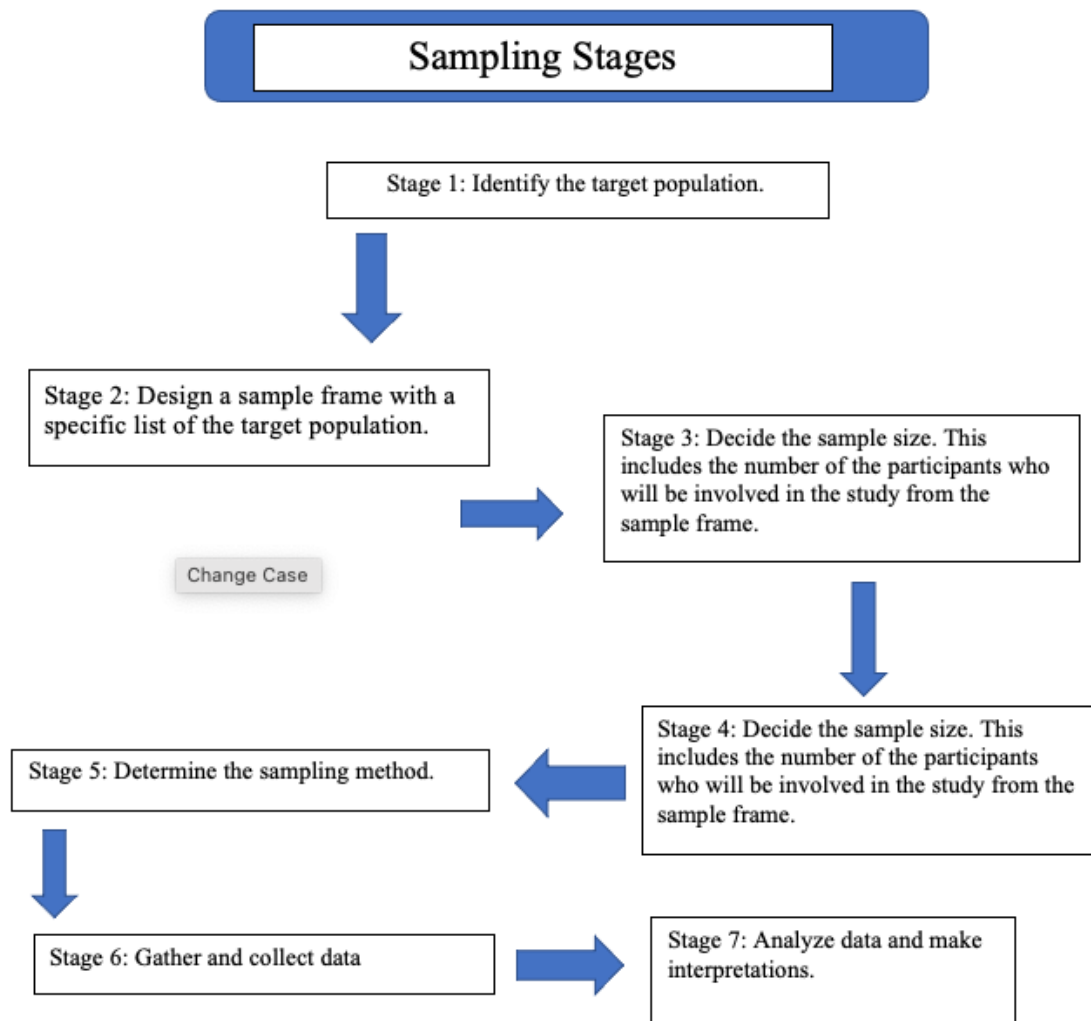


Figure 2: Summary of sampling stages

3.5.1 A sampling analysis

The above diagram illustrates the sampling process that the study has adopted to collect the data. To start, the target population of this study was the school teachers and students, in addition to school representatives (Head of the department and Head of sections). The second stage of the

process indicted the sample frame where the researcher designed a specific frame including the target school teachers and students who would be involved in the study. Afterward, the researcher refined the target volunteers based on the participants' approval and students' age and level. The total number of the participants of students who participated in the survey was 52, while 30 teachers participated in the teachers' survey.

The teachers who have been set for an interview were selected based on their teaching qualifications, experience and knowledge. The sample participant of teachers has also taught in schools during the pandemic Covid 19. They are also familiar with the blended learning approach and using technology in a blended learning setting. The teachers have been interviewed in a focused group face-to-face meeting. Teachers were selected from different core subjects including teaching English as a second language (ESL), Math, and Science. The total number of interviews was 4 based on the explained procedure.

Proctor (2003) defined the sample as the simplest unit of the population used in conducting research. Brown (2006) argued that the proper choice of sampling contributes to the reliability and validity of the research. It incorporates many benefits such as 1) providing a better opportunity to collect data in a more sufficient method, 2) generating more accurate findings, 3) administering more primary source data collection, and 4) significantly providing a lower cost to the researcher. The sample participants have been chosen based on the Quota Sampling techniques.

Sampling can be classified into two groups: probability sampling and non-probability sampling. Probability sampling is also defined as "random sampling". It is a method of collecting data where every individual in the total population has an opportunity to participate in the research study. The non-probability sampling is more systematic as the members of the total population are carefully selected. As a result, it is impossible to estimate the probability of a simple unit participating in the study.

The current study has used the non-probabilistic sample to collect the data. This method of collecting data is not generalizable or random sample and does not represent a simple unit of the population. The sample has also been selected according to the "Quota sampling"

techniques. Quota sampling is a nonprobability sampling technique in which the researcher selects the participants based on specific traits or qualities. In Quota sampling, the researcher initially divides the total population into subgroups called “Strata”. Then, the researcher selects the quota sample that matches the same quota criteria. Based on the sampling techniques, the following figure 3 illustrates the types of sampling.

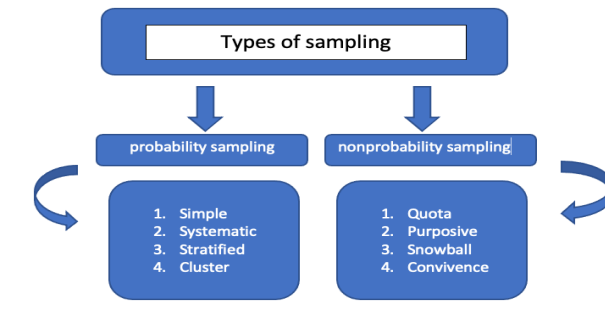


Figure 3: Types of sampling

The study sample participants have been divided into subgroups based on their age and academic level. Then, the researcher made the quota based on the age group and grade level. It was important to select participants who share the same quota in order to collect reliable information and data for the study. The participants who will take apart in the study should be grouped in an age level between 11 to 18 years old. All participants should be classified under the middle or high school level.

3.6 Data Collection

3.6.1 Triangulation method

As it was mentioned, this study followed the mixed research method. The study included both qualitative and quantitative research techniques to gather information. According to (Denzin and Lincoln 1994) Mixed research method is considered one of the most commonly used methods in recent times. The researcher followed the case study methodology to interpret the data. Stake (1995) asserted that the case study magnifies a specific case and examines it in depth, analyzes the data, and makes interpretations in order to provide an assumption on a specific

issue or a topic. Stake has classified the case study into 3 categories; intrinsic, instrumental, and collective. Stake defined the intrinsic case study as a study that investigates a particular phenomenon. It is the role of the researcher to articulate all the characteristics of that phenomenon based on the collected data.

Data collection was grounded based on three main elements: teachers, students, and school administration and management. It was formed in a meaningful triangulation. Patton (1999) identified triangulation as a combination of different data resources used in qualitative research to maintain validity and establish a holistic and in-depth understanding of a phenomenon. Patton divided the triangulation into four types: a) method triangulation, b) investigator triangulation, c) theory triangulation d) data sources triangulation. Figure 4.

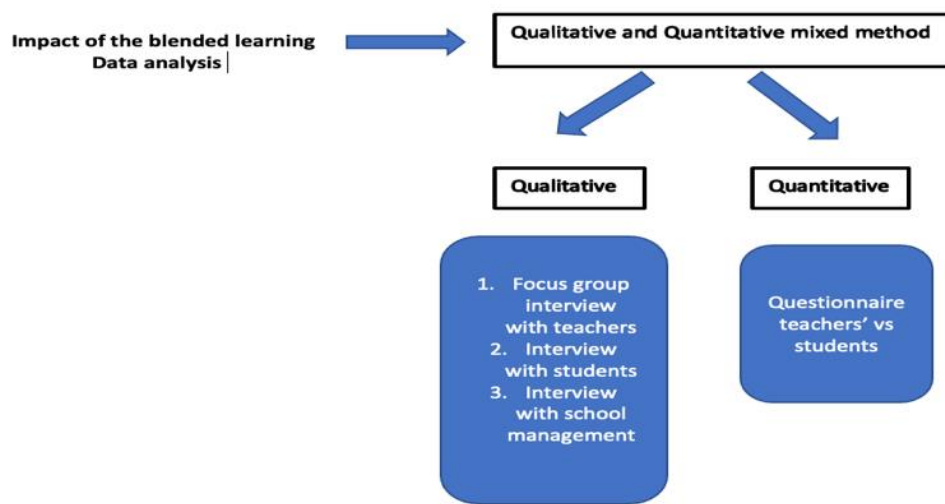


Figure 4: Study methodology

This study integrated the data source triangulation method to collect data. Data resource triangulation is a method of collecting data through individual or group interviews to understand a phenomenon. Russell, Gregory, Ploeg, DiCenso, & Guyatt (2005) described interviews as one of the most significant sources of data that explore and gain an in-depth understanding of the study participants. Throughout The data source triangulation, information and human experiences can easily be obtained. It also supports the researcher to explore the participants' perception toward a specific topic or a social phenomenon.

This study has underpinned the prior on the triangulation data source techniques through interviews. The participants of the study were requested to respond to certain questions. The fundamental goal of the interview was to explore the teachers' and students' perspectives towards the effectiveness of the blended learning. The teachers' interviews provided an insightful vision about blended learning and how it impacts students' academic achievements and emotional well-being. On the other side, the students' interviews revealed the challenges and difficulties they encountered during the blended learning instruction; particularly during the pandemic Covid 19.

3.6.2 The Insider Research technique

The study has also adopted Insider Research techniques. That technique has proved many advantages and disadvantages. The researcher has believed that being a part of the process will provide insights into the study. The study "The impact of blended learning on students' achievement and well-being" is a case study that seeks to investigate students', teachers and school management's perceptions towards the blended learning approach and instructions. As a result, being an "insider researcher" would administer a deep level of understanding of that approach. According to Fleming (2018), being an "insider" in research would provide the researcher will in-depth and detailed information and interpretations of the subject matter or the phenomenon. However, Fleming asserted that there are some challenges to be considered when a researcher is a part of the study.

The key challenges include the probability of using the research methods to forcefully persuade the participants of any belief. Another critical point of being an insider, the researcher might implicitly or explicitly tend to influence the participants to achieve a specific outcome. Although the researcher would be more committed and self-passionate as an insider, yet there are more potential risks while applying the research regulations and ethics.

To defend the former point, Bonner and Tolhurst (2002) argued that being an insider researcher would easily contact the participants and better understand the subject matter in the same context. The insider would not interrupt the interactions and relationships among participants of the same institution or the study setting. In addition, the insider would smoothly gain true and

reasonable data from the participants because he understands the nature and the culture of them. Finally, the grounded understanding and familiarity of the insider to the cultural and societal structure of the institution would provide a quick and validated data for the study.

3.7 Data collection instruments

A. Interviews

Interviews are considered one of the most well-known and most utilized methods of collecting data using the qualitative research method. Ryan et al (2009), interviews provide a collection of the database for the researcher using interactions and communication in a form of a discussion between the researcher and the participants. It is an unqualifiable research tool that assists the researcher in gaining more knowledge about the issue. Edwards & Holland (2013) confirmed that interviews can be classified into formal and informal. The type of interview is determined based on the nature of the study. The formal interview is more structured compared to the informal one. A formal interview includes a lead analyst who interviews the participants and analyzes the data and makes specific and logical interpretations. Unlike the informal interview in which the collected data is mainly utilized for anecdotal purposes.

In addition to the above classification, Edwards & Holland (2013) added another subcategory to the interview based on the researcher's motive and power. Stuckey (2013) explained that the researcher has more power in the structured interview; in other words, the researcher does not provide more flexibility or spontaneous responses during the interview. While the structured interview is very formal and rigid, the semi-structured interview has a less rigid formality yet it includes guidelines and a set of questions prepared by the researcher. The semi-interview provides more pace and less rigid adherence to the interviewee. DiCicco-Bloom & Crabtree (2006) confirmed that a semi-structure interview is considered one of the most ideal sources of data for qualitative researchers. The third type of interview is known as an unstructured interview. This type of interview is more narrative and non-directive to the researcher. In this

type of interview, the researcher does not prepare a set of questions and only relies on his background in the subject and his own interests.

In this study, the researcher adopted the focus group in a semi-structured interview to conduct the study. The teachers were informed via the school email; the questions were pre-prepared before the interview. In addition, teachers were requested to watch an educational video about blended learning instructions and implementations. The types of questions were formal but less rigid. Teachers were aware of the questions and they contributed to the inquiries. The contribution of the focus group provided the researcher with a variety of responses from the teachers. The face-to-face interview according to Opdenakker (2006) described the data collected using the interview is very high and vividly related to the issue. According to (Doyle, 2005), group interviews is perfect method of collecting and gathering information.

In this study paper, the researcher used the semi-structured interview method in a focus group of different subject teachers; that type of interview administered a better opportunity for the researcher to collect enrichment data for the study. DiCicco-Bloom & Crabtree (2006) described the researcher in the semi-structured to be formal but less rigid. The fundamental purpose of the open-ended questions was to investigate the teachers' perceptions of the effectiveness of blended learning.

According to Gill et al. (2008), Qualitative interviews are a method of collecting data in which interviewees demonstrate their point of view, experience, and background toward a subject matter. The researcher's questions were pre-prepared to gradually move from easy to more difficult questions. Teachers' responses were vivid and more detailed because they were very comfortable during the interview. Finally, Edwards & Holland (2013), explained that the purpose of the interview will support the researcher and promote a deeper understanding of the subject matter.

B. Surveys

Surveys and questionnaires are considered the most reliable sources of information. In this paper, the researcher's purpose in using that method is to examine the teachers' and the students' perceptions of blended learning. Another purpose was to compare the teachers' point of view with the students' point of view on the blended learning effectiveness and implementation. The

survey was designed on google form, using a simple format. The questions were designed in a simple and clear form to allow the participants with a better opportunity to easily access and respond to the questions. The researcher has avoided any biased or misleading questions. The teachers' and students' surveys adopted the Linkert scale to answer the survey questions.

The learners' survey was divided into 3 sections: Learners' perception, blended learning content and usage, and students' well-being. The survey was designed based on the Linkert Scale which measures the level of agreement or disagreement with the statements. The ultimate benefits of Linkert provide quantitatively valuable data. It also avoids any biased information because the participants are anonymous, the learners in this case did not encounter any kind of pressure to respond in a specific way. The question statements range from strongly disagree, agree, neutral, strongly disagree, and disagree. The participants' responses determined the "direction" whether they agree or disagree and the "intensity" by strongly or not.

C. Challenges

This section would reveal some challenges that the researcher has encountered in this study. First, the study started immediately after the UAE ministry of education announced that students are to physically attend to schools. It was observant that schools, students, and parents were not completely comfortable because of the fear of the Covid 19 contagious disease among the children. For this reason, friendly precautions were adopted to administer the surveys and the interviews. Online interviews and surveys were upgraded for learners and teachers to be undertaken at their convenience. Thus, the researcher has utilized the technology and appropriate tools and measurements to collect data and manipulate all the research tools.

Another challenge was the school timing and teachers' busy schedule. The researcher then relied on the focus group meeting with the teacher to conduct the interview. Teachers were informed via email about the purpose of the study. The school email was a valid and impactful tool of communication to contact the teachers and deliberate the meeting timing and avenue.

Additionally, there was an intention to include both male and female learners' perception and point of view as a part of the study. However, the researcher has finally decided to consider one side of the learners' based on the gender. The study intentionally focused on the female perception for many reasons. The female learners would be more dedicated and hold more

responsibility on the survey and interview questions. Another reason that would make the study more impactful was the female learners' vision, especially in the middle and high school stages, is highly insightful.

3.8 Ethical consideration

Ethics is an important element of the research study. According to Berg and Howard (2012), ethics is the study direction that guides the researcher throughout his study. It includes the fundamental concepts of the study; such as informed consent, the participant's rights, the anonymous participants, confidentiality, and potential risk.

The researcher was very cautious considering the ethical rules while conducting the study. The consent form has been sent to the school via email. The principal has approved the project. Afterward, the researcher has taken the next important step; it was the participants' approval. Both the students and the teachers have been formally informed. The consent has been sent to the students' guardians in order to apply the ethical rules for the study. Participants have been informed about the purpose of the study. The consent has clearly declared that participants have the right to withdraw during any stage of the study. They were also informed that the study has no protentional risk to their lives.

The confidentiality of the information has been a priority in this study. The participants' detailed information was securely saved, and no one was allowed to reach the data. Participants' names and identities were anonymous to avoid any biased data. In addition, the data collection was secured by a password. The study participants with all due respect were not paid; they were voluntarily anticipated to this study. Finally, the study survey and interview avoided any misleading questions.

The study tools were systematically and scientifically designed to prevent any falsifying data. The study instruments were tested prior to the study to check its reliability and validity. The Psychological section of the study tool was conducted and advised by a professor in Psychology. The Psychological advisor guided the researcher on how to conduct the interview with the participants in terms of "emotional well-being". The advisor also assisted the researcher in the third section of the survey where the students had to anticipate their feelings and emotions toward the effectiveness of blended learning during Covid 19.

3.9 Data analysis

A. Qualitative data: Interviews and the thematic analysis

The following section will discuss the data and the method of analysis that has been utilized. The research study followed the mixed-method research. There was a significant use of qualitative and quantitative approach. The qualitative data was collected through the survey and data analysis was thematically applied. Figure 3 illustrates the data analysis map that has been used in this study.

According to Braun & Clarke (2006); King (2004), thematic analysis is a flexible and adjustable method to analyze qualitative data. As a result, the researcher can easily adjust and customize the tools that work well and achieve the ultimate benefit for his study. This study has adopted the thematic analysis created by Virginia Bran and Victoria Clark (2013). Holloway & Todres (2003) defined thematic analysis as one of the very significant tools that researchers should acquire as it will support them with other qualitative skills. Thus, thematic analysis is a means to master other skills in order to conduct other forms of qualitative analysis. Bran and Clark (2013) described thematic analysis to be a flexible tool that researchers can potentially utilize as a research method that provides detailed and in-depth data.

Bran and Clark (2013) have divided the thematic outline into 7 phases. The researchers explained that there are 7 phases to thematically analyze the data as the followings:

1. Be familiar with the data, study the data, and carve out the selected narrative data.
2. Create a set of initial codes, the researcher should read the narrative data carefully and encode them.
3. Provide similar codes to the same meanings of the narrative data.
4. Classify the codes into themes. The researcher should collate all codes in order to group all the data into themes and sub-themes.
5. Evaluate and revise the themes. The researcher in this step revise and assess the extracted themes and whether they disclose a coherent pattern.
6. Create your own thematic map, give your themes a complex structure and corelate it with the research questions.

7. Refine the themes, the researcher finally should recognize the “essence” of each theme. The researcher in this stage can clearly relate the content of the data under each theme and analyze each theme by writing a descriptive report that provides the reader with a meaningful understanding of that theme.

As mentioned earlier, this study has adopted the focus group under the semi-structured category. The semi-structured interviews have been conducted with 4 teachers and one of the school managements (vice principal). The teachers have been informed via school email; this was the pre-interview step. The teachers were aware of the study purpose and aim of this interview. Afterward, the teachers signed the consent form that agreed on the study. Therefore, the interviewees have agreed on the study and the interview was recorded.

The interview was divided into 3 parts: the beginning of the interview, the middle part, and the conclusion. The beginning of the interview was background information and a discussion about the blended learning video that teachers were asked to watch. Then, the middle of the interview focused on the core questions. The questions were scientifically selected to examine the teachers’ perception of the effectiveness of blended learning.

The ending of the interview focused on teachers’ feedback and any comments that they would like to indicate about the interview stages. At the end of the interview, the interviewer gracefully thanked the participants for their cooperation and participation and the recording stopped. It was evident that the interviewees were very satisfied to share their points of view about their experience with online and blended learning during the pandemic Covid 19. It can be deduced that the interview has been smoothly performed and has successfully achieved its goal. This study has adopted qualitative coding and pen and pencils to analyze the codes. The following measurements have been conducted when analyzing the data.

1. Coding the data

The researcher started on the thematic analysis after collecting all the required data. Based on Virginia Bran and Victoria Clark (2013), the interview data has been written and data was securely saved. The interview has carefully listened and important notes have been taken. According to (Bran and Clark 2013), the researcher might analyze the data in 3 different ways: a) Using pen and pencils b) Document processor c) Qualitative coding.

2. Creating a thematic map

The next step was identifying the main themes and design a thematic mapping. Different themes were pointed out and listed in the form of a map; the researcher refined and revised the themes for the final step.

3. Writing the report

Bran and Clark (2013, writing a report should be done after all 7 phases are precisely completed. The report should explain complex narrative data about the interviews. The final analysis should be plausible and logically written. In addition, an extract of original words, in which a high level of cohesion and conciseness, should be used. The selected extracts should be written in an analytic narrative that illustrates the data. Finally, the report should not be written in a descriptive word; it should go beyond the description and reach further to an argumentative scope in which the research questions are related.

B. Quantitative data: Surveys analysis

The study has also used quantitative data in a form of a questionnaire for both teachers and students. The survey was emailed to the teachers, while students received the survey through the school formal school channel. The survey was conducted through Google forms, the results were digitally calculated. The survey followed the Linkert Scales of 5 main categories: strongly disagree, agree, neutral, strongly disagree, and disagree.

As mentioned earlier, the study has adopted the “Quota sampling” technique. Quota sampling is a part of the nonprobability sampling method in which the study population is selected based on specific qualities. This researcher selected the Quota based on the learners’ age group, while teachers were selected based on their knowledge and teaching experience.

The use of quota analysis was an effective method of collecting data. The participants were carefully selected after considering the following Questions:

- a. Who are the selected population?
- b. What is the probability of selecting specific participants and add them to the frame list?
- c. How was the sampling frame designed?

In order to answer the above questions. The researcher has chosen the participants based on the nature of the study. Thus, the study is seeking to investigate the effectiveness of blended learning on the students of middle and high school students in the UAE. Hence, middle and high school students along with teachers of the same grade levels were chosen. The frame list was constructed after the students were divided into subgroups based on their grade level and age. Figures 5 and 6 illustrate the percentage of the student's level and age group.

What is your age?

18 / 52 correct responses

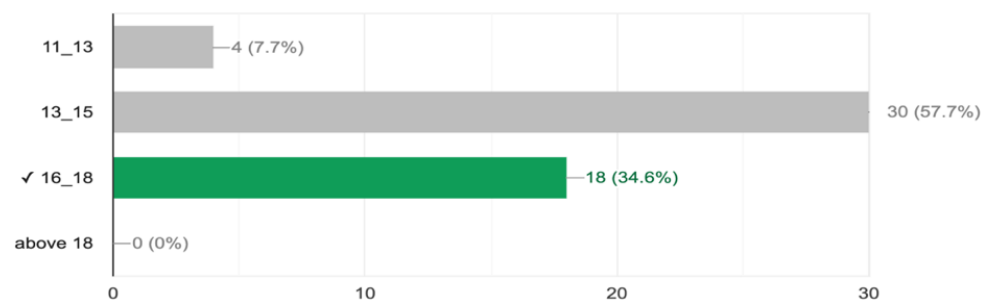


Figure 5: percentage of the student's age

Which grade are your currently studying?

52 responses

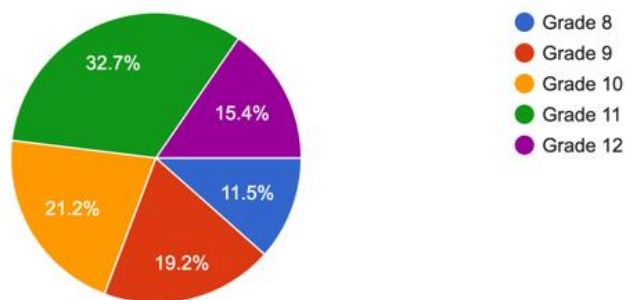


Figure 6: percentage of the student's level

3.10 Reliability and authenticity

The quality of the study research is determined by the validated data and the authentic tools in which the researcher has utilized to analyze the data. (Knapp 2008) defined the validity as the effectiveness of the selected tools in which the researcher used to measure and achieve the ultimate purpose of the study and answer the research questions. The mixed method research study along with the triangulation techniques has achieved a high standard of validity.

Bryman (2004), argued that the creditability of the research method is increased when using triangulation techniques. Additionally, the study has adopted case study techniques to describe and examine a specific phenomenon in which a case was studied in-depth. Moreover, the researcher has significantly attempted to avoid any biased opinion. The researcher objectively considered the study by utilizing different viewpoints: teachers, students, and leadership. However, to achieve a high standard of fairness, the researcher should include the parents' point of view as a fundamental element of the study.

Additionally, the interviews conducted with teachers were recorded. The analysis of the collected data was accurately done using the encoding data. The researcher has used **comparative techniques** to compare the teachers' responses in the focus group interview with the teachers' quantitative analysis. The analysis of the qualitative data was revised and refined in order to identify the themes and patterns.

CHAPTER 4: FINDINGS

4.1 Introduction

As previously mentioned, the current study adopted the mixed method to collect the data. To this end, this section will focus on the results of the data. The results of the analysis will be divided into 2 main categories: the qualitative data findings and the quantitative data findings. The results of the data have been analyzed in order to investigate the teachers', students', and school management members' perceptions of the blended learning implementation effectiveness. The following table explains the qualitative data participants and their responses rate.

4.2 Response Rate

Table 1: participants and their responses rate.

Qualitative data (interviews)	Responses	Questionnaire
Middle and High School Participants	12 students	The questions are attached in the appendices.
School management	1 (Vice Principal)	
Teachers' interview	4 (Core subject teachers)	
Total	16 interviews	

4.3 Qualitative data

4.3.1 Teachers' Perception

The study's population has been conducted on 4 teachers from different core subjects: English, Math, and Science. The interview questions were mainly focused on teachers' point of view on the blended learning instructions and implementations during Covid 19 pandemic. This section will display the results of the teachers' focused interview based on the three phases: 1) coding the data, 2) Designing the thematic map, and 3) Writing a report description.

A. Teachers' perception

i) *Coding the data*

This first part of the interview was focused on the teachers' perception of the blended learning. The data has been analyzed using pen and pencil to jot thought and highlight the main points. According to (Bryman, 2004; Punch, 1998), they confirmed that using pen and pencil and jot thought techniques are some of the very significant methods when data is analyzed. The followings are some of the teachers' responses.

The beginning of the interview was a set of questions that examined the teachers' definitions and backgrounds of blended learning. Some teachers' responses to the questions are as the followings:

Q1: What is your definition of blended learning?

“Blended learning is a mixture of online and traditional face-to-face learning” T1

“Blended learning has a wide variety of options including online and flipped learning” T2

“Blended learning is a method of teaching that combines digital learning with physical learning techniques” T3

The second question examined the teachers' experience with blended learning during Covid 19. The following responses are examples of the teachers' (T) answers.

Q2: Have you ever had any experiences designing lessons that include a blended learning instructional model? If, yes, please discuss and describe your experiences.

T1: "Yes! Last year I had to use technology in order to design the math lesson. It was very hard to experience because students could not easily understand the instructions. Students' cameras were usually off, and I had to repeat the instructions over and over."

T2: "Yes! Students were not engaged at the beginning of the online learning experience. However, after a while, they started to be engaged"

T3:" Yes! I felt discomfort because online and blended learning was a new experience to me."

T4: "Yes, teaching math was a challenging task. Most of the students were struggling to understand and solve the equations. Face-to-face learning is a better option in teaching math."

Q3: How effective is blended learning in teaching during the COVID-19 situation?

T1: "Blended learning has an impactful result when instructions are clear. I usually start my lessons with reviewing the concepts and simplify the instructions so students will be more engaged."

T2: "Blended learning brings more efforts on the teachers' shoulders because teacher has to design more engaging activities."

T3: "When it comes to the blended learning effectiveness, as an English teacher I can admit that blended learning motivates the students to work independently. As the teacher is not considered the main source of knowledge. Students are more responsible of their learning because they are more independent learners that are due to the effective implementation of the blended learning techniques."

T4: “Thanks for the blended learning, it shifts the class focus from a teachers-centered classroom to be more students-centered classroom.”

From the above quotes, it could be clearly seen that teachers were aware of the blended learning approach. They have a solid foundation in blended learning instructions. However, blended learning techniques for some teachers were a matter of concern; particularly, when they started teaching during Covid 19 era. Teachers confirmed the positive impact of blended learning on students’ self-confidence and self-responsibility to whatever they are learning. Banditvilai (2016), who conducted a study to examine the impact of blended learning on students’ autonomy and learning language skills, argued that learners were more responsible and easily access knowledge when implementing blended learning techniques. The study concluded that blended learning is a significant approach to teaching that provides both teachers and students with more opportunities to achieve teaching goals.

The second part of the focus group interview focused on the teachers’ and students’ role in the blended learning classroom.

Q4: What do you believe to be the role of a teacher during a blended learning instruction classroom?

T1: “I believe that the teacher is a facilitator in the blended learning classroom. Students are free to learn at their own pace.”

T2: “I agree that the teacher’s role is just to guide the students during the class phases.”

T3: “When it comes to math, the story is different, the teacher should give more examples and explain more so that students can understand the lesson. The teacher must assist the students to understand the lesson.”

Q 5: What do you believe the student’s role in blended learning?

T1: “Students are more self-independent. They are to search the knowledge and the basic concepts through the learning objectives that were clearly identified in the flipped learning video. The students should understand the topic before it is taught in the classroom.”

T2: “Some students are more independent than others. Teachers have to identify the weak students and design a special group for those who are struggling.”

T3: “Students are self-oriented; they can search the information and work independently.”

Finally, the interview ended with a question that explored the teachers’ challenges and obstacles when implementing blended learning instructions.

Based on the above quotes, it can be concluded that the teacher’s role is a facilitator. Their role is to provide the opportunities and tools in order to facilitate the learning process. On the other side, the student’s role is to pursue knowledge, as one of the basic concepts of blended learning is that it shifts the classroom from a teacher-centered to a student-centered classroom. Students in blended learning are more active and dynamic compared to the students in traditional learning who are passive. The enhanced role of technology in blended learning has also played a significant role to balance the quality of tech-based learning, in which learners are more engaged, with teacher-led instructions.

Blended learning has also underpinned the foundations of students’ self-reliance. It provided the students with opportunities to control what they learn and how they learn. It also enabled the teachers with significant benefits to reach out and personalize the instructions with more differentiated support for the intervention students. Not to mention, how blended learning has strengthened the teacher-student relationship. BL according to some studies has proved to empower teachers with more insightful observations of the student’s needs and abilities, and coach students through challenges. In conclusion, BL according to the teacher’s point of view combined the facilities and benefits of technology-based learning and teachers’ instruction.

Q6: What challenges do you face as part of blended learning in the COVID-19 situation?

T1: “One of my biggest challenges during Covid-19 was that the educational environment was not appropriate for all students.”

T2: “Some students felt isolated and teachers could not address their needs. There was not a proper way of communicating with those students who were emotionally struggling. Teachers were not able to implement the social-emotional learning strategies which demotivated some students and weaken their learning progress.

T3: “Some students were not able fully engaged due to some technical issue. They were struggling with the conference meetings and how to submit their assignments.”

The responses above demonstrated some obstacles that teachers have critically encountered during teaching using the blended learning model. Bonk and Graham (2012), have determined six major challenges of blended learning. The challenges are: 1) the communication and interaction between students and teachers. 2) Students’ self-regulation and independence. 3) The school support and digital support facilities. 3) cultural awareness 4) The balance between the outcomes and the innovative ideas. 5) The course content 6) The perception of the student’s needs and choices.

The teachers’ responses have included some obstacles that they have encountered during the implementation of the blended learning curriculum. Communication and interaction were critical concerns to some teachers. Another issue was engagement and participation. According to (Riel et al. (2016), blended learning might cause a distraction and lack of communication between the students and their peers when they perform a specific task or activity. The researchers argued in their study that teachers might struggle to keep the students engaged and active during the blended learning classes compared to the face-to-face learning model. The researchers suggested that teachers should set high expectations and train the students during the instructional phase before students work independently on their tasks. To conclude, there are several difficulties that teachers have commonly faced when implementing blended learning

strategies. However, there are dearth of benefits that blended learning has contributed to the educational system.

ii) *Thematic Mapping*

The above data demonstrated several considerable themes of blended learning:

1. The importance of Interaction and communication between the students and teachers in the blended learning model.
2. Blended learning strengthens the learners' self-autonomy and self-independency.
3. Blended learning provides more opportunities for teachers to address the learners' learning styles.
4. Teachers need more training and professional development on how to engage students using digital learning activities.

B. Administrative perception

As a part of the study, an interview has been conducted with the school management. The researcher has interviewed the school vice principal. The interview has taken about 30 minutes. The purpose of the interview sought to examine the school's administrative attitude toward the blended learning implementation.

The interview has been divided into 2 parts. The first part was an introduction, while the second part was the core question followed by a conclusion. At the end of the interview, the researcher thanked the vice principal for her participation. The followings are some quotes from the participants' responses.

The first question examined the school's administrative vision toward the effectiveness and success of blended learning during covid 19.

Q1: How do you evaluate the school experience using blended learning and online learning during the Covid-19 situation?

P1: I do not believe blended learning is a new approach of learning. However, the school has implemented blended learning strategies during Covid 19. It was a successful experience because the students were trained to use digital learning websites. Our students were familiar with e-learning and can dependently acquire knowledge using the digital platforms on their own iPad.

Q2: What were the major challenges the school has encountered implementing blended and online learning during the Covid-19 situation?

P1: The main challenge was the students themselves. The students were not familiar with the concept of studying at home. They were not ready to follow the teachers' instructions while they are home. They were confused about the learning procedures, especially during Covid 19.

Q3: To what extent do you think that blended and online learning has impacted the learners' motivation and participation in school extracurricular activities?

P1: The students were not very motivated to participate in extra-curricular activities. They needed physical communication with their teachers and their peers. Compared to face-to-face to online learning, students are fully engaged in most of the school activities when they physically attended school and communicate with their teachers.

Q4: What do you think the school needs to improve in order to implement an impactful blended learning classroom?

The school has started implementing the blended learning through the flipped learning video, using the digital websites and online resources. However, the school needs to improve the science labs with more resources and tools to stimulate students working independently and perform more scientific experiment. More educational apps and platforms are requested to enhance the students' learning. Throughout the class observation, I have noticed that teachers are qualified and experienced when teaching and combining traditional learning with digital learning. Students now are more familiar with online and digital websites; they easily follow the teacher's instructions even if the teacher is not physically attending.

The above responses demonstrated the school management's awareness of blended learning. The interviewee's perception of blended learning has provided the researcher with an insightful idea of the challenges that the school has encountered in implementing blended learning strategies. The followings are the main themes:

Thematic Mapping

1. Blended learning provides flexibility and mobility to learners.
2. Challenges with live interaction and learners' motivation.
3. Resources and training for the teachers would enhance the learners' experience.

C. Students' perception

The study has included a significant element to examine the learners' perception of blended learning. The researcher interviewed 12 students of different grade levels; mainly middle and high school learners. The learners are between 12 to 17 years old; they are classified into two groups: group 1 (12_14), and group 2 (15_17). The students are currently in grades (8_ 12), studying in an American School system.

The following questions are some of the participants' responses:

Q1: Do you prefer learning through the traditional face-to-face model or the online and blended learning model? Why?

S1: face-to-face model because teachers can communicate in a better way in traditional learning.

S2: Face-to-face model because I face a lot of technical issues using the online model.

S3: Face-to-face because I can be more sociable and communicative through class discussions.

S4: Face-to-face because I think that the classroom provides me a great opportunity to focus and be more productive.

Q2: Do you better understand the teacher in the classroom using the traditional learning model or the online and blended learning model?

S1: Traditional learning model is better because my communication skills become better; I can raise my hands and see my teacher.

S2: Traditional learning because I am a visual learner. I can't understand the lesson if the teacher is teaching away.

S3: Face-to-face or traditional learning because the group work is fun and I can communicate better with my peers.

S4: Face-to-face because the teacher can support me during the class easier and smoother than the online conference and instructional videos.

Q3: Was it easy to access educational websites and digital platforms during Covid 19?

S1: No, most of the apps were not easily accessible.

S2: No, it was not easy to communicate with IT to get access to the digital websites.

S3: No, it was hard. I did not feel confident using educational websites.

S4: No, sometimes the conference meetings and educational websites lagged during Covid 19

Q 4: What are some challenges that you encountered in online and blended learning during Covid 19?

S1: I have not achieved any academic progress during Covid 19 which was due to the distraction factors that occurred during the conference meetings. The flipped learning instructional videos did not guide me to understand the subject matter.

S2: PE classes were not very engaging.

S3: Assessments and Quizzes were not easily performed using digital platforms.

S4: Activities and tasks were not engaging.

Q 5: Do you think that online and blended learning has provided a better opportunity to improve your language skills?

All the participants have agreed that blended and online learning has not supported them during Covid 19. They confirmed that their language skills were not improved due to the challenges that were discussed previously.

Thematic Mapping

1. Digital learning challenges during Covid 19.
2. Communication and physical interaction of traditional learning provide a better opportunity for learners to improve their skills.

Students' responses indicated that blended learning is an educational pedagogy that combines both face-to-face and online learning. Students were confidently sharing their experiences with online and blended learning. The students' responses reflected a negative attitude towards online and blended learning. The interviewees showed that blended and online learning had unsuccessful progress in their academic progress. Students expressed their negative attitudes towards online and blended learning. The qualitative data concluded that students were not provided with quality blended learning strategies to improve their learning skills. It also demonstrated the challenges that have resulted in insignificant results on students' academic achievements.

4.4 Quantitative data

The study consisted of a questionnaire for both teachers and students. The questionnaire was divided into three sections: 1) Teachers' and learners' perceptions of blended learning. 2) Blended learning syllabus and teaching content 3) Learners' emotional well-being. The questionnaire was scientifically framed to examine the effectiveness of the blended learning implementations on middle and high school learners. The teachers' questionnaire was designed

in order to compare the learners' perceptions with teachers' perceptions. The questionnaire was performed and calculated based on Google forms.

4.4.1 Students' survey data analysis

Based on the questionnaire sample quota, the selected participants were categorized into middle and high school learners. All the participants were classified based on their gender; all the participants were females aged rate is 12 to 17 years old. The questions used the Linkert scale parameters.

A. Section 1: Learners' Perception

Q1: Which grade are you currently studying?

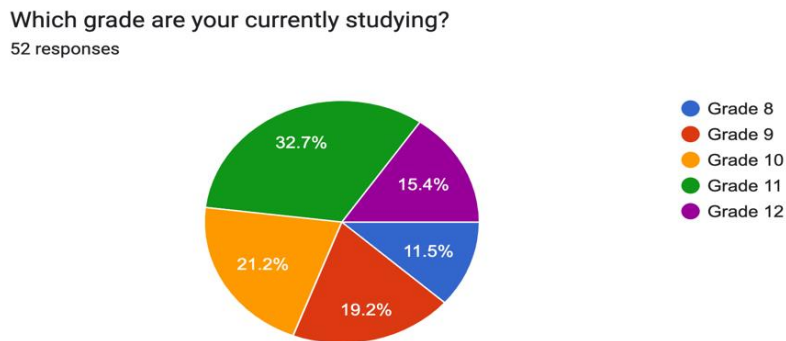


Figure 7: which grade are you currently studying?

Q2: On a scale of 1-5, how excited are you about learning via the blended learning model?

The data-driven shows that approximately 11% of learners felt extremely excited to learn via a blended learning environment because it has a significant impact on learners' feelings, while 27% of learners were not satisfied with using blended and online learning during covid 19.

On a scale of 1-5, how excited are you about learning via blended learning model?
52 responses

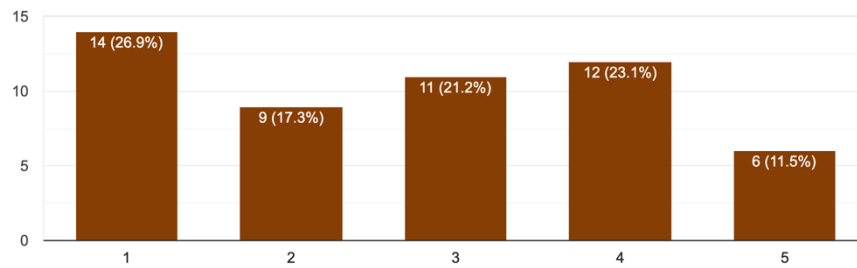


Figure 8: how excited are you about learning via blended learning model?

Q3: On a scale of 1-5, how engaging did you find technology tools such as Nearpod, Padlet, and other applications in online learning?

On scale of 1-5, how engaging did you find technology tool such as Nearpod, Padlet and other applications in the online learning?
52 responses

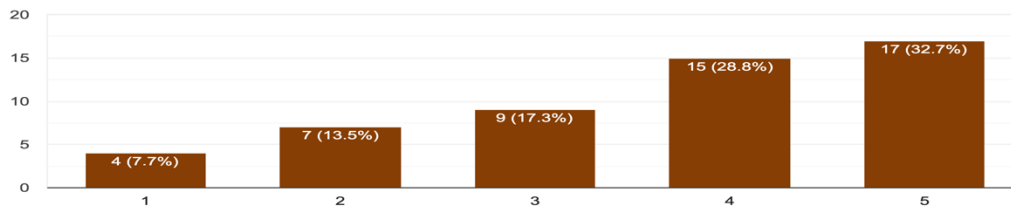


Figure 9: how engaging did you find technology tools such as Nearpod, Padlet, and other applications in online learning.

The above data demonstrated the students' attitudes toward the tools used as a part of digital learning. The graph shows above 30% of learners were extremely satisfied with the educational tools, while 7% were unsatisfied with the e-learning learning tools.

Q4: Which do you find more interesting and helpful to your understanding: the teacher is standing in front of the class and teaching a topic or the teacher is making short videos (Flipped videos) about different topics to watch on your own?

Which do you find more interesting and helpful to your understanding: the teacher is standing in front of the class and teach a topic or the teacher ...ideo) about different topics to watch at your own?
52 responses

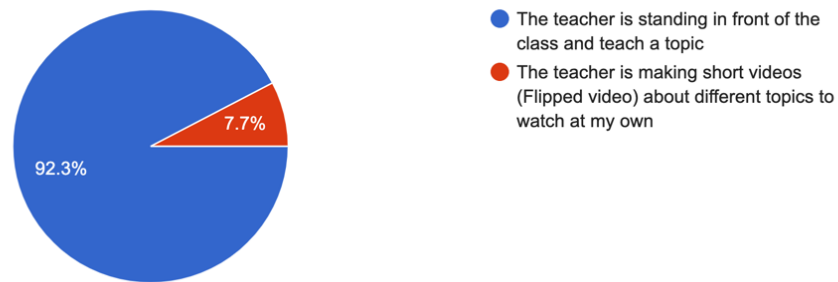


Figure 10: Which do you find more interesting and helpful to your understanding

The data driven from the above pie chart demonstrated the learners' attitudes to their readiness and self-responsibility towards their learning. 92% of the total responses (52 students) agreed that traditional face-to-face learning while the teachers standing in front of the class has a great impact on their learning, while 7% found that flipped learning video might be enough to learn the new concept.

Q 5: Learning the content through the online is much more interesting than learning the materials in class.

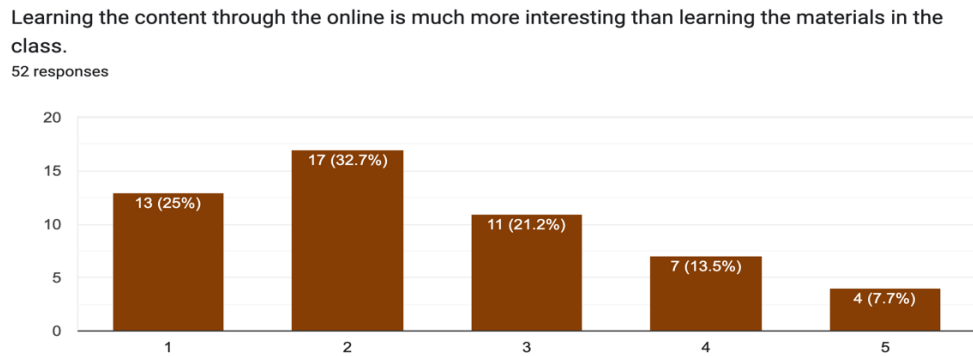


Figure 11: Learning the content through the online is much more interesting than learning the materials in class

The above graph demonstrated learners' satisfaction with the content and selected materials in the blended learning model. 21% of the total population reflected a positive attitude toward the content, while 30% reflected a negative attitude.

Q 6: Teaching programs with online practices shifted my whole understanding of online learning.

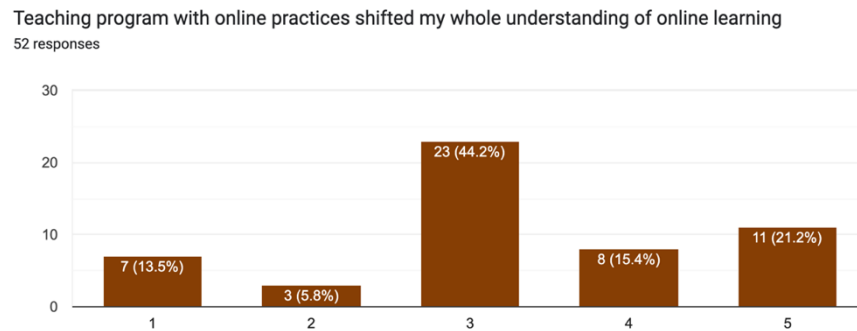


Figure 12: Teaching programs with online practices shifted my whole understanding of online learning

36% of the participants believed that online and blended learning has shifted their perspective toward learning, and 20% agreed that blended and online learning has not affected their perspectives toward learning.

Q 7: My motivation is very low when learning independently using the online platform.

Approximately, 40% of learners agreed that they were not very motivated when learning using online and blended learning, while 32% of the total population were motivated to learn independently using online and blended learning.

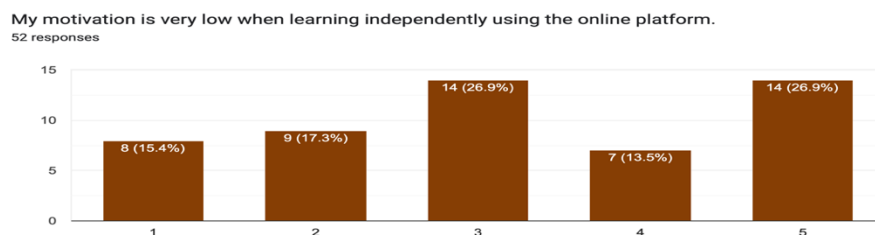


Figure 13: motivation when learning using online and blended platforms

B. Section 2: Blended learning implementation and tools.

Q 8: The online class instructions are clear and enough to perform my tasks.

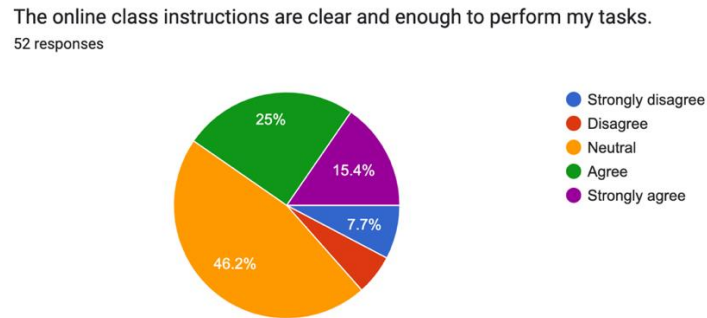


Figure 14: Clarity of online class instructions

The driven data shown above demonstrated that 40% of learners disagreed that the online and blended learning instructional strategies were manifested and clearly implemented, while 10% only agreed that the instructions were clear.

Q 9: Learning through the online classes in BL meets my needs.

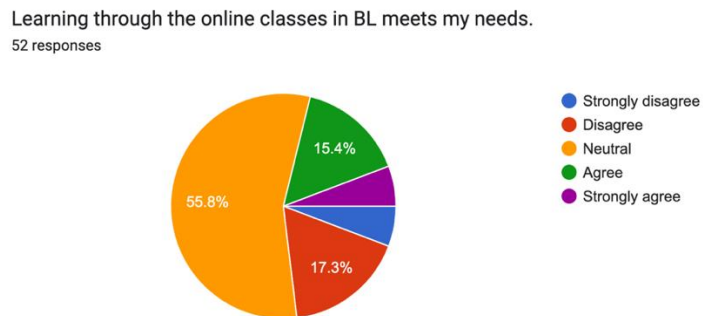


Figure 15: Platform meeting their needs

The above data shows that approximately 21% of the population agreed on the utilization of differentiated activities to meet the learners' needs and abilities were effectively implemented, and approximately a similar result was recorded (20%) of the population disagreed on the effectiveness of the differentiated materials.

Q 10: The online classes complete the face-to-face sessions and satisfy my needs considerably in terms of extra practice.

The online classes complete the face-to-face sessions and satisfy my needs considerably in terms of extra practice.
52 responses

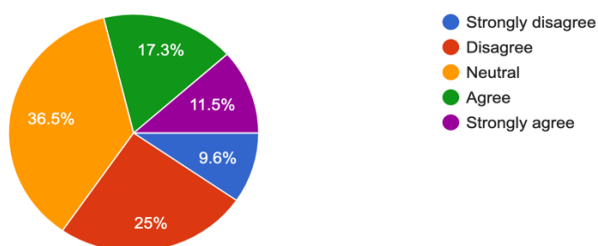


Figure 16: The online classes complete the face-to-face sessions and satisfy my needs considerably in terms of extra practice

Based on the above data, 35% of the total participants agreed that online and blended learning instructions satisfied their needs and achieved a learning practice of the skills, while approximately 29% disagree on online learning and blended learning instructions and how effectively it impacted their learning skills and practice.

Q 11: Based on my online classes in the BL, the online platforms provide plenty of opportunities to practice listening and speaking skills.

35% of the total population agreed that online and blended learning support their language learning practice for the language competencies of speaking and listening, while 34% disagreed that online and blended learning supported their learning skills in listening and speaking.

Based on my online classes in the BL, the online platforms provides plenty of opportunities practice listening and speaking skills.
52 responses

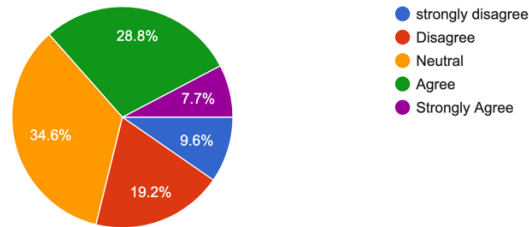


Figure 17: Based on my online classes in the BL, the online platforms provide plenty of opportunities to practice listening and speaking skills.

Q 12: Based on my online classes in the BL, I can easily practice and improve my writing skills through online platforms.

Based on my online classes in the BL, I can easily practice and improve my writing skills through the online platforms.
51 responses

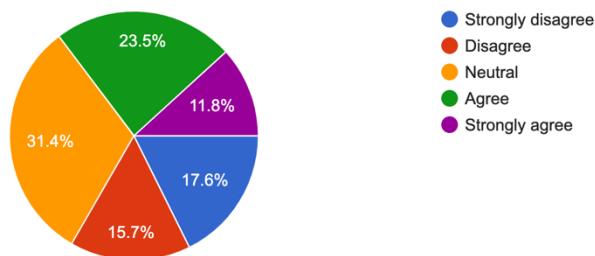


Figure 18: Based on my online classes in the BL, I can easily practice and improve my writing skills through online platforms

34% of the total population disagreed that blended learning strategies and online classes helped improve their writing skills, while 26% of the participants agreed that online and blended learning strategies supported the improvement of their writing skills

Q 13: Online practice and content are not as effective as face-to-face classes.

Online practice and content are not as effective as the face-to-face classes.
52 responses

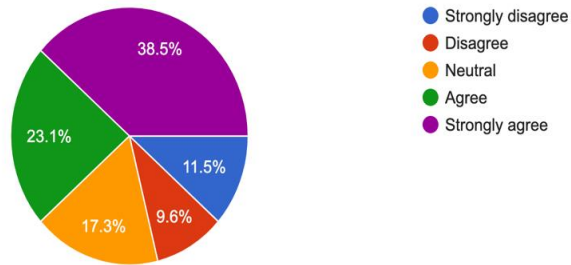


Figure 19: Online practice and content are not as effective as face-to-face classes

61% of the responses demonstrated that learners believed that the online practice and materials are effective for their learning, while 21% believed that the online practice and materials were not very effective.

Q 14: E-Learning facilitates cheating and plagiarism.

E-Learning facilitates cheating and plagiarism.
52 responses

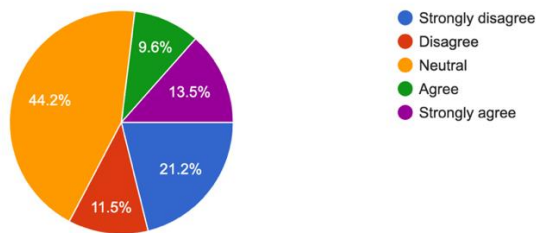


Figure 20: E-Learning facilitates cheating and plagiarism

33% of the total population disagreed that blended and online learning facilitated cheating and plagiarizing ideas without references, while 23% of the learners agreed that online and blended learning facilitated cheating and plagiarism.

C. Section 3: Learners' well being

Q 15: How satisfied are you with the Blended learning and online learning experience over the past 2 years?

How satisfied are you with the Blended learning and online learning experience the past 2 years?
52 responses

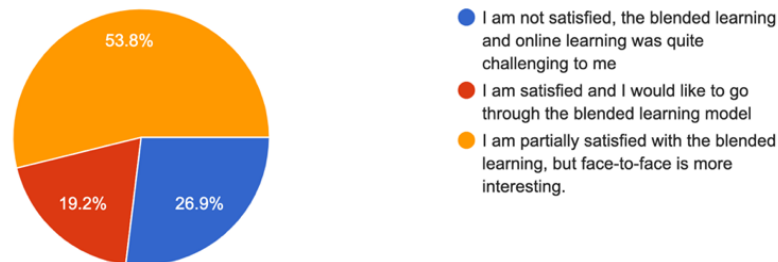


Figure 21: How satisfied are you with the Blended learning and online learning experience over the past 2 years?

53.8% of the total population demonstrated partial satisfaction with blended learning and online learning strategies during Covid 19, and 19.2% demonstrated satisfactory feelings towards blended and online learning. On the other hand, 29.6% expressed dissatisfaction with online and blended learning.

Q 16: E-learning is difficult to handle and therefore frustrating to use.

E-learning is difficult to handle and therefore frustrating to use.
51 responses

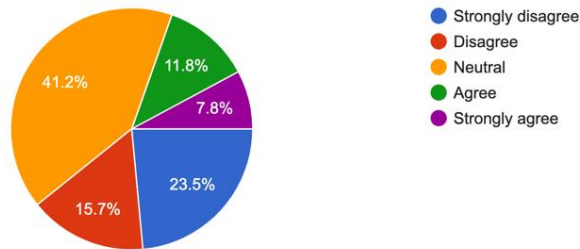


Figure 22: E-learning is difficult to handle and therefore frustrating to use.

39% of the total population agreed that they felt frustrated and confused due to the difficulties they encountered using e-learning and blended learning, while approximately, 20% on the difficulties that might be caused because of digital and blended learning.

Q17: I think that I am socially isolated when I study online.

I think that I am socially isolated when I study online.
52 responses

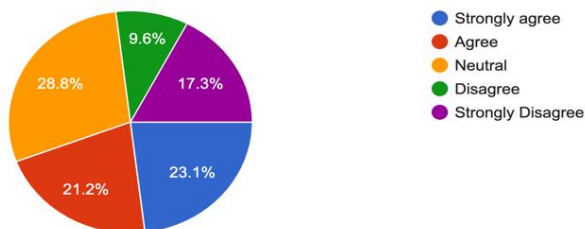


Figure 23: I think that I am socially isolated when I study online

44% of learners agreed that they felt isolated because of the online study, while 27% disagreed that online and blended learning isolated them.

Q18: Coming to school makes me feel happier than learning through the online application.

Coming to school makes me feel happier than learning through the online application.
52 responses

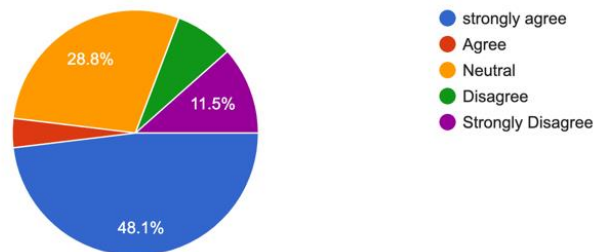


Figure 24: Coming to school makes me feel happier than learning through the online application.

Approximately 52 % of learners felt happier coming to school and learning traditionally, while 19% felt satisfied with learning online.

Q 19: I feel anxious when learning through Blended learning and online learning.

I feel anxious when learning through the Blended learning and online learning.
52 responses

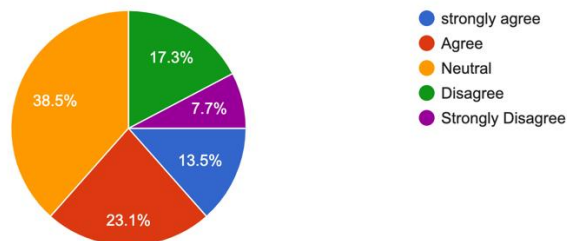


Figure 25: I feel anxious when learning through Blended learning and online learning

The pie graph indicated that 37% of learners agreed that blended learning and online learning caused anxiety and stress, while 25% disagreed that blended and online led to anxiety and stress.

Q 20: I feel confident when I learn through online learning and Blended learning compared to face-to-face learning on school premises.

I feel confident when I learn through the online learning and Blended learning compared to face-to-face learning in school premise.
52 responses

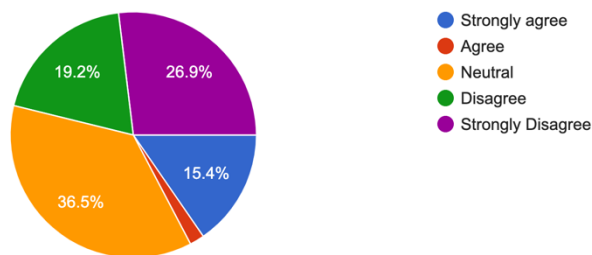


Figure 26: I feel confident when I learn through online learning and Blended learning compared to face-to-face learning on school premises

46% of learners disagreed that online and blended learning boosted their confidence, while approximately 17% agreed that blended and online learning boosted their confidence compared to face-to-face learning.

Q 20: Online learning practice boosts my effectiveness and motivates me to be better in the classroom.

Online learning practice boosts my effectiveness and motivate me to be better in the classroom.
52 responses

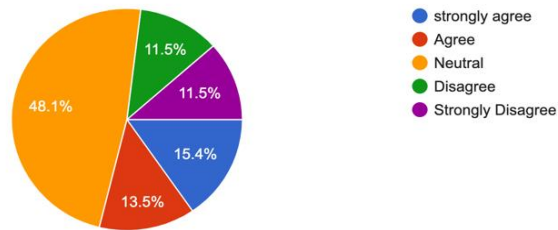


Figure 27: Online learning practice boosts my effectiveness and motivates me to be better in the classroom

29% of learners agreed that online activities and practices motivated them to perform better in the classroom, while 23% disagreed that online practices supported their learning to perform better in the classroom.

Q21: It is very frustrating to do tasks through the online platform (Schoology).

It is very frustrating to do tasks through the online platform (Schoology).
52 responses

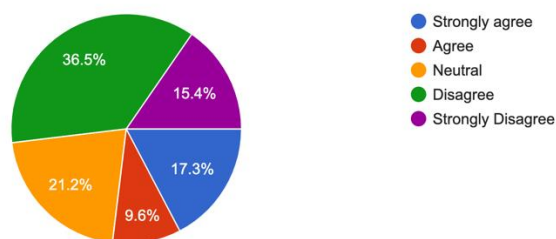


Figure 28: It is very frustrating to do tasks through the online platform (Schoology).

Approximately 15% of learners agreed that tasks on the online platform led them to feel frustration, and 54% of learners disagreed that performing tasks using the online platform demotivated their learning and caused frustration.

Q 22: I think blended learning makes the courses more communicative compared to face-to-face learning.

I think blended learning makes the courses more communicative compared to face-to-face learning.
52 responses

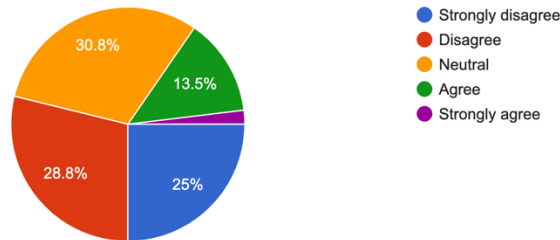


Figure 29: I think blended learning makes the courses more communicative compared to face-to-face learning.

Approximately 15% of learners agreed that blended learning courses are more communicative than face-to-face learning, while 54% disagreed that blended learning courses are more communicative.

4.4.3 Teachers' survey data analysis

The teachers' survey was designed to examine the teachers' perceptions and attitudes toward blended learning. The survey was divided into three sections: 1) teachers' perceptions, 2) Course content and delivery, and 3) School facility and readiness. The survey questions have provided the researcher with insightful visions of blended learning implementation in the school and its effectiveness. The total number of participants in this survey was 18 teachers. The responses to this survey were received from teachers who had experienced blended and online learning during Covid 19.

A. Teacher's perception

1. Which of the following below best describes your current teaching cycle?

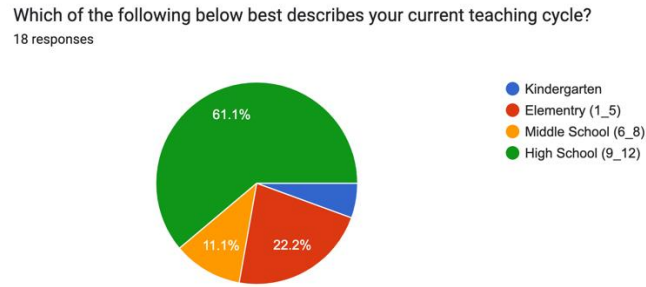


Figure 30: 1. Which of the following below best describes your current teaching cycle?

The participants are teachers of different grade levels in an American School in UAE. The above question demonstrated that the highest rate of participation was the high school teacher at 61%, followed by 22% of elementary teachers, 11% of middle school teachers, and 6% of kindergarten teachers.

2. Which of the options below best describes your current teaching circumstances?

1. Which of the options below best describes your current teaching circumstances?
18 responses

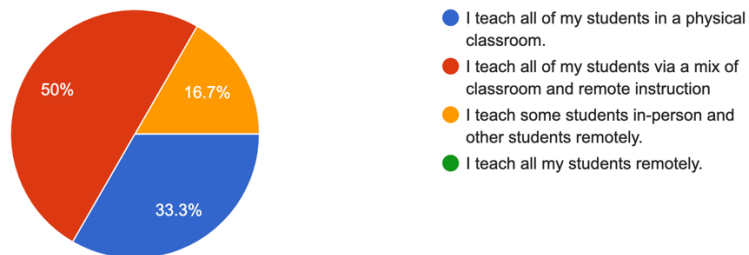


Figure 31: 2. Which of the options below best describes your current teaching circumstances?

The above question described the teachers' current teaching model. It demonstrated that 50% of teachers used blended learning; they followed a mixed teaching mode of face-to-face and remote learning. 33% are teaching through a face-to-face model, while approximately 18% of teachers are teaching a mixed class of online and onsite learners.

3. I believe that blended learning has a positive impact on students' learning.

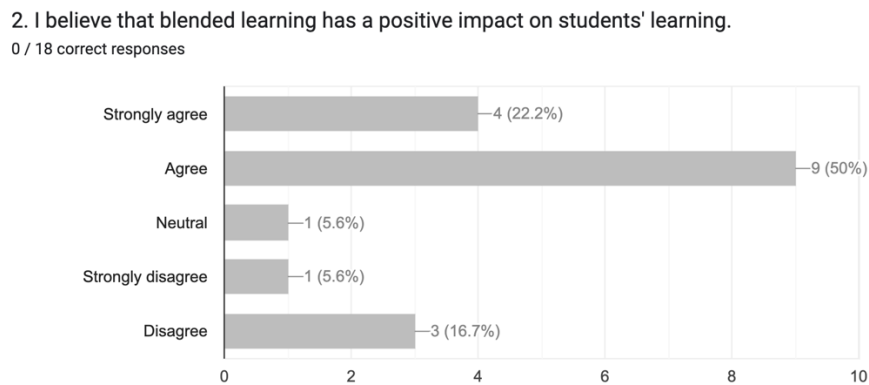


Figure 32: I believe that blended learning has a positive impact on students' learning.

50% of the total population agree that blended learning has positively impacted the students' performance, 22% strongly agree, 17% disagree and 6% disagree.

Q 4: I believe that students can learn the language effectively by integrating the materials in the class with online platforms.

3. I believe that students can learn language effectively by integrating the materials in the class with the online platforms.

0 / 18 correct responses

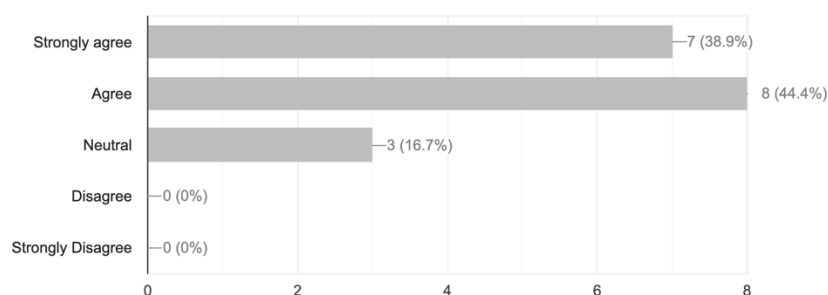


Figure 33: I believe that students can learn the language effectively by integrating the materials in the class with online platforms.

The above graph showed that approximately 39% of teachers believed that language skills can be taught and learned using online instructional activities and face-to-face teaching, while 44% agree. The remarkable fact is that there was no teacher disagreed with the question.

Q 5: I believe that Blended learning helps learners develop productive skills (Speaking - Writing)

4. I believe that Blended learning helps learners develop productive skills (Speaking - Writing).
18 responses

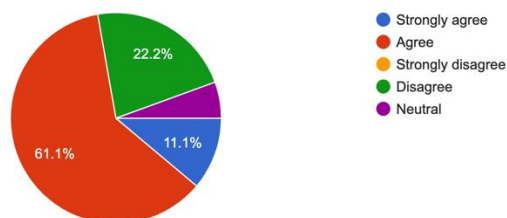


Figure 34: I believe that Blended learning helps learners develop productive skills (Speaking - Writing)

The above pie chart demonstrated that 72% of teachers believed that blended learning supports the development of productive skills, while 28% does not develop learners' productive skills.

Q 6: I believe that blended learning helps learners develop receptive skills (Listening - Reading).

5. I believe that blended learning helps learners develop receptive skills (Listening - Reading).
18 responses

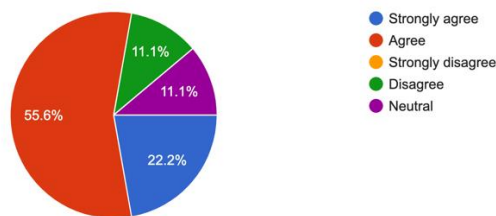


Figure 35: I believe that blended learning helps learners develop receptive skills (Listening - Reading).

Approximately, 78% of teachers believed that blended learning help supports learning receptive skills, while 22% believed that blended learning does not support learners' learning and acquiring receptive skills.

Q 7: Learners' interaction and engagement are more satisfied in blended and online learning than face-to-face learning model.

6. Learners' interaction and engagement is more satisfied in the blended and online learning than face to face learning model.
18 responses

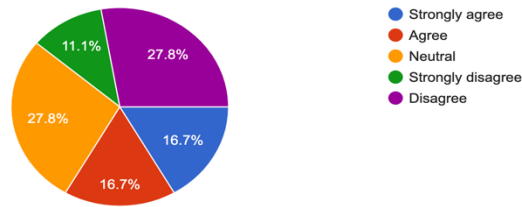


Figure 36: Learners' interaction and engagement are more satisfied in blended and online learning than face-to-face learning model.

A percentage of 39% of teachers demonstrated disapproval of blended learning positive impact on learners' interaction and engagement, while 33% agreed that blended learning supports learning engagement and interaction.

Q 8: Blended learning helps provide a cooperative environment among students and develop positive attitudes towards learning.

7. Blended learning helps provide a cooperative environment among students and develop positive attitudes towards learning.
18 responses

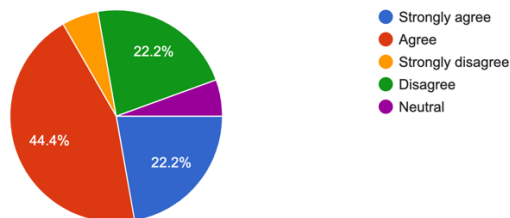


Figure 37: Blended learning helps provide a cooperative environment among students and develop positive attitudes towards learning.

Approximately 76% of teachers believed that blended learning supports a cooperative environment among students, while 27.8% demonstrated their disagreement on the positive impact of blended learning on learners' attitudes towards learning.

Q 9: How do you build and sustain personal relationships with your students when teaching in a blended learning model?

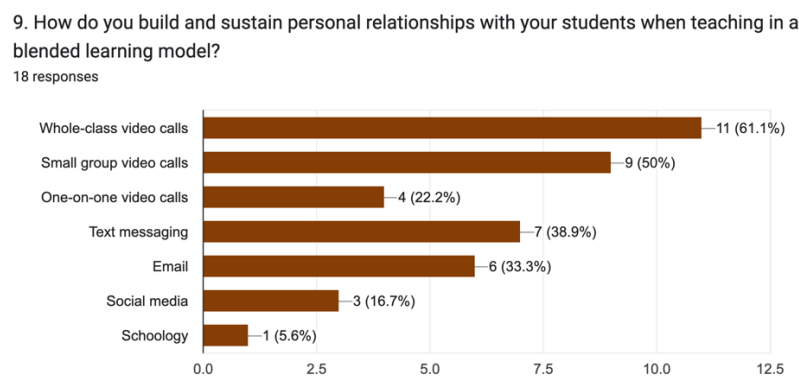


Figure 38: How do you build and sustain personal relationships with your students when teaching in a blended learning model?

The above question examined teachers' communication with students in blended and online learning models. Approximately, 61% of teachers communicated with learners using whole-class video calls, 50% communicated small group video calls, 39% communicated via text messages, 22% used one-to-one video calls, 33% used emails, 17% used social media, and 6% used the school platform Schoology to communicate and interact with the students.

Q 10: Blended learning allows a great opportunity for communication and interaction between the learners and their teachers.

8. Blended learning allows a great opportunity of communication and interaction between the learners and their teachers.
18 responses

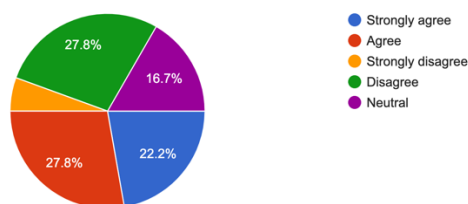


Figure 39: Blended learning allows a great opportunity for communication and interaction between the learners and their teachers.

In terms of communication and interaction, approximately 45% of teachers believed that blended learning supports communication between learners and teachers, while 50% disapproved that blended learning provided better communication and interaction between teachers and their learning.

iii) Section 2: Course and content delivery.

This section investigated the method that teachers design their curriculum. It also explored the teachers' methodology to deliver the content in blended learning and online learning environment.

Q 11: Which of the following is the primary source of the curriculum materials you use in your teaching?

10. Which of the following is the primary source of the curriculum materials you use in your teaching?

18 responses



Figure 40: Which of the following is the primary source of the curriculum materials you use in your teaching?

Table 2 Curriculum Design Method

Curriculum design method	Teachers' response
Commercial curriculum based on classroom based-instructions	55.6%
Online resources	22.2%
Teachers developed materials	11%
Open-source curriculum	11%
Materials developed by others in my schools.	0%
Commercial curriculum based on remote learning instructions	0%

The above chart and table demonstrated that the majority of teachers relied on commercial curriculum based on classroom instructions. Teachers did not depend frequently on remote and adopted resources to meet blended learning instructional classrooms.

Q 12: Learning the content using online activities and technology-based learning is easier for students than face-to-face instruction.

11. Learning the content using the online activities and technology based learning is easier for students than face-to-face instruction.
18 responses

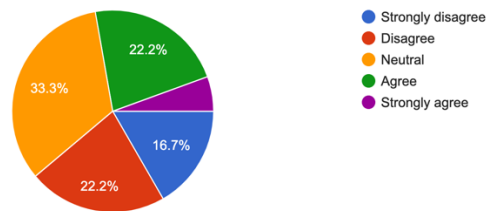


Figure 41: Learning the content using online activities and technology-based learning is easier for students than face-to-face instruction.

A total percentage of 28% of the teachers agreed that blended learning content is easier for learners than face-to-face, while 55% disagreed on this matter.

Q13: I believe that students can gain more knowledge only through printed materials in the face-to-face learning environment.

12. I believe that students can gain more knowledge only through the printed materials in the face-to-face learning environment.
18 responses

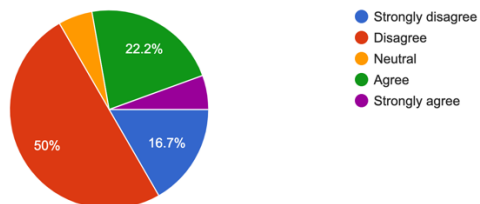


Figure 42: I believe that students can gain more knowledge only through printed materials in the face-to-face learning environment.

A percentage of 57% of teachers disagreed that only printed materials are enough for learners in the face-to-face environment, while 28% of teachers agreed that printed materials are enough for learning.

Q 14: The class discussions and activities in the blended learning model are more engaging for learners rather than a face-to-face model.

14. The class discussions and activities in the blended learning model are more engaging for learners rather than face-to-face model.
18 responses

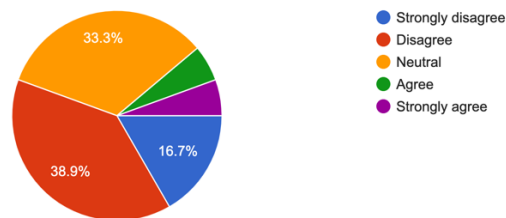


Figure 43: The class discussions and activities in the blended learning model are more engaging for learners rather than a face-to-face model.

56% of the total percentage disagreed that class discussion on blended learning is more engaging and fruitful in blended learning than face-to-face, while, approximately 11% agreed on the effectiveness of the communication and class discussion using the blended learning model.

Q 15: Modules and course content in the online and blended learning model meet all students' needs.

18 responses

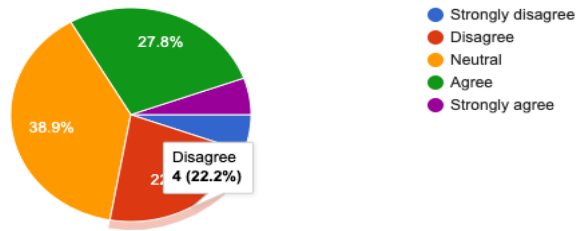


Figure 44: Modules and course content in the online and blended learning model meet all students' needs

Approximately 28% of teachers agreed that blended learning content meets students' needs and abilities, while 33% of the teachers disagreed that blended learning content is enough to meet the learners' needs.

Q 16: Blended learning has more technical problems during the sessions; thus, there is a need to face for face interaction to sort it out.

15. Blended learning has more technical problems during the sessions; thus there is a need to face for face interaction to sort it out.

18 responses

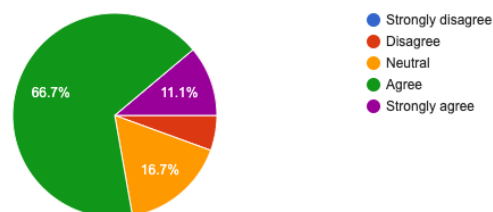


Figure 45: Blended learning has more technical problems during the sessions; thus, there is a need to face for face interaction to sort it out.

In terms of technical challenges, 78% of the teachers agreed that they encountered technical problems during the blended learning, while 6% disagreed that blended learning has more technical challenges which required more face-to-face classes.

Section 3: School Facility and Readiness

Q 17: The school has designed a clear policy on how to teach using the blended learning model.

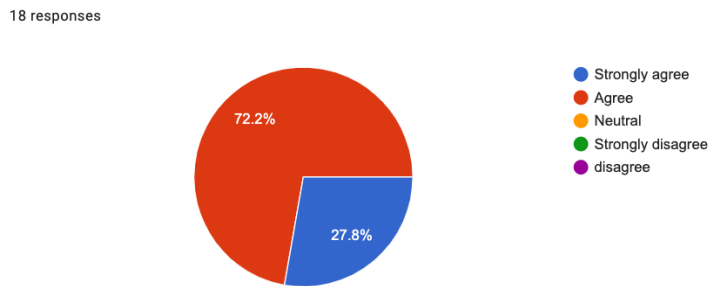


Figure 46: The school has designed a clear policy on how to teach using the blended learning model.

All teachers agreed that the school has designed a clear policy that tackled the blended learning model and how to teach through it.

Q 18: The school's professional development is effectively designed to promote more skills on how to deal with technical problems in the online and blended learning sessions.

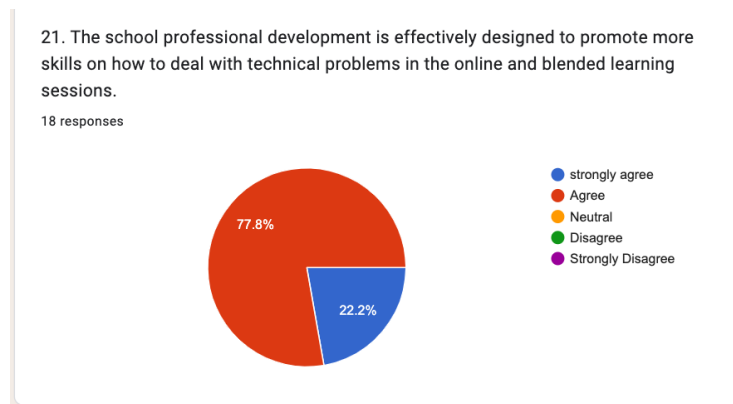


Figure 47: professional development effectiveness

Almost all teachers agreed that the school has supported teachers with professional development sessions on how to deal with technical challenges.

Q 19: I think teachers' inability to use the technology in the blended learning model hinders the teaching process to flow smoothly.

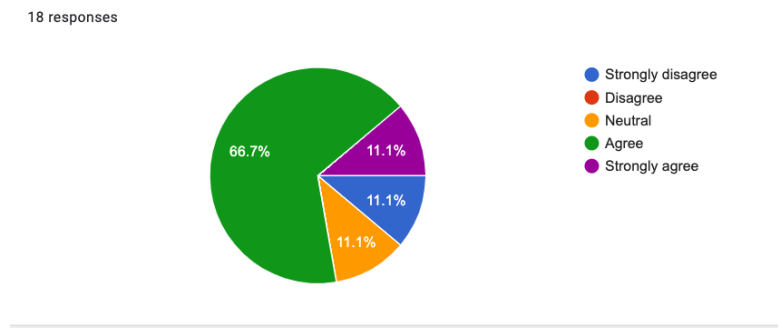


Figure 48: Inability to use the technology in the blended learning

Approximately 77% of teachers agreed that teachers' inability to use technology in blended learning hindered their teaching, while 11% disagreed on the statement.

Q 20: What are the challenges you have encountered in the past three years when teaching through the blended and online learning model?

20. What are the challenges you have encountered in the past three years when teaching through the blended and online learning model?

18 responses

Technical issues

One of the top concerns for me when firstly implemented blended learning was how to manage the online and on site students together and what where the best strategies to adapt for successful teaching and learning practices for them. This was a legitimate concern since students weren't used to learning in a flexible environment. The two categories of students had to be trained to be independent and work in groups successfully. This took me time and effort to correlate the classroom techniques I know with new techniques that adapt with the online learning as well.

Some technical issues related to internet access.

Internet connection
Learning outcomes
Learning environment
Students' background

Certain challenges including technical issues and some students might misuse the provided applications during the sessions.

In the above question, the researcher decided to make it open-ended to collect more data on the blended learning challenges that encountered teachers during Covid 19.

Some of these challenges were technical support, learners' participation, and interaction, students' demotivation, and passive communication between learners and their peers.

CHAPTER 5: DISCUSSION

The section seeks to answer the research questions. The study followed mixed-method research; thus, the data was driven based on qualitative and quantitative data. This study will discuss the finding of the data analysis driven by teachers, students, and school management. This part of the study will be divided based on the thematic analysis of the quantitative and qualitative data. The following are the main themes that this section will analyze.

- 1) Blended learning effectiveness and implementation
- 2) Blended learning influence learners' academic progress and emotional well-being.
- 3) Challenges of blended learning.

5.1 Blended learning effectiveness and implementation

- 1) Research Question 1: What are the main differences between the teachers' and learners' perceptions in terms of blended learning and its implementation?

a. Teachers' perception

Based on the interview questions teachers have indicated a positive attitude toward blended learning. The researcher investigated the teachers' perspectives through questions 1 and questions 2 in the interview questions. Teachers revealed a valid background of blended learning as a combination of face-to-face with online instructional activities. Teachers indicated a positive attitude toward blended learning effectiveness which was mentioned in question 3. The findings of this question revealed that 50% of teachers agreed that blended learning has positively impacted the students' performance, 22% strongly agree, 17% disagree and 6% disagree. The findings confirmed that blended learning provided a great opportunity for learners to learn new skills.

Additionally, teachers agreed that blended learning supports the learners to independently learn and acquire receptive and productive learning skills. In questions five and six, teachers showed a positive attitude toward blended learning effectiveness on learners' language learning. The findings of question 5 demonstrated that 72% of teachers believed that blended learning supports

the development of productive skills, while approximately, 78% of teachers believed that blended learning help supports learning receptive skills. The development of learners' skills was assumed by teachers due to several factors such as blended learning flexibility, the feasibility of access to technology, and providing an interesting learning environment.

A study conducted by Ja'ashan (2015) in Saudia Arabia, the study explored the university students' attitude toward learning language skills in a blended learning environment. Ja'ashan (2015) confirmed that students have a positive attitude toward blended learning. The researcher concluded that blended learning added more valuable benefits to the learners' skills, and learners felt more comfortable with the blended learning environment than with face-to-face and traditional learning models.

Moreover, in this study teachers indicated that blended learning provided learners with a flexible timetable. It also provides a better opportunity to manage their time and pace of learning. According to Bonk, Kim, and Zeng (2006), one of the blended learning successful criteria is flexibility. As a result, the study findings agreed with Taplin, Kerr, & Brown (2013) who confirmed that blended learning flexibility is a great advantage for both teachers and learners. Teachers could easily manage the content and topics they would teach. Teachers reported that the blended learning experience was positive due to the feasible use of resources and technology.

Additionally, teachers agreed that blended learning supported learners' self-autonomy and building up responsibility toward their learning. Teachers indicated that students could easily access the resources and educational materials. In addition, teachers' interview questions indicated that blended learning assists students in building self-responsibility toward their own learning. Throughout questions five and six of the interview with the teachers, the researcher investigated the role of both teacher and learners in the blended learning environment. Teachers positively reported that blended learning shifted the classroom environment to a more student-centered class compared to traditional learning that focused on teachers more than students.

The study quantitative data (question 8) revealed that approximately 76% of teachers believed that blended learning supports a cooperative environment among students, the question was intentionally asked by the researcher to investigate the teachers' perception of how students

perceive knowledge in blended learning. Zhang and Zhu (2018) conducted a study that investigated the effectiveness of blended learning on learners' academic achievements in ESL classrooms. The finding of this question agreed with Zhang and Zhu (2018) concluded findings that reported all students who have studied languages in a blended learning environment performed better than students who taught in a traditional learning model. To conclude, teachers of this current study analysis, indicated a positive attitude toward blended learning during Covid 19.

b. Learners' perceptions

Research Question 1: What are the main differences between the teachers' and learners' perceptions in terms of blended learning and its implementation?

The study has a fundamental part investigating the learners' perceptions of blended learning, and how blended learning influenced their learning either positively or negatively. The mixed-method study that has been adopted and embedded into this study provided a quality data analysis of the effectiveness of blended learning from the learners' perspectives. Learners have set for interviews and responded to a questionnaire in order to collect relevant data. The participants were scientifically selected based on the quota sampling method. Learners were selected according to their grade level and age group. Their students' perceptions of blended learning have contributed to this study and expanded the researcher's knowledge on how impactful blended learning is.

Students' interview questions were designed to investigate and explore their perceptions of blended learning and its effectiveness. For example, questions one and two of the interview concluded that learners' points of view and their attitude toward blended learning compared to traditional learning. Students reported a negative attitude and they confirmed that face-to-face learning is better in terms of its effectiveness and learning skills. The learners' attitudes in this study contradicted to Salman (2002), who conducted a study to investigate blended learning impact on students' academic growth. Salman (2002), concluded in the study that blended learning has a variety of advantages, such as learners being more interactive and productive, the blended learning environment being more interesting to learn, and time being more managed.

Additionally, survey questions two and three concluded that students approximately 27% felt unsatisfied and less excited to learn via blended learning, while 11% were extremely satisfied to learn via a blended learning environment. However, learners have pointed out through the survey questions to the level of engagement and engaging activities of blended learning. They reported a positive attitude towards the learning activities in the blended learning model such as Padlet and Nearpod. 92% of Students reported an interesting factor about the role of teachers in blended learning, they agreed that teachers' physical presence in the classroom provided them with better learning opportunities than studying from flipped learning videos or other educational tools.

In terms of learners' motivation, the study has directly concluded that learners were not motivated to learn independently in a blended learning environment. 40% of learners disagreed that blended learning motivated them to build up their own independency which indicated a negative impact of blended learning on learners' motivation to work independently and take responsibility for their learning. As a result, this study contradicted the findings of other studies such as Osguthorpe and Graham (2003) who concluded that blended learning provided learners with an opportunity to interact and communicate verbally and non-verbally.

Additionally, students were struggling to follow the teachers' instructions. They expressed their disagreement as the data shown in survey question eight demonstrated that 40% of learners disagreed that the online and blended learning instructional strategies were manifested and clearly implemented, while 10% only agreed that the instructions were clear. Thus, the students reported a negative attitude toward blended learning implementation and instructions. Moreover, students have also expressed their satisfaction with blended learning and online practice. They have seen that the online practice was not enough to build up their skills and complete face-to-face learning. To conclude, learners indicated a negative attitude toward the plenty of practice that online and blended learning content provided to learn new skills.

5.2 Blended learning influence learners' academic progress and emotional well-being.

Research question 2: Does blended and online learning positively or negatively impact the learners' academic and emotional well-being?

This study has agreed with Vyogtsky (1978) in terms of interaction, as learners expressed their disagreement on the effectiveness of blended and online learning communication and interaction. Learners indicated that the online interaction in blended and online learning is less effective compared to face-to-face and traditional learning. The survey questions in section 2 (Questions 11 and 12) investigated learners' attitudes toward their language learning growth in ESL classrooms via blended learning. The findings indicated positive results of 35% of the total population agreeing that online and blended learning support their language learning practice for the language competencies of speaking and listening, while 29% agreed that online and blended learning helped support their writing. Thus, blended learning has partially impacted the learners' language skills.

Learners' well-being is a basic element of this study. Thus, the quantitative data of the survey in section 3 was designed to investigate learners' emotional well-being. Learners reported in question 18 that they felt isolated because of the online study. Thus, it negatively impacted their well-being and interaction. On the other hand, learners indicated that coming to school made them feel happier than learning via blended and online learning. While findings of question 20 in the survey reported that 29% of learners agreed that online activities and practices motivated them to perform better in the classroom. As a result, blended learning supported the learners' learning progress to develop their skills outside the classroom.

Additionally, Covid 19 has negatively impacted the learners' learning setting. They felt anxious and frustrated, the learning environment impacted their emotional well-being. This finding agreed with Ausburn, (2004) and Rovai (2003), who agreed that learners were demotivated to learn because of the lack of interaction. This study agreed with the previous researchers' findings that learners struggled and felt isolated because of the online setting environment during Covid19.

5.3 Challenges of blended learning.

Blended learning proved to have several benefits to teaching and learning. However, it is believed that blended learning has challenges. Students and teachers have identified many challenges that they have encountered. In this study, learners were unsatisfied with the following challenges:

1. The need for more technical support. The use of technology has to be purposeful with clear teaching goals.
2. Lack of motivation and active interaction. Students were mostly passive and learning was not a productive process.
3. Group and teamwork activities were not interesting. This challenge is mostly related to the lack of interaction between students and their peers and teachers.
4. Motivation is a critical issue. Based on survey question seven, students were demotivated to learn.
5. Blended learning negative influence on learners' emotional well-being. Survey questions 17, 19 and 20 investigated the learners' well-being when learning in the blended learning environment. The findings of the survey questions have concluded that students felt isolated. They were anxious and irritated to express their feelings. Not to mention, learners reported that they suffered from a lack of confidence to share their answers and take an active part in the classroom discussion.

As for teachers, this study has concluded the following challenges:

1. Lack of motivation. Teachers reported that students were not active participants. Students according to teachers' perspectives were passive, for example, teachers repeatedly instructed the students to share their cameras and audio devices, however, they were not responded to teachers' instructions.
2. Engagement. Teachers explained that students sometimes were not engaged in the blended learning class activities. Question 20 in the survey with teachers concluded that teachers were overloaded and stressed out because they had to provide students with a variety of activities to keep them engaged and active participants during Covid 19.
3. Evaluation and assessment. Teachers reported their disagreement with how learners

responded to formative and summative assessments. Teachers explained that learners suffered from technical problems during the assessments.

4. Constructive feedback. One of the challenges that teachers clarified was their inability to give constant feedback on learners' work. Teachers also indicated that they suffered to achieve the lesson's objectives and keep learners engaged all the time.

In conclusion, this section seeks to respond to the research questions based on the analysis of the mixed method data. The discussion has concluded that blended learning has achieved several positive factors; however, it fails to attain other significant factors of a successful learning environment.

CHAPTER 6 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

This study examined the effectiveness of blended learning on learners' academic growth and well-being during Covid 19. The study is based on a mixed-method research approach; thus, the researcher has mainly utilized interviews and surveys to collect the study data. The participant of the study was selected based on quota sampling techniques. Participants of this study were mainly covering three different diversions: teachers' perceptions of blended learning, students' perceptions of blended learning, and school management perceptions of blended learning.

The study concluded that teachers agreed and were satisfied with the blended learning environment; however, students have reported a negative attitude towards blended learning due to several challenges. Both teachers and learners have agreed that blended learning is a new trend of learning that provide good opportunities to learn. The teachers and students agreed that blended learning is a cost-saving and flexible approach to learning; however, it required more training to effectively implement its strategy and achieve its ultimate goals.

Overall, the study has imported an insightful perspective on blended learning effectiveness. It was scientifically designed to explore the blended learning approach from different perspectives: teachers, learners, and school management. The study has in-depth detailed the blended learning approach and its successful implementation in a private school in UAE. However, further research should be conducted to explore the success criteria of blended learning and how UAE schools develop its implementation.

6.2 Recommendation

The study results have concluded that blended learning has attained several positive achievements. Some of the successful implementations were highlighted in this study by teachers and learners. Blended learning according to teachers and learning has succeeded to build up students' self-independency and responsibility for their own learning, to shift the classroom from a teacher-led classroom to a student-led classroom, to combine the benefits of

face-to-face learning and e-learning, and maintaining a flexible learning environment. However, students expressed their disagreement against several challenges during the blended learning environment. Nevertheless, the following recommendation should be addressed to develop the blended learning implementations in schools:

1. Teachers should be included in professional programs and trainings to improve the blended learning class outcomes.
2. Digital issues should be properly addressed and tackled before the starting point of the blended learning program.
3. Teachers should be trained on how to design a blended learning course instead of the reliance on commercial curriculum.
4. Students' emotional well-being should be addressed as an essential element of the blended learning curriculum. Teachers should design a curriculum that balances the academic components with students' emotional satisfaction.
5. An urgent need for further research on how to improve blended learning implementations and limit its negative impact on learners' emotional well-being.

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Appendices

APPENDIX1 STUDENTS' SURVEY

1/19/23, 9:21 PM

The impact of blended learning on Learners' academic performance and emotional well-being.

The impact of blended learning on Learners' academic performance and emotional well-being.

What is blended learning? Blended learning as a combination of face-to-face and computer-assisted learning in a single teaching and learning environment. The study seeks to probe into the learners', the teachers', and the school administration perception of blended learning and its impact on learners' academic progress and emotional well-being. This questionnaire aims to explore the teacher's attitude and perception towards teaching in a blended learning model. Please, take few minutes responding to the following statements. Your cooperation is highly appreciated.

* Required

Teachers' perception

In this section, the questions will explore the teachers' attitude towards the blended learning and how they evaluate its effectiveness.

1. Which of the following below best describes your current teaching cycle? *

Mark only one oval.

- ☐ Kindergarten
☐ Elementary (1_5)
☐ Middle School (6_8)
☐ High School (9_12)

2. 1. Which of the options below best describes your current teaching circumstances? *

Mark only one oval.

- ☐ I teach all of my students in a physical classroom.
☐ I teach all of my students via a mix of classroom and remote instruction
☐ I teach some students in-person and other students remotely.
☐ I teach all my students remotely.
☐ Other: _____

https://docs.google.com/forms/d/1zRPhqMDJJlpVrA39rtlvF_94WHpvPgRDXebD9ogKPhY/edit

1/10

3. 2. I believe that blended learning has a positive impact on students' learning. * 1 point

Mark only one oval.

- ☐ Strongly agree
☐ Agree
☐ Neutral
☐ Strongly disagree
☐ Disagree

4. 3. I believe that students can learn language effectively by integrating the materials in the class with the online platforms. * 1 point

Mark only one oval.

- ☐ Strongly agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree

5. 4. I believe that Blended learning helps learners develop productive skills (Speaking - Writing). *

Mark only one oval.

- ☐ Strongly agree
☐ Agree
☐ Strongly disagree
☐ Disagree
☐ Neutral

6. 5. I believe that blended learning helps learners develop receptive skills (Listening - Reading). *

Mark only one oval.

- ☐ Strongly agree
☐ Agree
☐ Strongly disagree
☐ Disagree
☐ Neutral

7. 6. Learners' interaction and engagement is more satisfied in the blended and online learning than face to face learning model. *

Mark only one oval.

- ☐ Strongly agree
☐ Agree
☐ Neutral
☐ Strongly disagree
☐ Disagree

8. 7. Blended learning helps provide a cooperative environment among students and develop positive attitudes towards learning. *

Mark only one oval.

- ☐ Strongly agree
☐ Agree
☐ Strongly disagree
☐ Disagree
☐ Neutral

9. 8. Blended learning allows a great opportunity of communication and interaction between the learners and their teachers. *

Mark only one oval.

- ☐ Strongly agree
- ☐ Agree
- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral

10. 9. How do you build and sustain personal relationships with your students when teaching in a blended learning model? *

Check all that apply.

- ☐ Whole-class video calls
- ☐ Small group video calls
- ☐ One-on-one video calls
- ☐ Text messaging
- ☐ Email
- ☐ Social media
- ☐ Other: _____

**Course Content
and delivery**

This section seeks to explore the course design in a blended learning model.

11. 10. Which of the following is the primary source of the curriculum materials you use in your teaching? *

Mark only one oval.

- ☐ Materials I develop
- ☐ Materials developed by others in my school
- ☐ Various resources collated from online sources
- ☐ Commercial curriculum designed for classroom-based instruction
- ☐ Commercial curriculum designed for remote instruction
- ☐ Open-source curriculum
- ☐ Other: _____

12. 11. Learning the content using the online activities and technology based learning is easier for students than face-to-face instruction. *

Mark only one oval.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

13. 12. I believe that students can gain more knowledge only through the printed materials in the face-to-face learning environment. *

Mark only one oval.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

14. 13. I can effectively organize formative and summative activities and assignments in the blended learning course that help monitoring the learners' progress. *

Mark only one oval.

- ☐ Strongly disagree
☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree

15. 14. The class discussions and activities in the blended learning model are more engaging for learners rather than face-to-face model. *

Mark only one oval.

- ☐ Strongly disagree
☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree

16. 15. Blended learning has more technical problems during the sessions; thus there is a need to face for face interaction to sort it out. *

Mark only one oval.

- ☐ Strongly disagree
☐ Disagree

Appendix2 teachers' survey

The impact of blended learning on Learners' academic performance and emotional well-being.

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☐ Disagree

4. 3. I believe that students can learn language effectively by integrating the materials in the class with the online platforms. * 1 point

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☐ Neutral

6. 5. I believe that blended learning helps learners develop receptive skills (Listening - Reading). *

Mark only one oval.

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☐ Agree
☐ Strongly disagree
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☐ Neutral

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☐ Neutral
☐ Strongly disagree
☐ Disagree

8. 7. Blended learning helps provide a cooperative environment among students and develop positive attitudes towards learning. *

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9. 8. Blended learning allows a great opportunity of communication and interaction between the learners and their teachers. *

Mark only one oval.

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- ☐ Agree
- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral

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- ☐ Email
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- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

13. 12. I believe that students can gain more knowledge only through the printed materials in the face-to-face learning environment. *

Mark only one oval.

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- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

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☐ Neutral
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☐ Strongly agree

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☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree

16. 15. Blended learning has more technical problems during the sessions; thus there is a need to face for face interaction to sort it out. *

Mark only one oval.

- ☐ Strongly disagree
☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree

17. 16. Blended learning enables the teacher to easily give clear instructions comparing to the face-to-face mode. *

Mark only one oval.

- ☐ Strongly disagree
☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree

18. 17. I believe that teaching in a blended learning model gives more opportunity for teachers to develop more technical skills. *

Mark only one oval.

- ☐ Strongly disagree
☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree

19. 18. I believe that blended learning makes the course content more communicative. *

Mark only one oval.

- ☐ Strongly disagree
☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree

20. 19. Modules and course content in the online and blended learning model meet all students' needs. *

Mark only one oval.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

**School
facility
and
readiness**

This section aims to explore the teachers' perception on the school support. The teachers reflect by responding to Likert scale questions on how they assess the school's readiness to implement the blended learning model.

21. 20. The school has designed a clear policy on how to teach using the blended learning model. *

Mark only one oval.

- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Strongly disagree
- ☐ disagree

Appendix 3 Teacher's Interview Questions



interview with School teachers

The interview questions below are to examine the effectiveness of blended learning on students' performance and well-being in a private school in the UAE. It will take around 30 minutes of your time, and all responses will be kept confidential.

1. How would you define the term blended learning?
2. Have you had any experiences designing lessons that include a blended learning instructional model? If, yes, please discuss and describe your experiences.
3. How effective is blended learning in teaching during the COVID-19 situation?
4. Do you find the students motivated in a blended learning environment?
5. Do you believe that blended learning is more beneficial and fruitful for students rather than face-to-face learning?
6. What do you believe to be the role of a teacher during a blended learning instruction classroom?
7. What do you believe to be the role of students during instruction?
8. What challenges do you face as part of blended learning in the COVID-19 situation?

Appendix 4 School Management Interview Questions



Interview Questions with management

The interview questions below are to examine the effectiveness of blended learning on students' performance and well-being in a private school in the UAE. It will take around 30 minutes of your time, and all responses will be kept confidential.

Administrative Questions:

1. How do you evaluate the school experience using blended learning and online learning during the Covid-19 situation?
 2. What were the major challenges that the school has encountered implementing blended and online learning during the Covid-19 situation?
 3. How did the school implement the blended learning instructions in exams and assessments during the Covid-19 situation? In your opinion, was that policy successful?
 4. To what extent do you think that blended and online learning has impacted the learners' motivation and participation in school extracurricular activities?
 5. What do you think the school needs to improve in order to implement an impactful blended learning classroom?
-

Appendix 5 Students' Interview Questions



Interview Questions with students

The interview questions below are to examine the effectiveness of blended learning on students' performance and well-being in a private school in the UAE. It will take around 30 minutes of your time, and all responses will be kept confidential.

Students interview Questions

Q1: Do you prefer learning through the traditional face-to-face model or the online and blended learning model? Why?

Q2: Do you better understand the teacher in the classroom using the traditional learning model or the online and blended learning model?

Q3: Was it easy to access educational websites and digital platforms during Covid 19?

Q 4: What are some challenges that you encountered in online and blended learning during Covid 19?

Q 5: Do you think that online and blended learning has provided a better opportunity to improve your language skills?