The Effect of Synchronous, Asynchronous and Hybrid Learning Models on EFL Learners' Achievement

Abstract

The outburst of COVID-19 pandemic brought about significant alterations in educational environments and teaching methodologies globally. This study examines the impact of synchronous, asynchronous, and blended learning approaches on the motivation and academic success of learners studying English as a Foreign Language (EFL). The primary objective of this research is to assess how synchronous, asynchronous, and hybrid learning models affect the academic performance of EFL students. A Non-Randomized Control Group Design with repeated measures was utilized, involving 80 pre-intermediate EFL learners who were categorized into three experimental groups: synchronous, asynchronous, and hybrid learning models, and a control group. The language achievement test which comprehensively tests Speaking, Reading and Writing skills was content validated by language experts' review and criterion related validated using standardized tests that had very high correlations. The data was analyzed descriptively (using mean scores and standard deviations) and inferentially (using ANOVA for repeated measures), to test for differences in language achievement among the teaching conditions. The results indicated significant variations in language scores across all instructional modes employed ($p < .05$). Notably, the hybrid model outperformed both the synchronous and asynchronous models, suggesting that the hybrid approach may effectively improve language proficiency among learners.

Keywords: Synchronous, Asynchronous, Hybrid Learning Models, EFL Learners' Achievement

Introduction

Currently, education involves the application of various possible learning designs which can be synchronous, asynchronous, and hybrid as being a complex interactive element of EFL learners' experiences and results. This assertion seeks to investigate comprehensively the degree to which various teaching strategies influence cognitive, motivational, and achievement constructs, particularly self-regulated learning, from the perspective of learners (Lim, 2017). In these unprecedented times, online learning (hereafter referred to as OL or e-learning) emerged as a highly effective alternative, enabling students to engage in their studies from virtually any location and at any time. Furthermore, it enhanced the interaction between students and teachers, facilitating uninterrupted communication (Lim, 2017). Internet-based learning can be generally

categorized into three types: synchronous, asynchronous, and hybrid learning (Dorsah & Alhassan, 2021; Perveen, 2016).

The integration of online educational methods into English language teaching is not a contemporary phenomenon; its origins can be traced back to the advent of the internet and mobile technology in the 1990s, which facilitated language instruction and acquisition (Paraded, 2020). However, the contrasting modalities of teaching and learning—synchronous and asynchronous online education—continue to pose challenges, particularly for educators and students who depend on these instructional methods (Atmojo & Nugroho, 2020; Bailey & Lee, 2020; Nambiar, 2020).

In the recent past, there has been an enforced change of the language teaching that was traditionally done in the classroom to a language learning done in the classroom with the help of technological devices. In her subsequent introduction, learning is defined as an instructional process within an educational setting (Salmon, 2023). A notable trend in contemporary educational practices is the growing implementation of diverse learning modalities, which encompass synchronous, asynchronous, face-to-face (FtF), and hybrid approaches, all designed to incorporate a range of instructional techniques. As the field of English as a Foreign Language (EFL) instruction progresses, it becomes essential to explore the impact of these different learning modes on critical psychological and educational factors, including self-determined motivation and academic achievement (Lim, 2017).

Limitations of Different Learning Environments on EFL Learners' Motivation: Teachers' and Learners' Perspectives.

Different instructional methods can exert distinct effects on the emotional aspects of language learners and their proficiency in the language. Dörnyei (2005) posits that personality factors, including extraversion and self-esteem, serve as significant indicators of success in acquiring a second language. These characteristics are associated with an individual's motivation to learn a second language, with studies indicating a positive relationship between these traits and motivational levels (Cheng, 2008; Horwitz, 2017).

While Papi (2010) noted that language learning students have an ideal self-concept, students similarly reported pressures which in turn served to enhance their self-concept. Yuan (2023) showed that the enjoyment of learning English among Chinese students was correlated with

motivation to study the language online when the pandemic occurred. The research encompasses several objectives designed to examine the impact of various learning modalities on English as a Foreign Language (EFL) students.

Literature review

Synchronous Learning

Synchronous learning refers to an educational approach conducted online, where students engage at predetermined times utilizing various tools, including video conferencing, teleconferencing, and live chat (Rahmani et al., 2024). It encompasses a stipulated weekly bit of commitment similar to in a physical school, in that students study from home but meet their classmates at certain times (Othman et al., 2024). These technologies also make it possible to overcome spatial barriers using real time voice or text chat rooms.

This mode of learning has gained significant traction, particularly with the emergence of the COVID-19 pandemic, during which platforms like Zoom and Microsoft Teams became prevalent.

In synchronous online platforms, interactions can be enriched through text chat, audio and video conferencing, and interactive whiteboard tools, among others. According to Martin and Parker (2014), virtual classrooms have technologies that allow sharing of files, use of whiteboards and breakout rooms among others. In a related study, Yeung's 2020 investigation involving 118 school students established that while online learning satisfied the two needs of autonomy and competence, it had a deficiency in the satisfaction of relatedness due to the shifting social roles brought about by technology. Martin et al. (2012) emphasized that the significance of interaction in synchronous virtual classrooms is paramount and promotes active participation.

LaPointe et al. (2008) offer the possibility that the inclusion of visual and audio modes in synchronous systems circumvents the problem of cultural disparities.

Cao et al. (2009) indicated that synchronous interaction resulted in increased student satisfaction, whereas Motteram (2001) asserted that synchronous tools were effective for educational applications.

According to Park and Bonk (2007), Synchronous learning environments give quick responses, promote additions and include vocal elements. Lietzau and Mann (2009) observed improvements

in distance education by the use of synchronised conferencing over the internet. Stein and Newfield (2006) state that there is a focus on multi-literacy when learning takes place in real time, which is beneficial for a global audience especially where English is concerned as a lingua franca (Crystal, 2012).

Synchronous interaction has been found to increase satisfaction levels among students (Cao et al, 2009), and Motteram (2001) continued this line of argument, pointing out that there were educational benefits with the use of synchronous tools. Synchronous learning also involves quick feedback and suggestions as well as audio inputs (Park and Bonk, 2007). Lietzau and Mann (2009) noted that distance learning has improved due to the use of web based synchronous conferencing. According to Stein and Newfield (2006), there is a concentration on multi-literacy when learning occurs in an interactive mode, which is advantageous for many people particularly when English (a Lingua Franca International, 2012) is spoken by the different participants.

According to Murphy et al. (2011), synchronous learning promotes autonomy and self-centered learning among students. It also enhances deep learning and critical analysis of various issues (Huang & Hsiao, 2012). In relation to this, Rika and Sulistyani (2020) focus on blended learning through synchronously and asynchronously conducted lessons whereas Methanethorn(n.d.) says that modern E-learning classes are equipped with various tools of writing that are appreciated by the students. ‘Virtual class room’ using tools such as zoom and other hour-less sessions depict any active participation of students.

Asynchronous Learning

Asynchronous learning, a form of distance education, gives learners the freedom to navigate through the course content without any contact with fellow students in real time. While this approach provides flexibility, it may lack the sense of belonging offered by face-to-face interaction in conventional classes. It also includes video tutorials and written materials aimed at learning at one’s most convenient time. Independent learning or learning at one’s pace again features learning, teaching and inclusion of own self directed learning methods. Asynchronous learning components, such as forums and wikis, add a social dimension to online courses, but this is distinguished from

synchronous learning, which occurs at scheduled times and involves live participation of learners and facilitators.

Asynchronous learning prevailed within e-learning because of its convenience (Hrastinski, 2008; Parsad & Lewis, 2008). Content was provided for self-study through Learning Management Systems among other platforms where students engaged in thoughtful learning in the presence of feedback lagging. AbuSeileek and Qatawneh (2013) emphasize the significance of acquiring a foreign language, contrasting this with the Western approach, where learners are encouraged to pose numerous expansive and ongoing inquiries, in contrast to the central perspective.

Since the communication is written, it lends itself to much thinking where one has to read and write, so there is also much time given for engagement. To passively engaged readers, Asynchronous engagement is offered, although it is not as lively and exhilarating as interaction at the same time (Hubackova, 2015). Perveen (2016) insists that extending time in solving a problem enhances higher order learning skills.

Hybrid Learning

In the conducted literature review, the blended learning model in education is presented as a model with numerous benefits for the teachers and the learners. The teachers supplement the conventional face to face teaching with specific e-learning resources, and the learners modify their experience together with classroom learning (El-Gayar & Dennis, 2005; So & Bonk, 2010). The productivity of broadband technologies contributes to increasing the amount of online communication with native speakers and working on the skills, Kern and Warschauer (2000) state. Bettor (2004) confirms technology helps to achieve language learning aims while Beckett and Miller (2006) point out the overall benefits of technology in language activities.

The COVID-19 pandemic brought about significant alterations in the educational landscape, affecting both learning environments and teaching methodologies globally. This study examines the impact of synchronous, asynchronous, and blended learning approaches on the motivation and academic success of learners studying English as a Foreign Language (EFL). Specifically, it investigates how these different learning models influence the academic performance of EFL students. A Non-Randomized Control Group Design with repeated measures was employed,

involving 80 pre-intermediate EFL learners who were categorized into three experimental groups: those engaged in synchronous, asynchronous, and hybrid learning, along with a control group.

The language achievement test which comprehensively tests Speaking, Reading and Writing skills was content validated by language experts' review and criterion related validated using standardized tests that had very high correlations. The data was analyzed descriptively (using mean scores and standard deviations) and inferentially (using ANOVA for repeated measures), to test for differences in language achievement among the teaching conditions. The results indicated significant variations in language scores across all instructional modes employed ($p < .05$). The hybrid model, in particular, was found to be better than the synchronous as well as the asynchronous model, which indicates that hybrid model can enhance language proficiency among the learners.

According to Motteram and his colleagues (2013), there has been a growth in using technology to enhance language skills acquisition, especially those that require integration of competencies. This has been done although the productivity of blended learning has been examined. Dudeney and Hockly (2016) however believe that online learning is effective when the users of the technology have been exposed to it from the toddlerhood. A significant improvement in the language skills of ESP students were also noted in the study by Banditvilai (2016). Chilton (2016) and Rofi'i & Herdiawan (2024) argue that a blended approach is crucial for effective language teaching and learning. In their research, Akbarov et al. (2018) investigated learners' perceptions and identified a distinct preference, a conclusion that aligns with Zhu's (2018) findings involving 5,376 ESL students in Beijing, who demonstrated superior outcomes when utilizing the blended learning method within the EFL framework.

Research Question

The present research investigated the influence of various educational modalities, specifically synchronous, asynchronous, and hybrid formats, on the language proficiency of English as a Foreign Language (EFL) students. In particular, this study seeks to address the following inquiry:

Do synchronous, asynchronous, and hybrid learning approaches significantly affect the academic performance of EFL learners?

Methodology

Sampling and Design

A quasi-experimental research design employing repeated measures was implemented in this study, which is particularly effective for investigating the impact of teaching conditions on participants over a specified period.

In this design, a given subject acts as his or her own control group since several measurements are taken while manipulating other independent variables. This design was preferred considering that it minimizes the threats of possible extraneous variables enhancing the internal validity of the study. The participants comprised 80 pre-intermediate EFL learners, who were obtained from Simaye Danesh Language Institute. All these participants were randomly assigned to four separate groups: synchronous, asynchronous, hybrid learning models and a control group with 20 students in each group. The random assignment makes sure that the differences between the groups are not due to differences in attributes of the participants before the experiment. This sampling strategy contributes positively to the external validity of the study as it enhances the chances that the results will be applicable to other populations of EFL learners of similar nature.

Instrumentation

A well-crafted language achievement test was designed to assess the different components of three essential language skills which include speaking, reading and writing. The way this test is designed is such that a number of language skills are tested hence assessing the participants fully. Moreover, the test is designed suited to the learning objectives of the research hence appropriate for the assessment.

The test consists of 46 items in total, shared across the skills of language:

. Writing: 4 essay questions have been administered to evaluate different factors of verbal communication skills such as fluency, pronunciation, grammatical accuracy and effectiveness of ideas communication .

Reading: 40 items, the comprehension questions are practioners basing on different perspectives and lengths of passages, as well as other inquiries that check how deduction, vocabulary in context and comprehension of main ideas and specific details works for a given passage.

. Composing: 2 subjects which particularly address 2 types of writing actions: one on the topic of technology measuring the candidates' skills on their discussion of the inventions and technological improvements of the recent times, their effects on people, and personal ideas regarding technology in general. One more subject is about the necessity of being literate, which assesses how well the candidates argue for the importance of being literate, how it affects or contributes to an individual and the community, and how to raise the levels of literacy within the population.

Content Validity

To ensure the content validity of the test, it was developed following a comprehensive review of existing research on language proficiency and in collaboration with an expert in language education.

The test items were cross-checked against the learning goals and targets set out in the study's curriculum. A committee of language education specialists screened the test items in order to verify that the skills represented by them are indeed the skills being assessed and the content areas that need coverage. This step for instance makes certain that the test does not deviate from the language skills that it is purporting to assess.

Criterion-Related Validity

Criterion-related validity was built by correlating the test result with some external standard variables that are known to measure language proficiency. Such criteria included some standardized tests like TOEFL, IELTS, teacher's assessment as well as students' language skills. Correlational analyses were carried out in order to assess how the test results relate to those external measures. This correlation was high (0.86) which means that the test scores are a true reflection of the language proficiency of participants.

Reliability

Various statistical methods were employed to assess the reliability of the research study and its findings. One approach involved calculating Cronbach's alpha for the reading component of the test.

The reading section items had an alpha value which was 0.90 indicating good internal consistency. In case of the speaking and writing sections, the responses were scored with the help of multiple raters. Rater agreement was analyzed using intraclass correlation coefficient (ICC). The reliability of the speaking section ICC was 0.85, whereas, for the writing section it was 0.88 exhibiting a very high agreement between raters.

Procedure

The research included preparation, intervention and evaluation as the three main parts of the whole process. In the preparatory phase of the research, ethical approval was requested and granted by the appropriate authority, and informed consent was obtained from all participants. This segment of the study ensured that ethical standards were upheld and that the rights and welfare of the participants were firmly established and safeguarded.

As one of the treatment methods, which lasted for 13 weeks, participants implemented their corresponding learning models: synchronous, asynchronous, or a combination of both. Under this learning model, the participants attended online classes with tutors and colleagues in real-time. The participants in this learning model accessed the learning content and performed the activities through online means at their own suitable time. The revised educational strategy allowed participants to engage in both classroom and online learning experiences while also attending mandatory instructional sessions. During the evaluation segment of the research, participants completed language proficiency assessments at the start and conclusion of the 13-week intervention period. To ensure rigor, uniformity, and comparability among the groups, identical assessment tools were utilized for all participants. This stage provided the researchers with the opportunity to determine whether there were any advancements in the participants' achievement levels by the conclusion of the study.

Data Analysis

The evaluation of the collected data was conducted utilizing both descriptive and exploratory statistical techniques. To illustrate the data, fundamental descriptive statistics were computed for each group and variable, encompassing means and standard deviations. Additionally, other

statistical methods, such as the repeated measures analysis of variance (MANOVA), were utilized to examine the variations in language achievement scores across the three teaching conditions.

Easily understood, Bonferroni tests, which are post-hoc tests, were performed to determine with respect to which groups the significant effects occurred. Moreover, qualitative analysis techniques may also be utilized to provide the content of the analyzed surveys in open-ended questions or other qualitative feedback on the different modalities experienced by the participants. All in all, in relation to data analysis, it was expected that there would be significant effects of synchronous, asynchronous and hybrid modes of instructions on the levels of achievement of EFL learners.

Results

To address the research questions, all scores pertaining to the variables were analyzed using MANOVA. Furthermore, the results presented in Tables 1, 2, and 3 encompass both descriptive and inferential statistics.

		Speaking		**Reading**		**Writing**	
		M	SD	M	SD	M	SD
CG	pretest	2.52	0.11	11.66	1.29	11.53	1.30
	posttest	2.37	0.82	13.80	1.50	13.75	1.48
syn	pretest	2.47	0.10	11.95	2.06	11.28	1.52
	posttest	1.9	0.65	17.55	2.32	17.35	2.25
asy	pretest	2.46	0.10	12.94	1.95	11.73	1.14
	posttest	1.64	0.19	18.70	4.16	18.70	4.16
hyb	pretest	2.47	0.13	12.20	1.57	11.75	1.33
	posttest	1.15	0.22	18.17	4.09	22.65	1.69

Note: CG= control group, Syn= synchronous, Asyn=asynchronous, hyb=hybrid, a= communication

This study assessed the effects of different instructional methods on student performance across four areas: speaking, reading, and writing. The instructional methods evaluated included control, synchronous, asynchronous, and hybrid, with performance measured through pretest and posttest scores. For the control group, the average pretest score was 2.53 (SD = 0.11), while the average posttest score was 2.38 (SD = 0.08). In the synchronous, asynchronous, and hybrid groups, the average pretest scores were 2.47 (SD = 0.10), 2.47 (SD = 0.10), and 2.48 (SD = 0.14), respectively, with posttest scores of 1.94 (SD = 0.07), 1.64 (SD = 0.19), and 1.16 (SD = 0.22). Across all instructional modalities, pretest mean scores ranged from 2.47 to 2.63, while posttest mean scores varied from 1.16 to 2.39. In the speaking domain, the highest pretest average score was 13.09 (SD = 1.36), and the lowest was 11.29 (SD = 1.30), with posttest mean scores of 14.35 (SD = 1.04) and 23.20 (SD = 1.67). Similarly, in the reading domain, the highest pretest average score was 12.95 (SD = 1.96), and the lowest was 11.29 (SD = 1.29), while posttest mean scores were 13.80 (SD = 1.51) and 22.65 (SD = 1.69). Furthermore, in the writing domain, the highest pretest average score was 12.00 (SD = 1.33), and the lowest was 11.29 (SD = 1.30), with posttest mean scores of 22.65 (SD = 1.69) and 13.75 (SD = 1.48). Overall, in all domains and instructional methods, posttest scores were generally lower than pretest scores, a trend that was particularly evident in the hybrid mode, which recorded the lowest posttest scores.

Table 2: Results of Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	.998	11613.518 b	7.000	141.000	.000	.998
Groups	.882	8.511	21.000	429.000	.000	.294
time	.925	246.858b	7.000	141.000	.000	.925
groups * time	.870	8.345	21.000	429.000	.000	.290

The multivariate set of tests performed on different aspects records impressive results. First of all, the "Intercept" again shows a paramount effect with a .998 value and an F-statistic that is very high at 11613.518 suggesting that the contributions of the intercept are crucial in the model. Such effect is further avouched by a p value less than .001 and a large partial eta squared of 0.998 signifying that a great deal of variance is attributed to the intercept term. Switching to the 'Groups' effect, the presence of significant multivariate effect is recorded with Pillar's Trace value of .882 and F-statistic of 8.511. This suggests that there was a meaningful effect of the independent variables on group membership. A p-value less than .001 also affirms this, but the partial eta squared of .294 shows only a moderately high level of variance explained by group membership. In the "Time" effect, also, the outcome of the multivariate test is impressive by yielding a Pillar's Trace value of .925 and an F-statistic as high as 246.858. This shows that the dependent variables are also affected by time. The related p-value is .001 which verifies such significance however; the partial eta squared of .925 is also very high indicating that a lot of time does account for the variance. Defining the final segment of analysis, the "Groups*Time" interaction proves to have a notable multivariate effect with Pillai's Trace value being .870 and F-statistic standing at 8.345. This means that the combination of belonging to a group and time significantly alters the dependent variables. The p-value is below .001; however, the moderate partial eta squared of .290 indicates the extent of variance explained by the interaction.

Table 3 Results of the between the groups' tests

Source	Dependent Variable	SS	Df	MS	F	Sig.	PTS
	speaking	2831.981	7	404.5	95.019	.000	.819
	reading	2188.602	7	312.6	60.848	.000	.743
	writing	2469.084	7	352.7	79.709	.000	.791
	speaking	35486.22	1	35486	8334.490	.000	.983
	reading	35388.53	1	35388	6887.179	.000	.979
	writing	33826.76	1	33826	7644.134	.000	.981

	speaking	417.459	3	139.1	32.682	.000	.400
	reading	429.355	3	143.1	27.853	.000	.362
	writing	404.234	3	134.7	30.449	.000	.383
	speaking	2012.465	1	2012.	472.659	.000	.763
	reading	1373.933	1	1373.	267.390	.000	.645
	writing	1639.449	1	1639.	370.481	.000	.716
	speaking	327.167	3	109.0	25.613	.000	.343
	reading	327.828	3	109.2	21.267	.000	.303
	writing	353.499	3	117.8	26.628	.000	.352

Considering the aforementioned findings of the analyzed data, numerous variables displayed considerable effects. To begin with, the constructs of speaking, reading and writing, also display considerable effects and enhance the explanatory power of the model. Regarding the "Intercept even though the variables recorded very significant effects as demonstrated by very high F-values and p-values < .001 in contrast, indicated that intercept significantly contributed in the outcome of the model across speaking, reading and writing. The partial eta squared values reiterate the high amount of variance that is accounted for by the intercept, between .979 and .996. Focusing on the analysis of psyhological time as 'groups' categorization of differnt groups have made significant impacts with moderate and high partial eta squared values averagely ranging between .727 and .767. Effects were also present in the “time” analysis, which displayed considerable partial eta squared values which ranged between .763 and .885. This means that time is a crucial determinant of the variables as defined in the different subgroups of speaking, reading, and writing. how the variables are affected by the group and the time factors was also explained in this interaction with partial eta squared values of .303 to .741 meaning there was some effect. A post hoc test (Bonferroni) was provided after to identify specific areas of difference. Outcomes are displayed in Table 4.

Table 4: Results of Bonferroni test for multiple comparisons

Dependent Variable	(I) groups	(J) groups	Mean Difference	Std. Error	Sig.
Speaking	control	synchronous	-1.6829*	.45414	.002
		asynchronous	-2.6667*	.45985	.000
		hybrid	-4.5750*	.45693	.000
	synchronous	asynchronous	-.9837	.45707	.198
		hybrid	-2.8921*	.45414	.000
	asynchronous	hybrid	-1.9083*	.45985	.000
	control	synchronous	4.5750*	.45693	.000
Reading	control	synchronous	-1.8329*	.49753	.002
		asynchronous	-3.0474*	.50379	.000
		hybrid	-4.5750*	.50059	.000
	synchronous	asynchronous	-1.2145	.50075	.099
		hybrid	-2.7421*	.49753	.000
	synchronous	hybrid	-2.7421*	.49753	.000
Writing	control	synchronous	-1.5189*	.46273	.008
		asynchronous	-2.5827*	.46856	.000
		hybrid	-4.4750*	.46558	.000
	synchronous	asynchronous	-1.0638	.46573	.142
		hybrid	-2.9561*	.46273	.000
	asynchronous	hybrid	-1.8923*	.46856	.001

To assess the differences in mean scores of dependent variables across various instructional modes (control, synchronous, asynchronous, and hybrid), several pairwise comparisons were conducted. Statistically significant differences were observed in all comparisons ($p < .05$). Conversely, the mean scores for these variables were generally lower for participants in the synchronous, asynchronous, and hybrid groups when compared to the control group. In the control group, which received instruction through a traditional approach, the mean scores in speaking, reading, and writing were the lowest relative to those of participants engaged in synchronous, asynchronous, and hybrid learning environments.

A number of pairwise comparisons were made to determine the different mean scores of dependent variables across different instructional modes (control, synchronous, asynchronous and hybrid) and found results included areas where statistically significant differences were found for all comparisons ($p < 0.5$). In speaking, reading and writing proficient Asian participants in control group scored lower mean scores than those trained in other modes such as synchronous, asynchronous, and hybrid. This indicates that although the control group was engaged in speaking, reading and writing practice, they did poorly in all those activities in comparison to participants who were taught in other ways. The distinction was especially evident within the hybrid group, which not only reported a greater number of contacts but also achieved higher average scores on most dependent variables. This indicates that performance levels were superior in comparison to other instructional methods. It appears that performance levels are significantly influenced by the various instructional modes employed in teaching, with the hybrid mode demonstrating the most effectiveness in enhancing performance across different domains.

Discussion

A thorough examination of the impacts of synchronous, asynchronous, and hybrid teaching methodologies on the language proficiency of English as a Foreign Language (EFL) students revealed noteworthy outcomes. The results highlighted the comparative advantages of the hybrid instructional model, which outperformed the solely synchronous approach, while the latter was found to be more effective than the conventional face-to-face teaching method in facilitating language acquisition.

In particular, language learning outcomes showed significant improvement in all instructional delivery modes.

These findings align with earlier studies that highlight the significance of instructional methods in enhancing students' language acquisition. Consequently, So and Bonk (2010) advocate for a hybrid learning model that allows students to benefit from both synchronous and asynchronous learning approaches, thereby accommodating diverse learning preferences. Additionally, the asynchronous elements of this model permit learners to engage with course materials at their own pace, reducing the need for constant supervision (AbuSeileek & Qatawneh, 2013). Furthermore, research by Cao et al. (2009) and Park & Bonk (2007) emphasizes the critical role of synchronous interactions in language learning, particularly in facilitating ongoing feedback and active participation, which these strategies aim to promote. This dual interaction framework fosters engagement and promotes self-directed learning, as observed by Murphy et al. (2011) and Huang & Hsiao (2012).

The increased efficacy of synchronous learning, in contrast to traditional face-to-face instruction, may be attributed to the unique benefits offered by online environments, particularly in fostering advanced cognitive processes such as deep learning and critical thinking (Murphy et al., 2011; Huang & Hsiao, 2012; Wang et al., 2018).

Synchronous virtual classrooms include different tools and features that promote interactions and reduce the effects of cultural distances, thus improving the overall learning process (Martin et al., 2012; LaPointe et al., 2004; Işık, 2023). The provision of instant feedback and encouragement of communication in the interplay of learners is an intrinsic attribute of learning through the synchronous mode and is proven effective in enhancing language achievement (Cao et al., 2009; Park & Bonk, 2007).

While the findings reconfirm the advantages of the online learning modes, it indicates the need to appreciate the diversity in language learning outcomes. However, while the achievement levels improved in all modes of instruction, the hybrid approach was the most effective one. This calls for a well-structured and balanced approach to language education where the psychological wellbeing of the learner is given the same weight as academic achievement. To sum up, in the light of this research, it is clear that all three modes of delivery, namely, synchronous, asynchronous and hybrid can dramatically enhance EFL teaching. In this way, using the advantages of the online learning components of instruction, teachers are able to offer students quality language skills development programs that take care of other factors apart from just learning the language. Nevertheless, there is the need for more investigation to assess the ways in which various

modalities of different instructions can affect language acquisition practices in teaching and learning over time.

Conclusions and Implications

To sum up, the results of this research demonstrate the transformative possibilities that synchronous, asynchronous, and hybrid teaching methods offer in the field of EFL. The finding which emphasizes that hybrid approach is more effective than the rest in improving language performance indicates the necessity of using different teaching methods to design a conducive and productive learning atmosphere. The hybrid method incorporates the advantages of both teaching learning processes thus providing a unique, flexible, and suitable environment that is able to address the varying learning preferences and differences because it has the two learning processes. Such climate encourages participation, self-directed learning as well as interaction between students, instructors, and colleagues. Furthermore, the hybrid model promotes learning by mixing both online and contact classes ensuring that learning processes do not overlap.

The ramifications of these results are present both in the use of the results and the policy formulation. The findings of this research may assist educators in identifying the most effective strategies for developing hybrid learning environments that prioritize the academic success of EFL learners.

With the understanding of how to design, coordinate and integrate different learning activities without sacrificing structure, focus will include incorporation of flexibility, independence and interaction in such a way as to provide an effective and interesting environment enhancing language learning. Additionally, policymakers and educational authorities will be able to utilize these findings when thinking of curriculum development, resource provision systems, and training activities for the improvement of EFL education. In summary, the findings and conclusions that emerged from this investigation are relevant to the planning and implementation of any EFL programs in a variety of education systems, and finally their usage enhances the language learning and teaching processes.

Limitations

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strategies for developing hybrid learning environments that prioritize the academic success of EFL learners.

With the understanding of how to design, coordinate and integrate different learning activities without sacrificing structure, focus will include incorporation of flexibility, independence and interaction in such a way as to provide an effective and interesting environment enhancing language learning. Additionally, policymakers and educational authorities will be able to utilize these findings when thinking of curriculum development, resource provision systems, and training activities for the improvement of EFL education. In summary, the findings and conclusions that emerged from this investigation are relevant to the planning and implementation of any EFL programs in a variety of education systems, and finally their usage enhances the language learning and teaching processes.

Suggestions for Further Studies

Future research should encompass longitudinal studies examining synchronous, asynchronous, and blended learning modalities, as well as their impact on the academic performance and motivation of English as a Foreign Language (EFL) learners overall.

Examining similar studies with larger and more heterogeneous samples, for example children, adolescents and adults, that cut across age, proficiency and culture will improve the scope of the results. Also, it would be interesting to look at how each of the learning models will take into consideration technology and support that exists to solve such issues that are available, with specific reference to access and digital divide issues. In addition to self-report data, more objective measures such as learning analytics could provide a truer measure of engagement, motivation, and achievement. It would also be worthwhile to analyze the effect implementation of different learning models structure content for different learners' learning and such factors as institutional policy, culture or course content. The focus on learning skills, adapting faculty to online teaching mode and the impact of specific instructor training programs on the efficiency of different learning strategies could bring some benefits. Meta-analytic investigations are called for within settings and subjects in which the stated effects have been observed to ascertain whether these effects are generalizable. We recommend conducting research on the relationship between the engagement and achievement of EFL learners and the utilization of specific interactive and collaborative tools within both synchronous and asynchronous learning contexts.

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