A Comparative Study to Check Students' Linguistics Achievement in Face-to-Face and Online Learning at BS Level

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ABSTRACT

This study aimed was to conduct a comparative analysis of the linguistic achievement of students in traditional learning (face to face) and virtual learning (online) at the BS level. It was hypothesiszed that there is likeliy to be a difference in studnets linguistics achievement in face- to- face (traditional) and online learning (virtual). The final term papers of students in both modes of learning are examined to find out the most common errors that pupils make. Due to the sudden outbreak of Covid-19, there has come an obvious transition in the patterns of teaching and learning. With this pandemic and its subsequent lockdowns, as well as isolated contact, e-learning has become a fundamental tool in ensuring continuity of education. This revolution to the online system has urged the researcher to analyze the linguistic achievement of students by comparing face to face and online learning. This study is based on comparative analysis and the data for this present study is collected from 120 students, 60 from face to face classes, and 60 from online classes. The analysis is done on the overall marks obtained by students to see the difference in achievements as well as the errors in writing in the face to face and online learning. The findings of the results showed significant difference in both types of learning. After evaluating the results, it is recommended that there is a dire need for the development of online training programs for both teachers as well as students. This research concludes that the learning outcomes of students are much better in the face to face setting as compared to online learning.

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1.   Introduction

The advancement in the field of information technology has made the online education a landmark success as it continues to grow and evolve dramatically. The whole world was struck by the unexpected epidemic of COVID-19 which resulted in the closing of all public places and educational institutions. With this epidemic and its subsequent lockdowns, as well as isolated contact, E-learning has evolved into the ideal instrument for assuring educational and learning continuity. The closings of schools impacted over a quarter of the world's student population. According to the report of UNESCO, the peak of school closures was recorded in early April 2020, when an estimate of 1.6 billion pupils in 194 countries were influenced (Saville, Leaton Gray, Perryman, & Hargreaves, 2024). Comparative research on learning outcomes of face to face and distance teaching has a long history. Students have rated the online domain as a superior mode of learning because it offered them a convenient pattern of learning but on the same note, online learning had negatively influenced the grasping capability of learners (Alabdulaziz & Tayfour, 2023). However, some researchers still argue that there is a vast gap between the qualities of education in both methods. There should be a properly formatted

context developed in the classroom which can enhance the active learning amongst students (Freeman et al., 2014).

This general shift to online teaching and learning made it necessary to have the comparative study in order to gauge the learning achievement of students. Comparative research on learning outcomes of face-to-face and distance teaching has a long history and dates back to the 1920s. A meta-analysis accompanied by the United States Department of Education (2010) established that when utilized alone, on-line learning is similarly effective as old-fashioned classroom training, but not more so. The predominant consent is that on-line education is substandard to traditional face-to-face teaching (Paul & Jefferson, 2019). Catering to the potential pedagogical benefits of e-learning, there is an urgent need to develop an evidence-based understanding of the best application in this area. This study will focus, more specifically, on the detailed comparison of Linguistics Achievements in online and face to face Learning. Proficiency is the skill to use language in a real-life situation whereas Achievement is the capacity evolving aptitude to repeat the recognized language elements, acquired, learned, and reinforced at some level. The significant aspect which is to be measured by this research is the linguistic achievement of students at BS level in terms of the distinguished varieties of errors committed in their written exam.

This study will focus, more specifically, on the detailed comparison of Linguistics achievements in operational and on campus Learning. The capability to use language in a real-life setting is referred to as proficiency whereas Achievement is the ability to repeat the recognized language elements, learned and mastered at some level. Both have a role to play in language learning. The focus of this study is on students' linguistic achievement at the BS level, when it comes to measure their writing skill's development. Error analysis and contrastive analysis both have become one of the most fascinating contests and key subjects in the study of Second Language Acquisition. According to studies on the speech and writing of adults learning a second language, the majority of errors made by understudies are inter-lingual errors, (Ismail, Bhatti, Sarfraz, Abid, & Najam, 2022). It indicates that students often experience a gap between their first language (L1) and target language (L2). In order to fully comprehend error analysis, the idea of contrastive analysis must be addressed. Both error and contrastive analysis are portions of Applied Linguistic Science The most important discoveries of this analysis is that that many students' errors are done because of their erroneous conclusions about the rules of the new language. Error Analysis offers suggestion for a much more composite view of the learning procedure, in which the learner is perceived as an energetic participant in developing and reviewing assumptions about the guidelines of the target language, and it concentrates on intralingual errors rather than interlingual errors, as contrastive analysis does. Khansir (2012) pointed out that the involvement persuaded by structural differences between the learner's mother tongue and the second language is one of the most crucial concerns in second language learning.

Present study tends to speculate both learning domains in depth and identify which system has led to more learning among students. Although it seems that online education has many advantages over traditional learning, it still has its pitfalls which are, according to some researchers, inadequate quality content and curriculum. Others argue that there is no discernible modification in the results of virtual learning and on campus encounters. Present study aims to find out Linguistic achievement in online and traditional learning by analyzing their written papers and to check the frequency of errors.

1.1. Hypothesis
- There is likeliy to be a difference in studnets linguistics achievement in face- to- face (traditional) and online learning (virtual).

1.2. Significance of The Study
The present study will provide a full description of how to recognize the perfect learning form either face-to-face or online. We can have a clear view of the linguistic achievement of students. This research will justify the fact that which learning pattern is more successful in reducing errors among students' written papers. It will also present the comparative analysis of linguistics errors, it will tell which domain of learning is more fruitful or impactful for the students. In terms of linguistic accomplishment, there will be eight types of errors:

subject+verb+ agreement, incorrect use of preposition, word order, singular plural forms, mishandling of definite and indefinite articles, punctuation, capitalization and wrong spellings. The outcomes of this study offer feedback for English teachers that may be convenient in diagnosing students' writing problems so that they may give greater consideration to the mistakes that students do and the reasons of those mistakes. The study's findings will help them consider whether or not they are fruitful in teaching English.

1.3.   Materials and Methods
1.3.1. Reserch design
The aim of the research is just to quantify the mistake and errors in both face to face written exam and online written exams of students. This research is Descriptive research in nature under which a causal comparative analysis is done. This study is a descriptive study that employs a quantitative approach.

1.3.2. Sampling and Data collection
The random sampling technique was implemented to collect the data. 60 written papers of students from on-line learning were taken as a sample of the study and 50 written papers from face-to-face learning were taken as a sample for study to find out the types of errors and to check the frequency of those errors. Particpants wereFemale students of age 19 to 21 years studying in BS 3nd semester of 3 integrated colleges under the name of Fazaia College of Education where the same course approved by the Academic Council is taught to students, a standardized paper is designed for grading or marking of these papers. in the study from three colleges of Lahore.

1.3.2. Measures
The research instrument used for this study was a question paper. The question paper was of 45 marks, divided into three sections i.e. part one was based on Objective Type (MCQ's), part two & three of the question paper was based on Subjective Type (short questions & long question). According to Bogdan and Biklen (1982:27), "the researcher himself/herself is the essential instrument in exploration." The researcher used the following mechanism to conduct the study:

i.   Document
"Documents are a readily obtainable and reachable source of data that aids researchers correspond to other observations by constructing a richer outline of the classroom or institutional framework for the research," writes Burns (1999:140). The researcher gathered data from students of the BS department, 3rd semester (face to face & online) who had done their final examination papers for this study. It is carried out to decide how fine pupils accomplished on their written exams.

ii.   Checklist/Ruberics
'A checklist is a helping tool to direct opinion that lists items to be given attention,' Hopkins (1976: 271). The researcher used a checklist to detect grammatical faults in writing and the source of problems after documenting students' writing papers. This checklist marks each item's presence, absence, or frequency of occurrence. After that, the written (solved) paper online and face-to-face learning were marked manually by the researcher and identified the common mistakes/errors done by students in both learning domains. The data was collected by the researcher in the form of written answer books/copies of the final examination of Fazaia Colleges of Education for Women. The goal of offering this course to students is to develop their writing skills in the English language...To obtain the information concerning common errors made by students, 60, 60 copies of final term examination papers (online & face to face) were collected and marked by research according to the set rubric.

1.4.   Data Analysis
The students' written papers were checked and marked by the researcher manually using a specific rubric for assessing students' written papers (Final Term Examination) and identifying the common errors committed by students. All of the collected errors were analyzed and labeled according to their types, frequency, percentage and rank. Additionally, examples of common errors committed by students were figured out. The grammatical errors done by third semester pupils in their writing test offered the data for this research. The researcher took the

students' writing test papers and methodically documented and read them. The next stage was to categorize and scrutinize the data that had been collected. The steps for distinguishing and measuring grammatical errors in writing are as checked. The practical analysis of Ellis (1994) of Error Analysis is followed in the study. The process has the following steps:

1. Recognize the errors that are existing in each word, phrase, and sentence.
2. Sort the data into categories.
3. Interpret and illustrate the data that has been scientifically considered.
4. Analyze the data to decide the foundations and reasons of their errors. (Article, preposition, noun, subject verb agreement, punctuation)

The answer copies of all participants (face to face & online) were gathered, and the errors committed by EIL students in their written work were identified, categorized, explained, and evaluated using the four stages sketched above. In the final examination, the students' errors were detected and classified. In addition, the final component of this error analysis study is to evaluate and develop conclusions based on the collected data so that the various errors in writing may be weighted to determine which ones should be taught in class.

2. Method Used for Analysis
Khanom (2014) offered the following measures error analysis process:

Paired sample t test is used for the analysis of the data.
i. Collection of samples from learners
ii. Identification of mistakes in students work
iii. Description of errors and its categories
iv. Explanation of different errors
v. Evaluation of errors of students

2.1. Coding Scheme of the study
Study employ following coding scheme for analysis

Table 1

face-to- face/online	Categories	coding scheme
Objective	"below average"(1-3)	1
	"average"(4-6)	2
	" above average" (7-10)	3
Short questions	"below average"(1-5)	1
	"average"(6-10)	2
	" above average" (11-15)	3
Long question	"below average"(1-5)	1
	"average"(6-10)	2
	" above average" (11-15)	3

2.2. Analysis Of Errors Found In Written Papers (Face To Face & Online)
At the third step another analysis was made on the mistakes of students in their written papers. First the errors were identified in both domains, then calculated and finally each category was compared using paired sample t test to find out in which domain the students had done more mistakes either in their face to face attempt or in online attempt.

3. Result
Table 2: Frequency and percentage of student's linguistic achievemt in the linguistic achievement of students in face to face learning

Face-to-face (objective)	Objective question		Short question		Long question	
	frequency	percentage	frequency	percentage	frequency	percentage
Below average	17	34%	6	12%	7	14%
Average	29	58%	36	72%	26	52%
Above average	4	8%	8	16%	17	34%
	50	100%	50	100%	50	100%

In the table (1) the linguistic achievemt of students have been analyzed by checking the frequency of their written errors in the final term examination in objective, short questions and long questions sections. In face to face analysis of objective portion, out of 50 papers the

"below average" responses were 17 that was about 34%. Similarly the "average" responses were 29, about 58% and the rest of others "above average" responses were 4 that was 8%. It means the average ratio of linguistic achievenment of students in face to face learning is moderateNow, in short questions section, out of 50 papers the "below average" responses were 6 that was about 12%. Similarly the "average" responses were 36, about 72% and the rest of others "above average" responses were 8 that was 16%. It means that pupils in face-to-face learning have a moderate written achievement ratio. They gained good concept to attempt the papers because in face to face learning the teacher's guidance and assistence is available to them. Further, in long questions part, out of 50 papers the "below average" responses were 7 that was about 14%. Similarly the "average" responses were 26, about 52% and the rest of others "above average" responses were 17 that was 34%. They obtained an excellent understanding of how to attempt the papers in term of sentence structure, introduction, mainbody and conclusion and also the maintain coherancy in presenting ideas.

Table 2: Frequency and percentage of student's linguistic achievemt in the linguistic achievement of students in online learning

Face-to-face (objective)	Objective question		Short question		Long question	
	frequency	percentage	frequency	percentage	frequency	percentage
Below average	43	78%	34	68%	27	54%
Average	11	20%	16	32%	22	44%
Above average	01	02%	0	0	01	02%
	50	100%	50	100%	50	100%

In these tables (2) the linguistic achievemt of students in online learning have been analyzed by checking the frequency of their written errors in the final term examination in objective, short questions and long questions sections. In online analysis of objective portion, out of 50 papers the "below average" responses were 39 that was about 78%. Similarly the "average" responses were 10, about 20% and the rest of others "above average" responses were 1 that was 2%. It means that the ratio of linguistic achievement of students in online learning is below average. Now, in short questions section, out of 50 papers the "below average" responses were 34 that was about 68%. Similarly the "average" responses were 16, about 32% and there was 0% "above average" response. It means that pupils in online learning havenot clear understanding of the content taught that's why there written achievement ratio is also below average which was considered poor indeed. They were failed to gain the concept in deeper sense to attempt the papers because in online learning although teacher's guidance and assistence is available to them but other factors also involved in poor learning such as: electricity issue, non-availablity of internet in far off places and weak signal strength etc. Furthermore, in long questions part, out of 50 papers the "below average" responses were 27 that was about 54%. Similarly the "average" responses were 22, about 44% and the rest of others "above average" response was 1 that was 2%. They were unable to obtain an excellent gist of attempting the papers in term of sentence structure, poor grammatical errors, wrong placement of articles, punctuation and to maintain coherancy in presenting ideas.

Table 3: Difference in linguistic achievemt in objective question portion between face to face and online learning

	Online		Face to face			95 % CI for mean difference				Df	Sig.
	M	SD	M	SD	N		r	t			
Objective	3.27	1.33	4.55	1.64	60	-1.87,-.69	-1.60	-4.36***		59	0.00

Note. *p<0.05, **p<0.01, ***p<.001

Table 3 shows statistically significant difference. Result showed that there were significant mean differences found in their final term examination in online objective (*M*=3.27) as compare to face to face objective (*M*=4.55). Students' linguistic performance was better in face to face learning as compare to online learning in objective portion. Learning style reports to how a student notices, relates with, and answers to the learning background. Results depict that mode of learning had an impact on students' results, this might be due to the fact that some student's enthusiasm was damaged by the teacher's physical nonappearance.

Table 4: Difference in linguistic achievement in short question portion between online and face to face learning

	Online		Face to face			95 % CI for mean difference				
	M	**SD**	**M**	**SD**	**n**		**r**	**t**	**df**	**Sig.**
Short online- short F to F	6.63	2.33	8.43	1.94	60	-2.51,-1.08	-1.60	-5.00***	59	0.00

Note. *p<0.05, **p<0.01, ***p<.001

Table 4 shows statistically significant difference. Result showed that there were significant mean differences found in their final term examination in online short question (*M*=6.63) as compare to face to face short question (*M*=8.43). Student's linguistic performance was better in face-to-face learning as compare to online learning in short questions portions. The results show that the manner of learning had a significant impact on students' grades; this could be because some students' learning online was harmed by the teacher's physical absence.

Table 5: Difference in linguistic achievement in long questions section between online and face to face learning

	Online		Face to face			95 % CI for mean difference				
	M	**SD**	**M**	**SD**	**n**		**r**	**T**	**Df**	**Sig.**
Long online- long F to F	7.30	2.51	8.88	2.10	60	-2.45,-.70	-.06	-3.62***	59	0.00

Note. *p<0.05, **p<0.01, ***p<.001

Table 5 shows statistically significant difference and the result showed that there were significant mean differences found in their final term examination in on-line long question (*M*=7.30) as compare to face-to-face long question (*M*=8.88). Students' linguistic performance was better in face-to-face learning as compare to on-line learning in long question sections. The results also indicate that students have the teacher's assistance in their learnings. Results indicate that mode of learning through face to face had an impact on their written results.

4. Discussion

This research domain is a clear indication of the deep inclination in terms of linguistic achievement among students at BS level. The consequences of online learning will become more obvious after this research. It is a foregrounded highlighter in the domain of research in accordance with contemporary genre of online learning. It will justify the clash among both sorts of teaching/learning patterns. The study of errors made by EIL students in their final term papers' writing reveal how students' academic language proficiency reflects crucial concerns in academic writing, such as their writing difficulties and development in thoughtful various academic English abilities STKIP (2022) established the categories of error analysis (interlingual, intralingual, and developmental errors). It is the need of this time to measure both teaching patterns in order to make them more authentic, understandable and successful. This study investigated the linguistic achievement in terms of their writing in online and face to face learning among students. Hopefully, this study has contributed to giving future English teachers a general concept of the most common grammatical errors made by students of BS-Level, as well as broadening their viewpoint on how to deal with these errors and how to teach grammar in the classroom to overcome these errors from the writing of students. Following the discovery of errors in students' writing at BS levels (face to face and online), the researcher came to the conclusion that there is a significant difference between online and face to face learning because the finding of the result show that students have done more errors in their writing in online papers as compare to face to face learning.

5. Conclusion

The studies concluded that the majority of the errors made by participants in the face to face and online learning are grammatical in nature. The students have a limited vocabulary and

their words are sometimes understandable. They have made mistakes when it came to putting on English sentence structure standards. As a result, we can presume that these participants have trouble learning basic English grammar principles.

5.1. Suggestion for future research

Based on the present study some future recommendations for future researches are that as current study included 120 participants from online and face to face learning, so it is suggested to work with a larger population to further investigate and enhance the generalization of the study. Further there is a need to study on linguistic achievement of male students as well since the present study was conducted with female students only, so the representation of the male population was lacking. Hence, it is suggested that further research should be conducted with male students as well.. Moreover, current study was conducted with the linguistic ability of 3rd-semester students only, hence future scholars should investigate the linguistic achievement of graduate and postgraduate students as well, to get a more in-depth analysis of students' linguistic performance.

5.2. Recommendations

It is recommended that on government level lecturers must be given training of conducting and handling online sessions successfully by creating real classroom enviornment for teaching English Language courses to avoid mistake and errors from their writing. Morover, the mechnism of online learning and teaching should be modernized that facilitate students so that they can participate fully equipped themselves with the latest knowledge of English grammar. Furthermore, faculty should be encouraged to streamline classroom-based courses for the online setting by institutions that offer online courses. In face to face learning the cramming system should be minimized and students must be motivated to be creative in their ideas.

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