

Enhancement of Learners' Attentiveness in ESL Classroom with CGW Using Web 2.0 Tools: An Intervention Study

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Received: February 4, 2024

Accepted: March 30, 2024

Online Published: April 26, 2024

doi:10.5430/wjel.v14n3p529

URL: <https://doi.org/10.5430/wjel.v14n3p529>

Abstract

Students' attentiveness in the classroom especially in ESL classrooms is an inevitable alignment of effective learning as well as teaching English as a second language. However, students are erratic in their attendance, and even when they do show up, they lack their attentiveness and are not focused on the lessons taught in the classroom. As a result, their ability to learn is being hindered more than ever. This is a significant issue in teaching and learning in tertiary-level education at most colleges and universities around the world. The research aims at reducing the lack of learners' attention to learning in ESL classrooms and enhancing students' attentiveness through the intervention of collaborative group work (CGW). The study was conducted in a mixed method that included a questionnaire survey, observation and some previous relevant Content Analysis (CA). The settings of the research were the departments of English of a College of the National University in Bangladesh and three colleges of the King Khalid University in Saudi Arabia. The study found that before an intervention, 62.75% of students were not paying attention, while only 31.75% were paying attention in their ESL classroom. But after the intervention, 63.50% of ESL students were more attentive, while 32.50% were no longer attentive. This indicated a significant change. So, the study successfully proved that if the collaborative group work (CGW) using web 2.0 tools were well performed among the students in the ESL classroom, the present and future learners could be capable of enhancing their attentiveness in the classroom and flexibly learning English as a Second Language than before.

Keywords: Collaborative Group Work, Web 2.0 Tools, ESL Classroom, Students' Attentiveness

1. Introduction

From the perspective of English as a Second Language (ESL) speaking countries, ESL classroom is a very common and large classroom where management is not easy (Chang, 2023). Sometimes, teachers cannot make their class interesting to the students as English is not their mother tongue. So, the students often feel inactive and bored, and thus they lose their attentiveness in their ESL classroom (Jian, et.al, 2023). Collaborative group work has been studied extensively in higher education and has shown the potential to enhance learning and engagement (Jade, et.al, 2023). However, the effectiveness of collaborative group work in increasing learners' attention in the classroom is noteworthy in (Montagud, et.al, 2022) its impact on teamwork skills and self-evaluative judgement skills (Allison, 2020), its use in university classrooms (Shen Ba, et.al, 2017), and its role in promoting students' learning performance (Roldsgaard, et.al, 2014). While these abstracts provide valuable insights into the benefits and challenges of collaborative group work, they do not specifically address its impact on learners' attention in the classroom. Further research or additional abstracts may be needed to provide a more comprehensive answer to the question.

Teachers can use web 2.0 tools to support collaborative group work in English classrooms by utilizing platforms such as WhatsApp group, Messenger group, Telegram, Edmodo, BBC Learning English, Youglish, YouTube, Padlet, Kahoot, TED Talks, VOA, Duolingo, Vo-screen, and Edmodo. These tools provide opportunities for students to engage in online writing activities and receive feedback from their teachers promptly (Purwaningtyas, et.al, 2023). Additionally, web 2.0 tools can enhance communication, interaction, and motivation among students, leading to increased participation and collaboration (Zeliha, et.al, 2023). The use of digital tools in language teaching can also deepen students' understanding of the subject matter and facilitate their overall academic performance (Moorhouse, B.L, et.al, 2023). By incorporating Web 2.0 tools into their teaching practices, teachers can create compelling blended learning environments that promote collaborative learning and the development of speaking skills (Elverici, 2022). Overall, the integration of Web 2.0 tools in English classrooms can support active learning, foster collaboration, and enhance students' language skills.

1.1 Problem Statement

After the COVID-19 pandemic's prolonged shutdown, students are in the habit of being irregular in their attendance, and even when they do show up, they are not attentive to the lessons taught in the classroom (Zelníčková, et.al, 2023). Since English is a second language in Bangladesh and Saudi Arabia, students have to be more attentive in ESL classes than in other subjects (Deen, 2023). As a result, their ability to learn is being hindered more than ever (Kao, 2023). This is a significant issue in teaching and learning at many colleges and Universities around the world (Hull, 2022). Therefore, it is crucial to find a solution, and this study is crucial in doing so. This issue hurts the proper learning system since teaching and learning are not successful when students are uninterested in or inattentive to what they are being taught by their teachers.

In ESL classrooms, learners' inattentiveness can harm their performance and engagement (Yang, et.al, 2021). Research has shown that learners who are not fully engaged in the classroom may exhibit misbehaviours and have lower achievement levels (Akhand, 2023). Factors such as the use of demotivational language by teachers can also contribute to learners' lack of motivation and disengagement (Akram, et.al, 2021). Additionally, the increased screen time and reliance on electronic materials in online learning environments can lead to surface reading and attention deficiencies, resulting in poor comprehension (Sarwar, 2021). Teachers' feedback remarks can also play a role in learners' detachment and sense of alienation, leading to lower performance in ESL classrooms (Misbah, et.al, 2020). Therefore, teachers need to create a positive and engaging classroom environment, use motivating strategies, and provide constructive feedback to address learners' inattentiveness and promote their active participation in the learning process.

Besides, the instructional problem was also investigated and proved by many previous and existing relevant literature. Some evidence from literature may be considered in this respect. Many studies believed that the students' concentration issues throughout the classes were more a result of the students themselves. The students and teachers concurred that their failure to fulfil their academic obligations had a detrimental impact on their attention. (Cicekci, 2019). Students' comprehension and memory skills indicate their capacity to pay attention in class and their academic performance, two factors that are connected. Nearly all instructors demand that their pupils pay close attention to the material being taught. According to teachers, paying close attention to what they say will help pupils understand the teachings and ideas more thoroughly and will save them time when it comes time to review what they have learned (Balushi, 2015).

Although issues with student behaviour have long been a source of worry for educators, administrators, and parents, several studies show that these issues are increasing rather than diminishing in many schools throughout the world. (Tarman, 2016). Attention Deficit Hyperactivity Illness (ADHD), a prevalent behavioural disorder that prevents students from developing appropriate social behaviour and academic accomplishment, has been the subject of several research published recently (Kulkarni 2015). In reality, 6.4 million children in the US received an ADHD diagnosis in 2011, according to the Centres for Disease Control and Prevention (2017a). (Alsalamah, 2017).

There is a growing corpus of research showing a connection between ADHD's inattentive symptoms and subpar academic performance. Conclusions concerning this association are complicated by significant variance among research. (Gray, 2017). So, it was obvious that students' inattentiveness was a major problem for appropriate learning and it was then affecting teaching and learning very tremendously in the classroom of colleges.

1.2 Objectives

The study aimed at detecting in-college problems and solving them through an intervention because research can be either observational or interventional (Thiese, 2014). The instructional issue of the study was the students' lack of attentiveness in classroom learning. So, they fell behind in assessment and evaluation due to their lack of focus during class, which interfered with their ability to receive a quality education (Jeekim, et.al, 2021). The authors wanted to find out the issue and intended to solve the problem by practising CGW using web: 20 tools to make the learners more attentive in ESL classrooms. Besides, the objectives of the manuscript are given below:

1. Identifying students' inattentiveness among the undergraduate students in the ESL classroom of the respective colleges.
2. Encouraging to practice CGW in the ESL classroom to enhance attentiveness among the undergraduate students of the respective colleges.
3. Advocating to practice CGW using web 2.0 tools in the ESL classroom to develop attentiveness among the undergraduate students of the respective colleges.

1.3 Research Questions

After identifying the problem, the authors aimed to solve the problem by enhancing students' attentiveness in classroom learning through a fruitful intervention. For this reason, the authors also hankered after the accurate answers to the following research questions to draw an authentic solution:

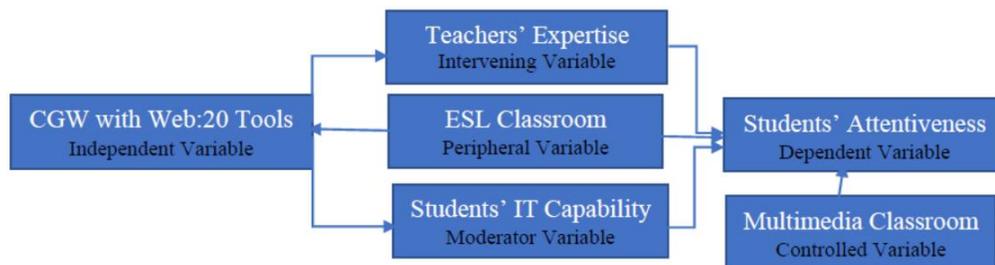
1. Do you feel inattentiveness among the undergraduate students in the ESL classroom of your colleges?
2. Are you encouraged to practice CGW in the ESL classroom to enhance attentiveness among the undergraduate students of your colleges?
3. Do you believe that the practices of CGW using web 2.0 tools in the ESL classroom develop attentiveness among the undergraduate students of your colleges?

1.4 Research Hypotheses

The authors also cordially expected to find out the solutions they hypothesised that the scenario of students’ attentiveness in the classroom is very crucial and the lack of students’ attentiveness in the classroom is a great problem among undergraduate students in their colleges. Besides, as the team usually feels the lack of students’ attentiveness, they primarily expected to make their learners engaged in collaborative group work (CGW) in the classroom to enhance their attentiveness in the classroom of their colleges.

1. If the teachers keenly observed their students’ activities and ways of behaviour in the ESL classroom, they would find inattentiveness among the undergraduate students of the colleges
2. If the practice of CGW in the ESL classroom was performed, the attentiveness among the undergraduate students would be enhanced than before.
3. If the practice of CGW using web 2.0 tools in the ESL classroom was conducted, the attentiveness among the undergraduate students would be developed than before.

1.5 Conceptual Framework



1.6 Theoretical Framework

According to the Collaborative Learning Theory, learning occurs when a group (or groups) of people cooperate to solve an issue, finish a task, produce a product, or exchange ideas. Lev Vygotsky’s (1934) social development theory and zone of proximal development, which emphasized the value of social contact and communication in learning, are the foundations of this theory. The Classroom Consensus Group approach was first proposed by Kenneth Bruffee in 1972. Under this method, students are divided into groups by the teacher and given issues or questions to work through collectively.

Null Hypothesis: The practices of CGW using web 2.0 tools in the ESL classroom do not enhance the attentiveness among the undergraduate students.

Alternative Hypothesis: The 21st-century era is best considered as the era of modern technology which has already made people especially teachers and learners addicted to technological devices like computers, laptops, android mobile phones, tabs etc. As the learners of this age are in the habit of using those devices, the teachers can practice CGW using web 2.0 tools to enhance 21st-century students’ attentiveness in the ESL classroom.

1.7 Outcomes

The outcome of the research was that students were not attentive to their ESL classroom learning. Besides, implementing Collaborative Group Work (CGW) using web 2.0 tools in the classroom could enhance learners’ attention in classroom learning than before.

2. Literature Review

2.1 Significance of Students’ Engagement in Classroom

Student engagement in ESL classrooms is of great significance. It helps to keep students involved and motivated in classroom tasks, leading to positive outcomes such as improved task retention, teamwork promotion, and increased motivation (John, et.al, 2023). However, various factors can impede students’ engagement, such as poorly managed classrooms, language anxiety, and lack of vocabulary (Musabal, et.al, 2023). To address this issue, cooperative learning strategies have been found to enhance students’ engagement in large ESL classes, leading to improved behavioural, cognitive, and emotional engagement (Panhwar, et.al, 2022). Additionally, the use of online learning platforms can also contribute to students’ engagement, particularly in terms of behavioural engagement, although cognitive and emotional engagement may not be as positive in some aspects (Sholikhah, et.al, 2022). Overall, student engagement is crucial in ESL classrooms as it contributes to their overall learning experience and prepares them for the demands of the 21st century.

2.2 ESL Classroom Management

Effective strategies for classroom management that promote student engagement include utilizing effective seating arrangements, fostering student engagement, and encouraging participation (Yasin, et.al, 2022). Seating arrangements can be optimized by using u-shaped, group, or orderly row configurations (Muir, et.al, 2022). Student engagement can be enhanced through various approaches such as cognitive, behavioural, academic, emotional, social, intellectual, physiological, affective, and relational engagement (Lohmann, et.al, 2022). Encouraging participation involves promoting different types of classroom talk, including classroom talk, teacher talk, collaborative talk, exploratory talk, disputation talk, and learner-managed talk (Chang Xu, et.al, 2023). Additionally, interactive online pedagogies can be used

to engage students in online learning environments, with a focus on the interaction between learners and content (Smith, et.al, 2023). Discussion boards can be utilized in asynchronous online courses to support teacher candidates in learning classroom management skills, using formats such as sharing products, video-based discussions, jigsaw discussions, and debates. Overall, these strategies aim to create a conducive learning environment and increase student engagement in both traditional and online classrooms.

2.3 Indicators of ESL Students' Attentiveness

ESL students' attentiveness can be indicated by their self-efficacy beliefs, anxiety levels, and engagement in the classroom. Students who have high self-efficacy beliefs in speaking and writing tend to be more attentive and perform better in these language skills (Echiverri, et.al, 2022). Conversely, students who experience anxiety in speaking and writing may struggle with attentiveness and performance in these areas (Anudin, et.al, 2022). Additionally, student engagement, particularly affective engagement, is a strong indicator of attentiveness in the ESL classroom (Odiaka, 2020). When students are actively engaged in the learning process, they are more likely to pay attention, participate, and perform well in their language learning (Nazamud-din, et.al, 2020). Therefore, self-efficacy beliefs, anxiety levels, and engagement are important indicators of ESL students' attentiveness.

2.4 Using CGW to Engage Learners in ESL Classroom

Collaborative group work is effective in engaging students in ESL classrooms. It promotes socialization, improves oral presentation skills, builds self-confidence, and enhances teamwork (Grace John, et.al, 2023). Implementing collaborative learning in EFL classrooms can have positive outcomes, such as increased motivation, task retention, and teamwork promotion (Abulhassan, et.al, 2021). However, teachers may face challenges in assessing students' collaborative work and organizing the activities (Novita, et.al, 2020). Malaysian ESL teachers have implemented collaborative learning by assigning learners roles, using teaching aids, and evaluating the learning process and products (Athirah, et.al, 2020). University students in EFL classrooms have shown positive responses to the use of learning communities through cooperative learning as it facilitates learning and improves vocabulary (La Sunra, et.al, 2021).

2.5 Web: 20 Tools Used in ESL Classroom to Engage Learners

Teachers can effectively integrate Web 2.0 tools into their ESL classrooms by utilizing digital tools and platforms to deliver language development tasks that promote the development of competencies and character qualities in students (Khan, et.al, 2022). Participating in communication, collaboration, critical thinking, and creativity activities mediated through Web 2.0 tools can facilitate the acquisition of character qualities like curiosity, persistence, adaptability, social and cultural awareness, etc. (Jose, 2021.). Web 2.0 technologies offer interactive learning environments that can be used by instructors to promote distance and collaborative learning without requiring advanced technical knowledge (Krouska, et.al, 2021). Teachers quickly become familiar with Web 2.0 technologies and find the capabilities of these applications very useful in the learning process (Alkhatay, 2023). Additionally, incorporating technology such as smart board computers, tablets, and computers can enhance ESL teaching by providing numerous techniques, increasing student independence, and receiving positive feedback from teachers, parents, and students (Angouti, et.al, 2019).

Many researchers studied this issue around the world. They only proved that CGW practice among learners can enhance learners' attentiveness in ESL classrooms. However, the research gap in the existing knowledge cited in the introduction and the literature review of this study was that most of the researchers highlighted separately CGW and web 2.0 tools that enhance students' attentiveness. But this study intermingled CGW and web 2.0 tools and proved that the practice of CGW using web 2.0 tools more enhanced learners' attention in the ESL classroom than only practicing CGW.

3. Research Method

This is an inevitable section that synthesizes types of research methods, data collection instruments, reasons for applying these instruments, participants and settings, procedures of data collection and procedures of data analysis to draw a solution to the research problem. They are ornamented below:

3.1 Type of Research

In this study, the mixed method was employed, however the quantitative approach predominated. Because, mixed methods research effectively addresses the limitations of quantitative and qualitative approaches by combining both methodologies (Wayessa, 2023). This integration allows for a comprehensive analysis, where quantitative methods reveal the magnitude of changes while qualitative methods unveil contextual meanings and power relations (Bregues, 2023)^[4]. The unpredictability of results in mixed methods research emphasizes the need to understand the strengths and weaknesses of combining different methodologies (Perrenoud, 2023). The researchers were able to balance out the limits of each method by combining quantitative and qualitative approaches with the aid of this type of strategy. It might also yield more detailed data than any one method, stronger proof, and increased trust in the study conclusions.

3.2 Settings and Samples

The research was conducted among the undergraduate learners of the department of English language in four colleges among them one was from the National University in Bangladesh and the others were from King Khalid University in Saudi Arabia. The sample of the study were the ESL students of undergraduate levels of those colleges. As the random probability sampling is quite prevalent in studies, can assist the researchers pick the proper samples, and completely devoid of bias, the authors employed this procedure to select the participants in this study. Through the above type of sampling, each researcher chose 25 learners from his own department his college. Thus, 4 researchers

chose 100 (25×4) learners as the participants of their study.

3.3 Instruments

As the study was designed with a mixed method, three data collection tools were used: *questionnaire survey, observation and content analysis*. As the study was to survey the mental and behavioural states of the students in ESL classroom, questionnaire and specially observation tools were suitable to collect original data. A structured questionnaire survey with a Likert scale was applied to the ESL learners for collecting quantitative as well as primary data. The authors separately arranged the physical survey with questionnaires among the participants in the respective colleges. In this part, the Likert scale was almost used in 8 questionnaires on 4 aspects like (1) classroom participation, (2) behaviour and attitude, (3) tests and quizzes and (4) punctuality and understanding to operationalize their responses and attentiveness. To testify the reliability of the results from questionnaire survey both in pre-intervention and post-intervention, Cronbach's Alpha had been checked through SPSS and the reliability level of results in pre-intervention was .997 and in post-intervention was .995 that indicated excellent level of reliability.

Table 1. Cronbach's Alpha based on standardized items in pre-intervention and post-intervention

Reliability Statistics (pre-intervention)			Reliability Statistics (post-intervention)		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.997	.997	8	.995	.995	8

Moreover, as qualitative research is subjective and flexible, a **non-participant observation** (covert where participants didn't know that they would be observed by a researcher) was performed by the four researchers as teachers to collect qualitative data. These methods helped to capture the learners' classroom participation, behaviour and attitude, tests and quizzes, and punctuality and understanding to measure their responses and attentiveness. Besides, the existing relevant **Content Analysis (CA)**, both archival and current, were used for collecting qualitative as well as secondary data.

3.4 Data Collection Procedures

After sampling and selecting participants, the researchers first shared their preparations for conducting the research with the heads of the departments and the authorities of the colleges. The authorities also permitted and encouraged them to conduct the research work. From the beginning to the end of data collection, the authors had divided three periods: pre-intervention, during intervention and post-intervention. In the pre-intervention period, the authors collected data from the participants both ESL learners and teachers about the attentiveness of learners in ESL classrooms. During the period of intervention, the authors designed a lesson plan including CGW with web 2.0 tools and conducted ESL classes for undergraduate students according to the lesson plan. In the post-intervention period, they again collected data as they did in the pre-intervention period. The research was conducted in 8 months starting from 01/04/2023 to 30/11/2023. The steps and duration of the research are noted below:

1. Four meetings among the researchers about the research preparation – 1 month
2. Questionnaire and observation checklist design and the arrangement of questionnaire survey and observation checklist in pre-intervention period -1 month.
3. Making 4 lesson plans discussing on them, and teaching the participant learners following the lesson plan during the intervention period – 2 months.
4. Questionnaire and observation checklist design and the arrangement of questionnaire survey and observation in post-intervention period -1 month
5. Accumulating data of four researchers, writing the article and frequent revision – 3 months

The authors had to face some challenges during data collection: (i) Respondents' inefficient knowledge in using web:20 tools, (ii) Some respondents' negativity emerging from their fear (iii) Financial constraints to cover the expense of arranging data collection procedures.

4.5 Instructional Intervention

Table 2. The design of instructional interventions

Process of Instructional Interventions and its Process					
Name of the teachers	Department/ Class	College Name	Lesson Plans	Classes	Selected Participants
1 st Author	English/ Undergraduate	Applied College, Khamis Mushait, King Khalid University in Saudi Arabia	4	4	25
2 nd Author	English/ Undergraduate	Khamis Mushait Applied College, King Khalid University in Saudi Arabia	4	4	25
3 rd Author	English/ Undergraduate	Sciences and Arts College for Girls, Sarat Abidah, King Khalid University in Saudi Arabia	4	4	25
4 th Author	English/ Undergraduate	Tarash Degree College, National University in Bangladesh	4	4	25

The team members' lesson plans and conducted classes are given below:

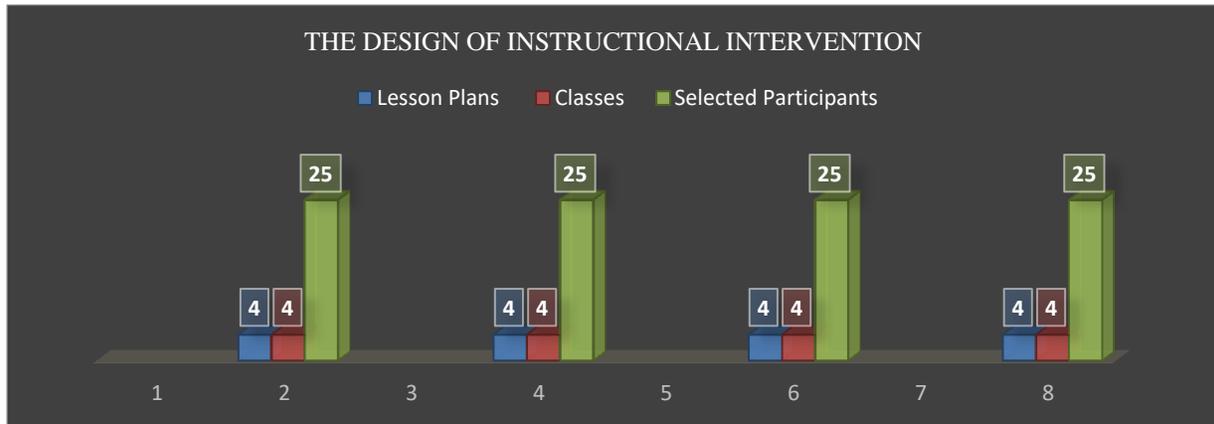


Figure 1. The design of instructional interventions

Instructional interventions were set up in ways that helped researchers to track learners' academic progress. This is more than a bit of "extra care." It's a specific program or set of steps to address an academic need. The interventions aimed at a particular challenge and lasted a certain number of weeks or months, and then progress was reviewed at set intervals. The four members were lecturers and assistant professors in the same academic areas at different colleges in different countries. First, each of them chose 25 participants from the students enrolled in their respective undergraduate English classes.

Then they each created four lesson plans that contained a variety of practices of CGW using web 2.0 tools like Kahoot, Padlet, WhatsApp group, google doc, Nearpod, etc. for the students in the ESL Classroom. Then, each of them conducted four classes following the four lesson plans. In those classes, the procedures for CGW were practised among the students who also took part in the aforementioned class activities. As a result, a member had four classes based on four lesson plans to practice. Making 4 lesson plans, discussing them, and teaching the participant learners following the lesson plan during the intervention period took 2 months.

The team carried out student individual involvement with mobile or tab-supporting internet, student-oriented teaching-learning processes, cooperative learning among students, students aiding one another in learning, especially making students practice CGW with web 2.0 tools, and students not having the chance to participate in extracurricular activities in the classroom. They required the participants to engage in exercises for problem-solving on their own, as well as peer and group work and discussion, poster paper presentations, and brainstorming. Book, Pencil and Paper Sheet, Poster Paper, laptop, tab or mobile that supported the internet, Whiteboard Marker, Whiteboard, and Projector were the resources and tools needed for the intervention. The team faced various difficulties executing the intervention, including managing the classroom, the lack of a seating plan that was oriented toward CGW, students' lack of experience with CGW tools let alone web 2.0 tools, and certain students' lack of interest in the classroom.

4. Result and Analysis

4.1 Questionnaire Survey (Before Intervention)

The four authors (Research team) selected 100 targeted students and each member took 25 participants from the department of his college for a questionnaire survey. After completing their survey differently, they compiled and accumulated all individual data files in one file and these data was analysed with IBM-SPSS. The compiled results of the questionnaire survey have been displayed below:

Table 3. Pointers of Students' Attentiveness in ESL Classroom Before Intervention

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
Categories	Do you feel your classmates' response to learning activities in the ESL classroom?	Do you find your classmates' asking questions to the teachers on learning topics in the ESL classroom?	Are your classmates' ardent listeners to the teacher's lecture or activity in the ESL classroom?	Are the appearance and eye contact of your classmates' indicating attentiveness in the ESL classroom?	Are all of your classmate collaborative with one another in the ESL classroom?	How can you rate the performance of your classmates on learned topics in the ESL classroom?	Are all of you in the habit of CGW practice in the ESL classroom?	Do you and your teachers use web:20 tools in CGW practice in the ESL classroom?
Strongly Negative	40%	40%	41%	35%	36%	36%	37%	38%
Negative	23%	21%	22%	27%	25%	30%	25%	26%
Neutral	5%	4%	7%	6%	4%	5%	7%	6%
Affirmative	17%	22%	18%	15%	17%	15%	15%	12%

Strongly Affirmative	15%	13%	12%	17%	18%	14%	16%	18%
mean	2.44	2.47	2.38	2.52	2.56	2.41	2.48	2.46
Minimum	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5
Std. Dev	1.520	1.514	1.469	1.514	1.553	1.457	1.507	1.534
N	100	100	100	100	100	100	100	100

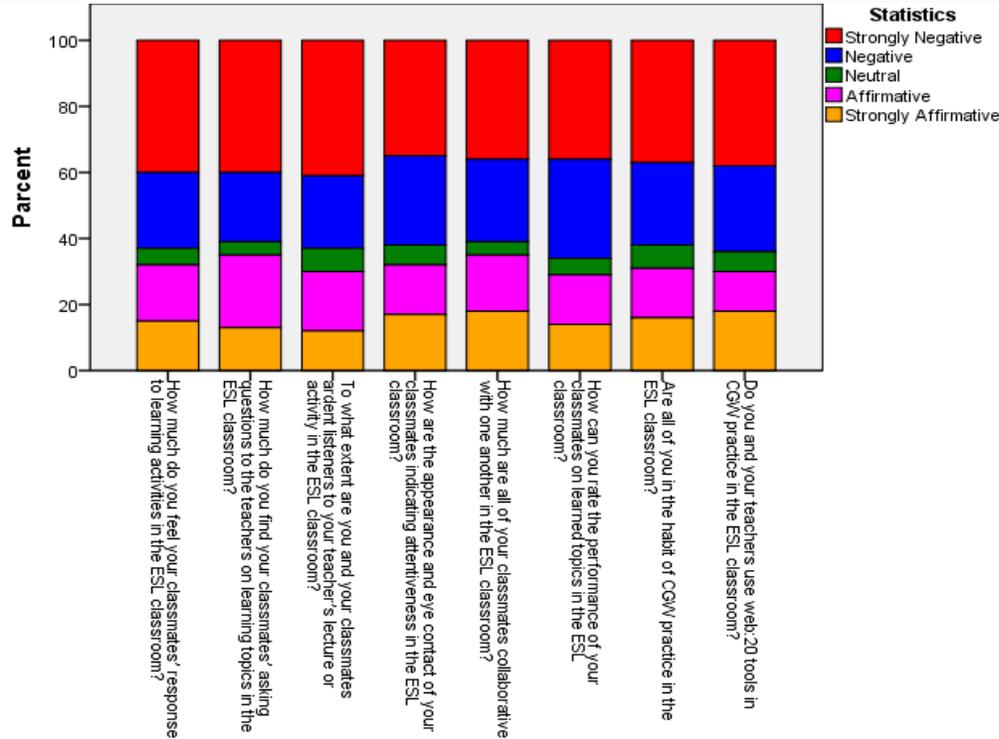


Figure 2. Pointers of Students' Attentiveness in ESL Classroom before Intervention

Explanation: The above table and bar chart (1) exhibited the indicators that labelled the attentiveness of undergraduate students in ESL classroom learning. Here in the bar chart, 100 (25×4) participants (Undergraduate students) were selected from the four respective colleges to find the level of attentiveness of undergraduate students in classroom learning.

In response to question 1 in the questionnaires, 40% participants were strongly negative and 23% participants were negative on their classmates' responses to learning activities in the classroom. So, 63% of respondents stated that most of the learners did not have responses to learning activities in the classroom which indicated the lack of students' attentiveness in the classroom in those colleges whereas only 32% of participants were affirmative in this purpose.

In reply to question 2 in the questionnaires, 40% participants were also strongly negative and 21% participants were negative on their classmates' asking questions to the teachers on learning topics in the classroom. So, 61% of participants said that the maximum number of students did not ask questions to their teachers during lessons in the classroom which denoted the lack of students' attentiveness in the classroom of those colleges whereas only 35% of participants were affirmative in this respect.

In answer to question 3 in the questionnaires, 41% participants were also strongly negative and 22% participants were negative on their classmates' being ardent listeners to your teacher's lecture or activity in the classroom. So, 63% of participants refused the maximum number of students to be ardent listeners to your teacher's lecture or activity in the classroom which hinted the lack of students' attentiveness in the classroom of those colleges whereas only 30% of participants were affirmative in this matter.

In reaction to question 4 in the questionnaires, 35% participants were also strongly negative and 27% participants were negative on their classmates' positive appearance and eye contact indicating attentiveness in the classroom. So, 62% of participants stated most of the students didn't have a positive appearance and eye contact indicating attentiveness in the classroom of those colleges whereas only 32% of participants were affirmative in this respect.

In response to question 5 in the questionnaires, 36% participants were also strongly negative and 25% contributors were negative about their class-mates' collaboration with one another, which indicated attentiveness in the classroom. So, 61% of participants stated that the students were not collaborative with one another which showed students' attentiveness in the classroom of those colleges whereas only 35% of participants were affirmative in this purpose.

In reply to question 6 in the questionnaires, 36% participants were also strongly negative and 30% respondents were negative on their classmates’ performance on learned topics that directed to the attentiveness in the classroom. So, 66% of participants said that the students’ performance on learned topics was not positive which showed students’ attentiveness in the classroom of those colleges whereas only 29% of participants were affirmative in this respect. From the above interpretation of the reply to the above questionnaire, it was obvious that a major portion of the students were not attentive in the classroom.

In answer to question 7 in the questionnaires, 37% participants were also strongly negative and 25% contributors were negative about their class-mates’ habit of practising CGW in ESL classrooms. So, 62% of participants stated that the students were not collaborative with one another which showed students’ attentiveness in the classroom of those colleges whereas only 31% of participants were affirmative in this purpose.

In response to question 8 in the questionnaire, 38% participants were also strongly negative and 26% contributors were negative about their class-mates’ collaboration with one another which indicated attentiveness in the classroom. So, 64% of participants stated that the students did not use web:20 tools in CGW practice in ESL classrooms of those colleges whereas only 20% of participants were affirmative in this respect. If we analysed the average inattentiveness of learners with all (8) pointers, the result would be 62.75%. So, only 31.75% of students were attentive in classroom learning. From the above analysis of 8 questionnaires, it was obvious that the minimum mean was 2.38 and maximum mean was 2.56 that indicated the categories within strongly negative, negative and neutral responses of the students’ attentiveness. Thus, the maximum participants confessed that the students were inattentive in their ESL classroom.

4.2 Observation (Before Intervention)

In the classroom observation typed in non-participant (Covert), the authors/ researchers decided to identity 7 indicators of learners’ inattentiveness focused among them in ESL classroom. The observers also ranked the indicators according to the most frequent, more frequent and frequent indicators / activities like 1st ----- 7th. The researchers ranked the indicators among the learners in the observation in the ESL classroom.

Table 4. Research team’s observation on ranked-wise indicators of students’ inattentiveness before intervention

<i>Research team’s observation on ranked-wise indicators of students’ inattentiveness before intervention</i>				
Indicators of Inattentiveness	1st Author	2nd Author	3rd Author	4th Author
1 st . Lack of learning activity	3 rd	7 th	6 th	2 nd
2 nd . Using mobile frequently	2 nd	5 th	7 th	1 st
3 rd . Not asking question	1 st	4 th	5 th	3 rd
4 th . Not responded to lectures	4 th	3 rd	1 st	6 th
5 th . Lack of cooperation with one another	6 th	2 nd	3 rd	4 th
6 th . Engaging in gossiping	5 th	6 th	4 th	7 th
7 th . Frequently browsing on mobile	7 th	1 st	2 nd	5 th

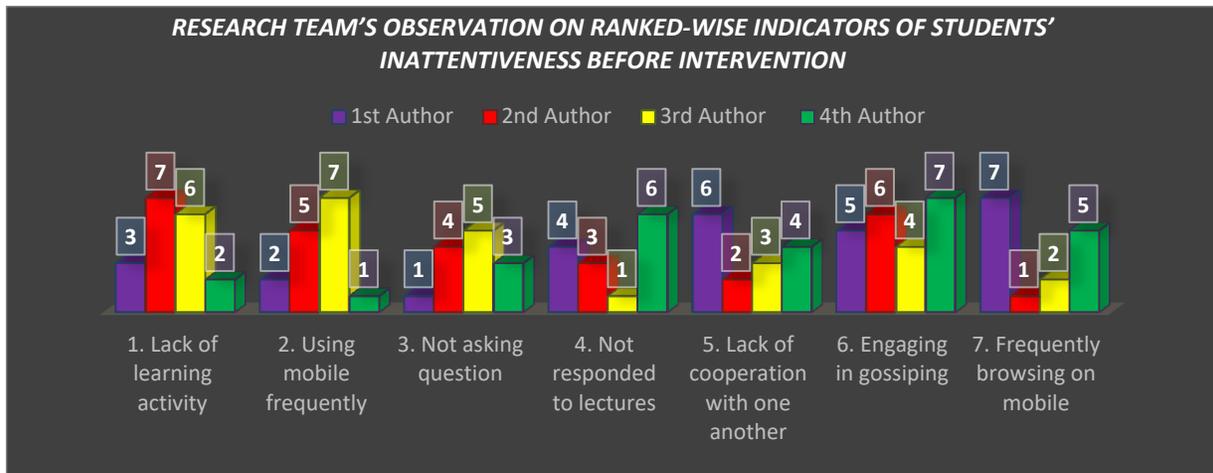


Figure 3. Research team’s observation on ranked-wise indicators of students’ inattentiveness before intervention

Explanation: In the above observation checklist, all four researchers felt some common indicators of students’ inattentiveness in their ESL classroom of undergraduate level such as lack of learning activity, using mobile frequently, lack of asking questions, not responding to teachers’ lectures, not co-operative one another. frequently internet browsing, etc. Each of them observed 7 major indicators of inattentiveness of learners. The first author rank-wise guessed the indicators of inattentiveness among the learners like (1) lack of asking questions, (2) using mobile frequently, (3) lack of learning activity, (4) not responding to teachers’ lectures, (5) engaging in gossiping, (6) lack of co-operative one another, (7) frequently internet browsing.

Like the first author, other three authors observed the same indicators of inattentiveness of the learners in ESL classroom. But each author

guessed the indicators of inattentiveness in a different priority according to its frequent occurring among the learners.

4.3 Questionnaire Survey (After Intervention)

Table 5. Pointers of Attentiveness of Students in ESL Classroom after Intervention

After implementing the instructional intervention, the team made a questionnaire with which the four members each surveyed 25 participants before the intervention. Thus, they all surveyed 100 participants from the undergraduate students of the mentioned four colleges and the lack of student attendance in the classrooms of the colleges was very crucial. The results of the survey have been displayed below:

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
Categories	Do you feel your classmates' response to learning activities in the ESL classroom?	Do you find your classmates' asking questions to the teachers on learning topics in the ESL classroom?	Are your classmates' ardent listeners to the teacher's lecture or activity in the ESL classroom?	Are the appearance and eye contact of your classmates' indicating attentiveness in the ESL classroom?	Are all of your classmate collaborative with one another in the ESL classroom?	How can you rate the performance of your classmates on learned topics in the ESL classroom?	Are all of you in the habit of CGW practice in the ESL classroom?	Do you and your teachers use web:20 tools in CGW practice in the ESL classroom?
Strongly Negative	10%	14%	13%	10%	12%	13%	4%	15%
Negative	26%	21%	22%	25%	20%	20%	21%	15%
Neutral	4%	2%	4%	5%	5%	2%	4%	5%
Affirmative	25%	30%	21%	22%	22%	30%	32%	23%
Strongly Affirmative	35%	33%	40%	38%	41%	35%	39%	42%
Mean	3.49	3.47	3.53	3.53	3.60	3.54	3.81	3.62
Minimum	1	1	1	1	1	1	1	
Maximum	5	5	5	5	5	5	5	5
Std. Devi	1.446	1.480	1.514	1.460	1.484	1.466	1.269	1.516
N	100	100	100	100	100	100	100	100

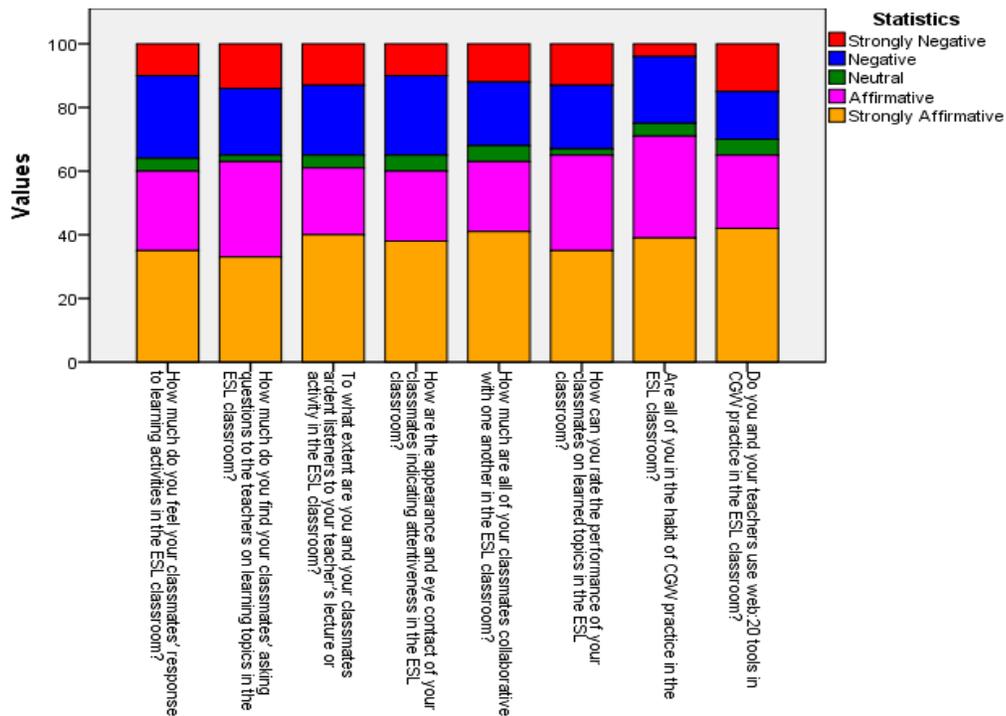


Figure 4. Pointers of Students' Attentiveness in ESL Classroom after Intervention

Explanation: The aforementioned figure (3) showed the signs of undergraduate students' attention in the learning environment. To determine the degree of undergraduate students' attention in classroom instruction, 100 (25*4) participants (undergraduate students) from the four participating colleges were chosen.

In response to question 1 in the questionnaires, 35% participants were strongly affirmative and 25% participants were affirmative on their classmates' responses to learning activities in the classroom. So, 60% of respondents stated that most of the learners had responses to learning activities in the classroom. On the contrary, 36% of participants were alternative to that.

In reply to question 2 in the questionnaires, 33% participants were also strongly affirmative and 30% participants were affirmative on their classmates' asking questions to the teachers on learning topics in the classroom. So, 63% of participants said that the maximum number of students did ask questions to their teachers on lessons in the classroom that denoted the students' attentiveness in the classroom of those colleges whereas only 35% of participants were negative in this respect.

In answer to question 3 in the questionnaires, 40% participants were also strongly affirmative and 21% participants were affirmative on their classmates' being ardent listeners to your teacher's lecture or activity in the classroom. So, 61% of participants confessed that most students are ardent listeners to their teacher's lecture or activity in ESL classrooms which hinted at the students' attentiveness in classrooms of those colleges whereas only 35% of participants were negative in this matter.

In reaction to question 4 in the questionnaires, 38% participants were also strongly affirmative and 22% participants were affirmative on their classmates' positive appearance and eye contact indicating attentiveness in the classroom. So, 60% of participants stated most of the students had positive appearance and eye contact indicating attentiveness in the ESL classroom of those colleges whereas only 35% of participants were negative in this respect.

In response to question 5 in the questionnaires, 41% participants were also strongly affirmative and 22% contributors were affirmative on their classmates' collaboration with one another indicating attentiveness in the classroom. So, 63% of participants stated that the students were not collaborative with one another which showed students' attentiveness in the ESL classroom of those colleges whereas only 32% of participants were negative in this purpose.

In reply to question 6 in the questionnaires, 35% participants were also strongly affirmative and 30% respondents were affirmative on their classmates' performance on learned topics that directed to the attentiveness in the classroom. So, 65% of participants said that the student's performance on learned topics was positive and showed students' attentiveness in the ESL classroom of those colleges whereas only 33% of participants were alternative to this respect.

In answer to question 7 in the questionnaires, 39% participants were also strongly affirmative and 32% contributors were affirmative on their classmates' habit of practising CGW in ESL classrooms. So, 71% of participants stated that the students were not collaborative with one another which showed students' attentiveness in the ESL classroom of those colleges whereas only 25% of participants were negative in this purpose.

In response to question 8 in the questionnaires, 42% participants were also strongly affirmative and 23% contributors were affirmative on their classmates' collaboration with one another indicating attentiveness in the classroom. So, 65% of participants stated that the students use web:20 tools in CGW practice in ESL classrooms of those colleges whereas only 29% of participants were negative in this respect.

From the above analysis of 8 questionnaires, it was obvious that the minimum mean was 3.47 and maximum mean was 3.81 that indicated the categories including affirmative responses of the students' attentiveness. Thus, it was apparent that a maximum part of the students was more concentrated on learning than before in ESL classrooms.

4.4 Observation (After Intervention)

The writers and researchers made the decision to identify seven markers of students' attentiveness focused on them in an ESL classroom based on the observation written in by the non-participant (Covert). Additionally, the observers assigned a ranking to each indicator based on whether actions or indicators were the most common, frequent, and more frequent, such as 1st -7th. Among the students in the ESL classroom under observation, the researchers ranked the indicators.

Table 4. Research team's observation on ranked-wise indicators of students' attentiveness after intervention

<i>Research team's observation on ranked-wise indicators of students' attentiveness after intervention</i>				
Indicators of Attentiveness	4th Author	1st Author	2nd Author	3rd Author
1 st . Eager to learn activity	2 nd	3 rd	7 th	6 th
2 nd . using mobile in need	1 st	2 nd	5 th	7 th
3 rd . Frequent asking question	3 rd	1 st	4 th	5 th
4 th . Responding to lectures	6 th	4 th	3 th	1 st
5 th . Co-operative one another	4 th	6 th	2 nd	3 rd
6 th . Practicing CGW in the classroom	7 th	5 th	6 th	4 th
7 th . Using web:20 tools in CGW	5 th	7 th	1 st	2 nd

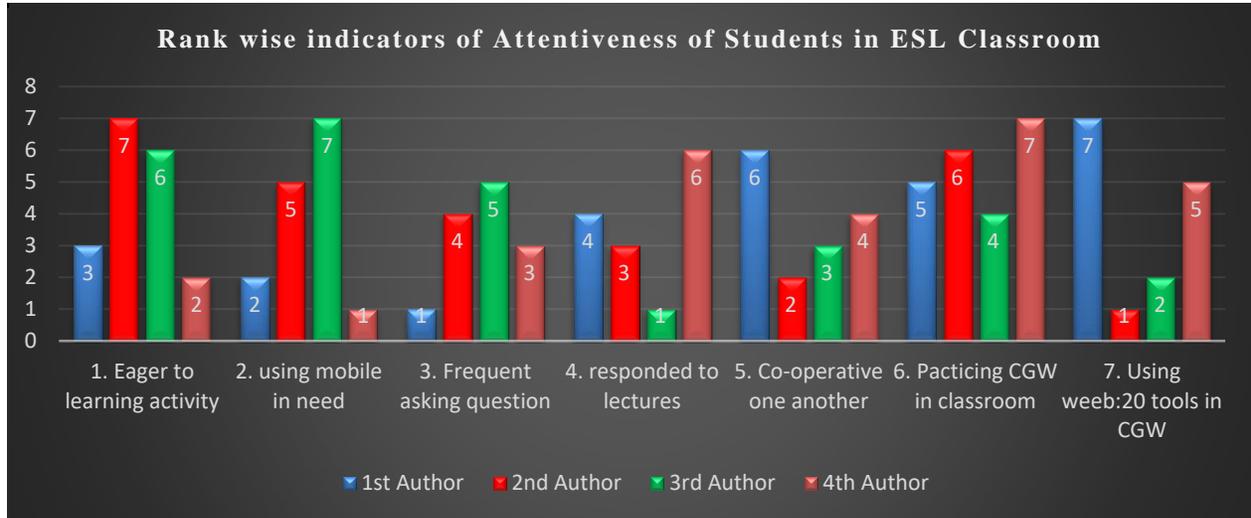


Figure 5. Research team’s observation on ranked-wise indicators of students’ attentiveness after intervention

Explanation: In the above observation checklist, all four researchers felt some common indicators of students’ attentiveness in their ESL classroom undergraduate level such as adequate learning activity, not using mobile in the classroom, asking questions, responding to teachers’ lectures, cooperative one another, no internet browsing, etc. Each of them observed 7 major indicators of attentiveness of the learners. They also ranked the indicators like (1st-----7th) based on the frequency of happening the activities among the learners in ESL classroom. The first author rank-wise guessed the indicators of attentiveness among the learners like (1) asking questions, (2) using mobile in need, (3) eagerness in learning activity, (4) responding to teachers’ lectures, (5) practicing CGW in classroom, (6) co-operative one another, (7) using web 2.0 tools. The other three authors noted the same attentiveness signs in the ESL students as the first author. However, based on how frequently the markers of attentiveness occurred among the students, each author estimated them at a different priority.

4.5 The Effectiveness of the Intervention

1. The research team aimed to depict the positive significance of CGW using web 2.0 tools for enhancing students’ attentiveness in classroom learning. The study also showed the same that was highlighted in the data collected before intervention and after intervention. In the questionnaire survey, the comparative result of the students’ attentiveness and inattentiveness in pre intervention and post-intervention were displayed here in the graph below:

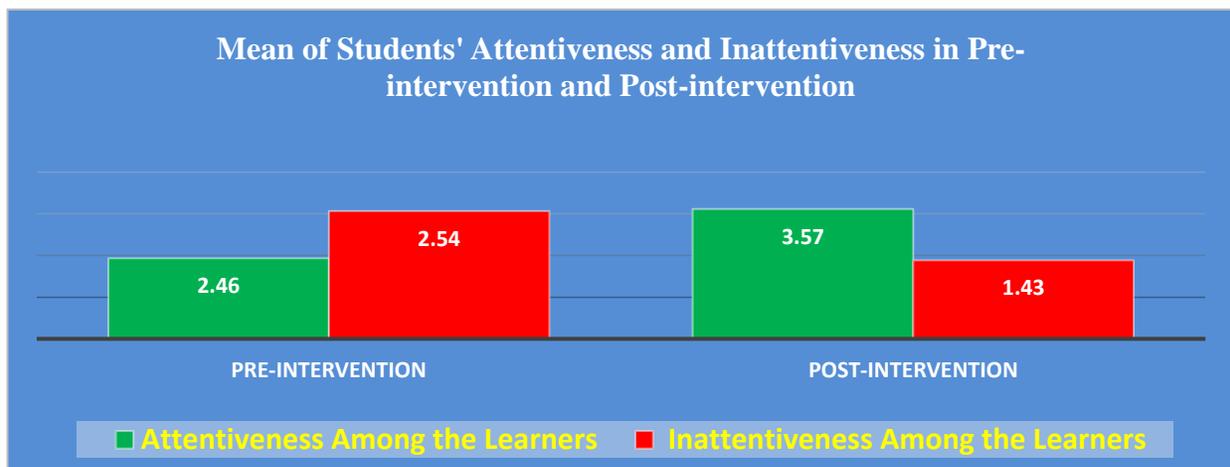


Figure 6. The mean of students’ attentiveness and inattentiveness in pre-intervention and post-intervention

The data collected after implementing the intervention through the questionnaire survey among 100 ESL learners was apparent that most of the learners were paying closer attention in the ESL classroom than they had before the intervention. The outcomes of the questionnaire survey after intervention showed that the mean of the learners’ attentiveness in ESL classrooms was 3.57 whereas the mean of the learners’ inattentiveness in ESL classrooms was only 1.43. On the contrary, the data collected before the implementation of the intervention through the questionnaire survey was obvious that most of the learners were not paying close attention in the ESL classroom as they were after intervention. The results of the questionnaire survey before intervention showed that the mean of the learners’ inattentiveness in the ESL classroom was 2.54 whereas the mean of the learners’ attentiveness was only 2.46 that was lower than 3.57.

2. Before the instructional intervention, the researchers used an observation checklist to identify common indicators of students' inattention in their undergraduate ESL classroom. These indicators included a lack of learning activities, frequent use of mobile devices, a lack of questioning, a failure to respond to lectures, and a lack of cooperation among students. regularly using the internet, etc. Each of them noticed seven key signs that students were not paying attention. The first author made a rank-wise guess as to what behaviors the learners would indicate as inattentiveness, such as (1) not asking questions, (2) using mobile devices frequently, (3) not participating in learning activities, (4) not answering lectures from teachers, (5) gossiping, (6) not cooperating with one another, and (7) frequently browsing the internet. Three additional writers noted the same signs of the students' inattention as the first author.

On the other hand, the researchers noted some common indicators of students' attentiveness in their undergraduate ESL classroom during the observation checklist prior to the instructional intervention. These indicators included sufficient learning activities, refraining from using mobile devices in class, asking questions, responding to lectures, cooperating with one another, and not using the internet. Each of them noted seven key signs of the students' attention. Additionally, they rated the indicators (1st—7th) according to how frequently the students in the ESL classroom engaged in the various activities. utilizing a rank-wise guessing algorithm, the first author identified the following learner indicators of attention: (1) asking questions; (2) utilizing a mobile device when necessary; (3) interest in learning activities; (4) reacting to lectures from lecturers; (5) practicing CGW in the classroom; (6) cooperating with one another; and (7) using web 2.0 tools. The first author and the other three writers saw the same attention indicators in the ESL pupils. However, each author assigned a different importance to the attention indicators depending on how frequently the students exhibited them.

5. Discussion

Examining the impact of cooperative group work on ESL learning outcomes was the main goal of the study. The study's specific goal was to determine whether using web 2.0 technologies in conjunction with CGW would improve students' focus in class. Evaluating the adaptability of web 2.0 tools used by CGW to promote ESL learning was another goal of the study. The study also sought to ascertain if this method would help students adjust to varied learning tempos and styles, eventually resulting in more efficient language learning. Subsequently, the study sought to advance knowledge of technology's function in ESL instruction. Through the inclusion of web 2.0 technologies into cooperative learning activities, the study necessitated examining the possible advantages and difficulties of employing technology in language teaching. Overall, the study's overall goals were to evaluate the effectiveness of collaborative group work using web 2.0 technologies on ESL learning outcomes, gauge how flexible ESL instruction is in this setting, and add to the conversation on technology integration in ESL education.

5.1 Enhancement of Students' Attentiveness with CGW Using Web:20 Tools in ESL Classroom

The study successfully proved that if the collaborative group work (CGW) with web: 20 tools were well performed among the students in the ESL classroom, the present and future learners could be capable of enhancing their attentiveness in the classroom and flexibly learning English as a Second Language than before. The study suggested that utilizing collaborative group work (CGW) with web 2.0 tools in ESL classrooms could significantly improve students' attentiveness and enhance their ability to learn English as a Second Language (ESL) in both the present and future (Yang, 2023). This implied that when students engaged in collaborative activities using web-based tools, they became more focused and attentive in class, which ultimately led to more effective language learning (Purwaningtyas, et.al, 2023). Additionally, the use of such tools promoted flexibility in learning, allowing students to adapt to different learning styles and pace, leading to better language acquisition outcomes (Roy, 2023). Overall, the findings highlighted the potential benefits of integrating technology-supported collaborative learning approaches in ESL education.

The results of the analyzed data collected from questionnaire survey and observation checklist in pre-intervention and post-intervention proved the research findings. Before intervention in questionnaire survey, the students were more inattentive in their classroom activities than after intervention. On the contrary, after intervention in questionnaire survey, they were more attentive than before, and the observation checklist also resembled to the questionnaire survey. Moreover, the result demonstrated a statistically significant increase of attentiveness of learners in speaking, listening, reading, and writing as well as classroom activities among students who engaged in CGW compared to those who did not. This evidence also directly correlated the use of collaborative learning with web-based tools to enhanced language learning outcomes, validating the effectiveness of the study.

5.2 Comparison and Contrast to Previous Studies

Like the previous studies, the research also found positive effects of collaborative group work (CGW) on ESL learning outcomes. Both the study and previous research show that collaborative activities could enhance students' attentiveness in language learning classroom. Overall, collaborative group work is a valuable approach to engage students in ESL classrooms, promoting active participation and enhancing language learning outcomes. It has also been asserted that these regulatory procedures contain an interpersonal component whereby the regulation of the activity is shared with others (Grau, 2018). In addition, collaborative learning has grown in significance as a component of education, but the research that supports it is dispersed across a wide range of disciplines, including socio-cultural studies, cognitive, developmental, and educational psychology, instructional design, the learning sciences, and educational technology. (Silver, 2013).

Collaborative Group work is one of the most widely used and deeply researched teaching approaches in the college classroom (Wilson, 2018). In the last five years, there has been less emphasis on building learners' skills and higher-order skills and more on enhancing students' performance in science, particularly social science, and in natural settings outside of the classroom. The impact of grouping design on

teaching and various approaches for choosing group members were not well studied. Collaborative group work using web-based tools can have an impact on students' attentiveness. Students perceive collaborative group work as beneficial, but it is not without its challenges. The global COVID-19 pandemic has affected learning and teaching, forcing students to learn online and impacting their experience with collaborative group work (McKay, et.al, 2024). Managing group work collaboration can be challenging, but a web-based application system with work progress, group task management, and email notification features can help students better manage and coordinate their group work (Shah, 2022). The transition from in-person to online instruction due to COVID-19 restrictions has had an impact on group work experiences. Students rated group work less favourably in terms of efficiency, satisfaction, motivation, and workload demands during the pandemic. Anxiety was associated with negative perceptions toward group work during the pandemic (Vogel, et.al, 2023). Web-based tools can be effective in promoting active learning and collaboration in group projects. These tools can optimize student engagement and support effective group meetings and collaboration (Tanaka, et.al, 2017).

The majority of studies used theoretically based collaborative learning approaches (Fu, 2018). Collaborative learning is a widely used instructional method, but the learning potential of this instructional method is often underused in practice. It is concluded that collaborative learning in higher education should be designed using challenging and relevant tasks that build shared ownership with students (Scager, 2016). The findings of the study provided an understanding of the learning performance of university students and their relationship with peers, and instructors, and their social presence, usage of social media, engagement, and collaborative learning (Qureshi, 2021).

The study specifically focused on the use of web 2.0 tools for collaborative learning, aligning with the trend of technology integration in education seen in recent research. Current trends and practices in technology integration in language education encompass various approaches. Studies highlight the importance of technology-enhanced language learning (TELL) in fostering active participation among instructors and students (Zainuddin, 2023). Educators are incorporating teaching methods like Blended Learning, Flipped Classroom, and Game-Based Learning to enhance students' 21st-century skills and language learning outcomes (Stanlee, 2022). Challenges arise when integrating technology into English education, emphasizing the need for effective strategies in English/ELA classrooms (Walrond, 2023). The role of Information and Communication Technologies (ICTs) in foreign language instruction is crucial for preparing students for the demands of the 21st century, focusing on computer literacy and language competence (Petrova, 2023). Research trends indicate a growing interest in technology integration for teaching English as a foreign language, with flipped learning and mobile-assisted language learning being prominent subjects of study (Başar, et.al, 2022).

However, in contrast to other research, this one concentrated on web 2.0 tools, whereas other studies may have employed more conventional approaches or a wider variety of technologies for collaborative learning. Additionally, the earlier research was done with different student demographics or in various educational environments, which might have affected the results. However, one institution in Bangladesh and three colleges in Saudi Arabia hosted this study. Furthermore, in contrast to other research, the study included three distinct evaluation instruments—a questionnaire survey, an observation checklist, and content analysis—to gauge the effect of CGW utilizing web 2.0 tools. This resulted in discrepancies in the results that were published. In addition, the study used more modern technology tools than previous research, such as Padlet, Kahoot, Nearpod, etc. Overall, the study contributed value by particularly studying the use of web 2.0 tools in the ESL setting, perhaps providing insights into the efficacy of technology-supported collaborative approaches, even though the beneficial impacts of collaborative learning are identical.

5.3 Strength and Significance

The study investigated the use of web 2.0 technologies in collaborative group work (CGW) in ESL classrooms, providing a fresh and original method of language instruction (Jose, 2021). The study's conclusions have applications for ESL teachers, including research-backed suggestions for incorporating technology into language training to raise students' focus and provide positive learning results (Nurmala, et.al, 2023). It is possible that the study used three different data gathering methods in order to analyze both qualitative and quantitative data (Wang, 2023). The analysis produced precise, quantifiable results that backed up the findings and conclusions.

The study's conclusions might apply to comparable ESL environments and educational settings, contingent on the quantity and variety of participants from Saudi Arabia and Bangladesh. So, it may require international implication (Wai-Chan, 2017). The study proposed that using web 2.0 technologies for collaborative group work (CGW) in ESL classes will increase students' focus and their capacity to learn English as a second language (ESL) in a flexible manner (Shahidan, et.al, 2022). As a consequence, the hypothesis was evidently examined using the findings from the observation checklist, questionnaire survey, and previous document analysis (Berman, 2022).

Student engagement in ESL classrooms is of significant importance for learning success (Fan, et.al, 2023). Various factors can contribute to student engagement, including the use of cooperative learning strategies and the incorporation of interactive tools like Word Wall (Liu, et.al, 2023). The study explored innovative methods to enhance ESL learning outcomes by utilizing web 2.0 technologies for collaborative group work (Mahmud, et.al, 2023). It highlighted the importance of technology integration in ESL classrooms (Ramalingam, et.al, 2021), particularly in the digital era, where digital literacy and 21st-century skills are increasingly valued. The research contributed to the ongoing conversation on technology integration in ESL classrooms (Kumar, et.al, 2022).

The study highlights the importance of collaborative group work in language education, highlighting its impact on student flexibility and attentiveness. It suggests the use of interactive and participatory methods in language acquisition. The findings can guide ESL teachers in creating effective instructional practices that support meaningful learning experiences for students. It added to the corpus of knowledge already available on technology integration and ESL instruction. The study broadened the understanding of successful teaching and learning

practices in the field of ESL education by building on prior studies and pursuing new lines of inquiry. This opened the door for further research and innovation. So, it is significant for the potential to enhance ESL learning results, promoting pedagogical approaches, and adding to the larger conversation about technology integration in education.

5.4 Limitations of the Study

A few of the study's shortcomings are its limited sample size, brief length, and reliance on available resources. These restrictions could make it more difficult to extrapolate the results to a larger group of ESL students. It's also possible that the usefulness of collaborative group work for ESL learners at varying competence levels was not investigated in this study. It might not have looked at the ideal group size and makeup for cooperative learning exercises. It might not have covered how teacher assistance and training might help implement collaborative group work using web 2.0 technologies in an efficient manner. It might not have looked at how context and cultural variables affect how well collaborative learning works in ESL classes. Additionally, it can discover that some web 2.0 technologies considerably influence ESL learning results more than others. In conclusion, the abilities acquired in the ESL classroom through collaborative group work using web 2.0 technologies may prove to be surprisingly transferable to other domains or situations, highlighting the wider advantages of technology-supported collaborative learning beyond language acquisition.

5.5 Potential Future Researches

The study included recommendations for further research in the areas of technology integration and ESL instruction. It recommends working together with instructional designers and software developers to build and assess new web 2.0 tools for ESL training, taking into account elements like accessibility, user interface design, and interaction with pre-existing curriculum resources. To investigate how collaborative group work with web 2.0 technologies is used in various language and cultural situations, cross-cultural studies might be carried out. The effectiveness of collaborative group work across a range of ESL learners' proficiency levels, the ideal group size and makeup, teacher preparation and support, and the impact of contextual and cultural factors on the efficacy of collaborative learning in ESL classrooms may not have all been examined in this study. Additionally, it could discover that some web 2.0 tools have a noticeably bigger influence on ESL learning outcomes than others, which would lead to more research into the characteristics and functions of those particular tools. The benefits of technology-supported collaborative learning extend beyond language acquisition, as demonstrated by the transferability of skills gained through collaborative group work using web 2.0 technologies in ESL classrooms.

6. Recommendation and Conclusion

It is advised that (1) ESL teachers include cooperative group work activities into their curricula, utilizing web 2.0 resources to improve student engagement and language learning results, in light of the study's findings. (2) Professional development and training on successful methods for incorporating technology-enabled collaborative learning into ESL education should be provided to educators. This covers advice on creating engaging learning activities, choosing suitable Web 2.0 technologies, and controlling group dynamics. (3) Students' digital literacy should be developed as a top priority in schools and other educational settings, and they should be prepared to use web 2.0 tools and surf the web safely for group projects. (4) Establish a classroom environment that prioritizes peer cooperation and support, motivating students to take an active role in group projects, exchange ideas, and give helpful criticism to their classmates. (5) Ask students and instructors for input on your pedagogical practices about collaborative group work using web 2.0 technologies on an ongoing basis. This will help you find areas for innovation and development.

To sum up, this study has shown how collaborative group work with web 2.0 technologies may improve ESL learning results, particularly when it comes to improving flexibility and attention in language acquisition. Teachers may build dynamic learning environments that foster language acquisition, critical thinking, and active involvement by including students in interactive, technology-supported collaborative activities. Nonetheless, it's critical to understand that putting collaborative learning into practice successfully calls for thorough preparation, continual support, and consideration of each student's unique requirements. Going forward, it is advised that educators, decision-makers, and interested parties keep investigating cutting edge methods of teaching English as a second language (ESL), utilizing technology and group learning techniques to satisfy the many demands of ESL students in the modern digital environment.

Acknowledgments

We sincerely thank all of the team members who took the time to participate in this study as well as the members of our community advisory committee for their invaluable contributions. We also express our gratitude to the college officials and colleagues who helped with research conduct and manuscript criticism.

Authors contributions

Md. Abdul Qader, the corresponding author, was responsible for study design and revising. All authors were responsible for data collection because each of them had to collect data from their own learners of own departments. Mir Rumi Mustafizur Rahman, Ms. Tanzin Ara Ashraf and Ismail Mohammed Hamid Rushwan frequently revised the manuscript frequently. All authors read and approved the final manuscript

Funding

No financial support for the research

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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References

- Akram, et.al. (2021). The Impact of Esl Teachers' Use of Demotivational Language on Students' Learning: A Study of Esl Learners at Secondary Level in Pakistan. *Communication and Linguistics Studies*, 7(3), 44-48. <https://doi.org/10.11648/j.cls.20210703.11>
- John, et.al. (2023). Reaching Out to Group Contingencies in the ESL Classroom. *Journal of Higher Education Theory and Practice*, 23(1), 108-123. <https://doi.org/10.33423/jhetp.v23i1.5794>
- Shen Ba, et.al. (2017). A Study on Grouping Strategy of Collaborative Learning Based on Clustering Algorithm. *Lecture Notes in Computer Science* (pp. 284-294). Springer International Publishing AG 2017. https://doi.org/10.1007/978-3-319-59360-9_25
- Abulhassan, et.al. (2021). A Nexus of Group Learning and Collaborative Learning Facilities in Stimulating Oral Interaction of Learners: A Case of Saudi Arabia. *International Education Studies*, 14(7), 101-107. <https://doi.org/10.5539/ies.v14n7p101>
- Akhand, M. (2023). Impact of Collaborative Reading Annotation System on EFL/ESL Learners on A Digital Platform: A Case Study of Tertiary Level Students in Bangladesh. *Journal of Education and Practice*, 14(18), 40-50.
- Al'Omairi, T. e. (2015). The influence of paying attention in classroom on students' academic achievement in terms of their comprehension and recall ability. In *Proceedings of INTCESS15-2nd international conference on education and social sciences*, (pp. 2-4).
- Alkhayat, A. (2023, June 30). Moving Beyond Web Conferencing Tools: ESL Professional Development Workshops in Virtual Reality Platforms. *Global Perspectives on Higher Education*, 11, 367-379. https://doi.org/10.1007/978-3-031-31646-3_24
- Allison, N. (2020). Students' attention in class: patterns, perceptions of cause and a tool for measuring classroom quality of life. *Journal of Perspectives in Applied Academic Practice*, 8(2), 58-71. <https://doi.org/10.14297/jpaap.v8i2.427>
- Alsalamah, A. (2017). Use of the Self-Monitoring Strategy among Students with Attention Deficit Hyperactivity Disorder: A Systematic Review. *Journal of Education and Practice*, 8(14), 118-125.
- Angouti, et.al. (2019, January 29). Transforming ESL Teaching Modalities Using Technological Tools. *Journal of Management and Sustainability*, 9(1), 134-144. <https://doi.org/10.5539/ells.v9n1p134>
- Anudin, et.al. (2022). Speaking and Writing Anxiety and Efficacy Beliefs of ESL Students in Spoken and Written Discourse. *Romblon State University Research Journal*, 4(1), 28-33. <https://doi.org/10.58780/rsurj.v4i1.93>
- Athirah, et.al. (2020). Implementing Student-Centered Collaborative Learning When Teaching Productive Skills In An ESL Primary Classroom. *International Journal of Publication and Social Studies*, 44-54. <https://doi.org/10.18488/journal.135.2020.51.44.54>
- Balushi, H. A. (2015). The influence of paying attention in classroom on students' academic achievement in terms of their comprehension and recall ability. In *Proceedings of INTCESS15-2nd international conference on education and social sciences*, 2-4. Retrieved from <https://www.semanticscholar.org/paper/THE-INFLUENCE-OF-PAYING-ATTENTION-IN-CLASSROOM-ON-Balushi/cbd93a5335a80f5c378a0daa7be1b6243320b85c>

- Başar, et.al. (2022). Technology Integration in Teaching English as a Foreign Language: A Content Analysis Study. *Journal of educational technology and online learning*, 5(1), 204-222. <https://doi.org/10.31681/jetol.972577>
- Berman, C. W. (2022). Hypothesis Testing. *Introduction to Basics of Pharmacology and Toxicology*, pp 865-875. https://doi.org/10.1007/978-981-19-5343-9_60
- Bregues, e. (2023). Use of mixed methods research in intervention studies to increase young people's interest in STEM: A systematic methodological review. *Frontiers in Psychology*, 13, Sec. Gender, Sex and Sexualities. <https://doi.org/10.3389/fpsyg.2022.956300>
- Chang Xu, et.al. (2023). Classroom Management Strategies in Secondary Language Education. *Journal of Education, Humanities and Social Sciences*, 8, 1649-1654. <https://doi.org/10.54097/ehss.v8i.4539>
- Chang, E. A. (2023). Classroom Management Strategies in Secondary Language Education. *Journal of Education, Humanities and Social Sciences*, 8, 1649-1654. <https://doi.org/10.54097/ehss.v8i.4539>
- Cicekci, M. A. (2019). Teachers' and Students' Opinions about Students' Attention Problems during the Lesson. *Journal of Education and Learning*, 8(6), 15-30. <https://doi.org/10.5539/jel.v8n6p15>
- Deen, A. A. (2023). Students' boredom in English language classes: Voices from Saudi Arabia. *Educational Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1108372>
- Echiverri, et.al. (2022). Correlates of English Immersion Program: A Study of Academic Performance and Gender Differences among ESL Chinese Students. *The Educational Review*, 6(1), 10-21. <https://doi.org/10.26855/er.2022.01.002>
- Elverici, S. (2022). A touch of edtech to create "compelling" blended learning environments. *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi*, 31, 1369-1381. <https://doi.org/10.29000/rumelide.1222279>
- Fan, et.al. (2023). Student Learning Engagement with Emerging Technologies in the EFL Classroom in China: A case study. *11th AMER International Conference on Quality of Life*, 119-125. <https://doi.org/10.21834/ebpj.v8i24.4652>
- Fu, Q. K. (2018). Trends in mobile technology-supported collaborative learning: A systematic review of journal publications from 2007 to 2016. *Computers & Education*, 119, 129-143. <https://doi.org/10.1016/j.compedu.2018.01.004>
- Grace John, et.al. (2023). Reaching Out to Group Contingencies in the ESL Classroom. *Journal of Higher Education Theory and Practice*, 23(1), 108-123. <https://doi.org/10.33423/jhetp.v23i1.5794>
- Grau, e. (2018). Socially Shared Regulation of Learning and Quality of Talk: Age Differences in Collaborative Group Work in Classroom Contexts. *New Directions for Child and Adolescent Development*, 162, 11-39. <https://doi.org/10.1002/cad.20261>
- Gray, S. A. (2017). Qualitative review synthesis: The relationship between inattention and academic achievement. *Educational Research*, 59(1), 17-35. <https://doi.org/10.1080/00131881.2016.1274235>
- Hull, T. (2022). Keep them Engaged: Lecturing through Low-pressure Comprehension Questions to Maintain Student Attention during Lectures in University EFL Classrooms. *International journal of studies in English language and literature*, 10(9), 17-21. <https://doi.org/10.20431/2347-3134.1009003>
- Jade, et.al. (2023). Student perceptions of collaborative group work (CGW) in higher education. *Studies in Higher Education*.
- Jeekim, et.al. (2021). CHANGES IN STUDENT MOTIVATION DURING ONLINE LEARNING. *JOURNAL OF EDUCATIONAL COMPUTING RESEARCH*, 44(1), 1-23. <https://doi.org/10.2190/EC.44.1.a>
- Jian, et.al. (2023). A Longitudinal Study of Foreign Language Boredom Experienced by English Major Students in a Blended English Reading Course. *Journal of Contemporary Language Research*, 2(1), 1-8. <https://doi.org/10.58803/JCLR.2023.385904.1007>
- Jose. (2021). Conversations through Web 2.0 tools: Nurturing 21st century Values in the ESL Classroom. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 13(2), 1-16.
- Jose, K. (2021., April-June). Conversations through Web 2.0 tools: Nurturing 21st century Values in the ESL Classroom. (S. P. Satpathy, Ed.) *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 13(2), 1-16. <https://doi.org/10.21659/rupkatha.v13n2.35>
- Kao, P.-C. (2023). The Interrelationship of Loneliness, Smartphone Addiction, Sleep Quality, and Students' Attention in English as a Foreign Language Class. *International Journal of Environmental Research and Public Health*, 20(4), 3460-3460. <https://doi.org/10.3390/ijerph20043460>
- Khan, et.al. (2022, December 30). Technology Integration into ESL Classrooms at University Level. *Pakistan languages and humanities review*, 6(IV), 369-381. [https://doi.org/10.47205/plhr.2022\(6-IV\)34](https://doi.org/10.47205/plhr.2022(6-IV)34)
- Krouska, et.al. (2021, March 04). Usability and Educational Affordance of Web 2.0 tools from Teachers' Perspectives. In N. N.et.al (Ed.), *ACM Conferences* (pp. 107–110). New York, USA: Association for Computing Machinery. <https://doi.org/10.1145/3437120.3437286>
- Kumar, et.al. (2022). Technology-integration experiences in ELT classrooms as an effective tool: a theoretical study. *Journal for Educators, Teachers and Trainers*, 13(1), 51-60. <https://doi.org/10.47750/jett.2022.13.01.006>
- La Sunra, et.al. (2021). Student Teachers' Perception on the Use of Learning Community in EFL Classroom. *Celebes Journal of Language*

- Studies*, 1(1). <https://doi.org/10.51629/cjls.v1i1.34>
- Liu, et.al. (2023). The role of learner engagement with corrective feedback in EFL/ESL classrooms. *Frontiers in Psychology*, 1-4. <https://doi.org/10.3389/fpsyg.2023.1118467>
- Lohmann, et.al. (2022). Using Asynchronous Discussions to Teach Classroom Management Skills in Online Teacher Preparation Courses. *JOURNAL OF SPECIAL EDUCATION PREPARATION*, 2(3), 48-58. <https://doi.org/10.33043/JOSEP.2.3.48-58>
- Mahmud, et.al. (2023). Exploring the Impact of Web 2.0 Tools on 21st Century Skills of EFL Learners in Pakistan. *Education Sciences*, 13(4), 384-384. <https://doi.org/10.3390/educsci13040384>
- McKay, et.al. (2024). Student perceptions of collaborative group work (CGW) in higher education. *Studies in Higher Education*, 49(2), 21-234. <https://doi.org/10.1080/03075079.2023.2227677>
- Misbah, et.al. (2020). ESL Learners' Sense of Alienation: An Exploratory Mixed Method Research on the Role of ESL Teachers' Remarking Practices. *English Language Teaching*, 13(11), 59-74. <https://doi.org/10.5539/elt.v13n11p59>
- Montagud, et.al. (2022). GROUP INFOGRAPHICS, PREPARATION, PRESENTATION AND DEBATE. COLLABORATIVE WORK IN THE UNIVERSITY CLASSROOM. *15th annual International Conference of Education, Research and Innovation* (pp. 707-714). Seville, Spain: Universitat Politècnica de València (SPAIN).
- Moorhouse, B.L, et.al. (2023). Use of Digital Tools by English Language Schoolteachers. *Educational Science*, 1-15. <https://doi.org/10.3390/educsci13030226>
- Muir, et.al. (2022, June 17). Using Interactive Online Pedagogical Approaches to Promote Student Engagement. (M. Boboc, Ed.) *Education Sciences*, 415, 1-18. <https://doi.org/10.3390/educsci12060415>
- Musabal, et.al. (2023). Exploring the Obstacles EFL Learners Encounter in Classroom Oral Participation from the Perspective of Tertiary Level Instructors. *Journal of Namibian Studies*, 33(1), 1121-1141. <https://doi.org/10.59670/jns.v33i.485>
- Nazamud-din, et.al. (2020). The Relationship of Affective, Behavioral and Cognitive Engagements in ESL Higher Learning Classroom. *English Language Teaching and Linguistics Studies*, 2(4), 48-64. <https://doi.org/10.22158/eltls.v2n4p48>
- Novita, et.al. (2020). COLLABORATIVE LEARNING AS THE MANIFESTATION OF SOCIOCULTURAL THEORY: TEACHERS' PERSPECTIVES. *Exposure: Journal Pendidikan Bahasa Inggris*, 9(1), 13-25. <https://doi.org/10.26618/exposure.v9i1.2888>
- Nurmala, et.al. (2023). Technology-Enhanced Language Learning: A Meta-Analysis Study On English Language Teaching Tools. *Journal on Education*, 6(1), 2188-2195. <https://doi.org/10.31004/joe.v6i1.3221>
- Odiaka. (2020). Students' Perception on the Indices of Teaching Effectiveness Among Some Senior Secondary School ESL Students in Ibadan Metropolis. *Journal of Education and Practice*, 11(23).
- Panhwar, et.al. (2022). Enhancing student engagement in large ESL classes at a Pakistani university. *Educational Action Research*, 1-17. <https://doi.org/10.1080/09650792.2022.2089191>
- Perrenoud, M. E. (2023). Mixed Method Approaches for Data Collection in Hard-to-reach Populations. In D. W. Spini, *Withstanding Vulnerability throughout Adult Life*. (pp. 337-357). Singapore: Palgrave Macmillan. https://doi.org/10.1007/978-981-19-4567-0_21
- Petrova. (2023). Modern Technologies in Foreign Language Teaching. *Научни трудове на ВНСС (Научни трудове на ВНСС)*, 63(2), 175-185. <https://doi.org/10.37075/RP.2023.2.13>
- Purwaningtyas, et.al. (2023). EFL Teacher Intervention in Mediating Students' Interaction in Web-Based Collaborative Writing Environment Using Google Docs. 7(1), 135-144. <https://doi.org/10.29408/veles.v7i1.7912>
- Qureshi, M. A. (2021). Factors affecting students' learning performance through collaborative learning and engagement. *Interactive Learning Environments*, 1-21. <https://doi.org/10.1080/10494820.2021.1884886>
- Ramalingam, et.al. (2021). Exploring ESL learners' blended learning experiences and its' effectiveness through web-based technologies. *International Journal of Evaluation and Research in Education*, 10(4), 1436-1445. <https://doi.org/10.11591/ijere.v10i4.21465>
- Roldsgaard, et.al. (2014). EDUCATIONAL INNOVATION THROUGH PARTICIPATORY ACTIVITIES. *INNODOCT*, 94-103. <https://riunet.upv.es/handle/10251/40350>
- Roy, P. (2023). The Use of Web 2.0 Tools and Technologies in English Language Teaching-Learning Process. *Gyan Management Journal*, 17(2), 23-30. <https://doi.org/10.48165/gmj.2022.17.2.4>
- Sarwar, e. (2021). Improving ESL Learners' Comprehension through Motivational Synergy. *Sir Syed Journal of Education & Social Research*, 4(2), 181-190. [https://doi.org/10.36902/sjesr-vol4-iss2-2021\(181-190\)](https://doi.org/10.36902/sjesr-vol4-iss2-2021(181-190))
- Scager, K. E. (2016). Collaborative learning in higher education: Evoking positive interdependence. *CBE—Life Sciences Education*, 15(4), ar69. <https://doi.org/10.1187/cbe.16-07-0219>
- Shah, F. N. (2022). Web-Based Task Management System for Improving Group Work Collaboration. *International Journal of Academic Research in Progressive Education and Development*, 1669-1680.

- Shahidan, et.al. (2022). Fostering Motivation in ESL Collaborative Online Writing Through Google Docs. *World Journal of English Language*, 12(7), 166-177.
- Sholikhah, et.al. (2022). "HOW DO I ENGAGE IN MY CLASS?"; EFL TEACHERS' AND TERTIARY STUDENTS' PERCEPTIONS DURING ONLINE SPEAKING CLASS. *Jurnal Pendidikan Bahasa*, 65-78. <https://doi.org/10.31571/bahasa.v11i1.3803>
- Silver, E. (2013). *The International Handbook of Collaborative Learning*. Routledge. Retrieved from <https://www.routledge.com/The-International-Handbook-of-Collaborative-Learning/Hmelo-Silver-Chinn-Chan-ODonnell/p/book/9780415805742>
- Smith, et.al. (2023, April 27). Interacting with the material differently: A mixed methods study exploring nursing student engagement and satisfaction with a flipped classroom approach. *Journal of Nursing Education and Practice*, 13(8). <https://doi.org/10.5430/jnep.v13n8p38>
- Stanlee, E. (2022). ENGLISH LANGUAGE EDUCATORS' APPROACHES TO INTEGRATE TECHNOLOGY IN THE 21ST CENTURY EDUCATION PRACTICES. *INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING*, 7(48), 301-307. <https://doi.org/10.35631/IJEPC.748022>
- Tanaka, et.al. (2017). Collaborative Group Label Work System Based on Web Technology. *IEEE Xplore -16* (pp. 915-918). Hamamatsu, Japan: IEEE.
- Tarman, B. (2016). Discipline or classroom management. *Journal of Learning and Teaching in Digital Age*, 1(2), 37-44.
- Thiese, M. S. (2014). Observational and interventional study design types; an overview. *Biochemia Medica*, 24(2), 199-210. <https://doi.org/10.11613/BM.2014.022>
- Vogel, et.al. (2023). Collaborative group work: university students' perceptions and experiences before and during COVID-19. *S N Social Sciences*, 2-18. <https://doi.org/10.1007/s43545-023-00670-2>
- Wai-Chan, S. (2017). International research collaboration creates higher impact. *Nordic journal of nursing research (SAGE Publications)*, 37(2), 59-60. <https://doi.org/10.1177/2057158517706259>
- Walrond, H. (2023). Integrating Technology in English Language Arts Teacher Education A Book Review. *Current Issues in Comparative Education*, 25(1), 27-29. <https://doi.org/10.52214/cice.v25i1.10160>
- Wang, R. (2023). Combining Data from Multiple Studies. *NEJM evidence*, 2(5). <https://doi.org/10.1056/EVIDe2300066>
- Wayessa, e. (2023). Mixed Methods Research in Global Development Studies: State-Sponsored Resettlement Schemes in Ethiopia. *The European Journal of Development Research*, 35, 1440–1464. <https://doi.org/10.1057/s41287-023-00588-8>
- Wilson, K. J. (2018). Group work. *CBE—Life Sciences Education*, 17(1), 45-52. <https://doi.org/10.1187/cbe.17-12-0258>
- Yang. (2023). Working Collaboratively in Second/Foreign Language Learning [Review]. *TESL-EJ*, 27(1), 1-4. <https://doi.org/10.55593/ej.27105r1>
- Yang, et.al. (2021). EFL Learners' Affect, Engagement, Misbehaviours, and Achievement: A Classroom Observation Perspective. *International Journal of English Linguistics*, 11(4), 12-25. <https://doi.org/10.5539/ijel.v11n4p12>
- Yasin, et.al. (2022, December 1). Effective Classroom Management in English as a Foreign Language Classroom. *Parole: Journal of Linguistics and Education*, 12(1), 91-102. <https://doi.org/10.14710/parole.v12i1.91-102>
- Zainuddin, N. (2023). Technology Enhanced Language Learning Research Trends and Practices: A Systematic Review (2020-2022). *The Electronic Journal of e-Learning*, 21(2), 69-79. <https://doi.org/10.34190/ejel.21.2.2835>
- Zeliha, et.al. (2023). WEB 2.0 ARAÇLARININ TEMEL EĞİTİMDE KULLANIMINA YÖNELİK SINIF ÖĞRETMENLERİNİN GÖRÜŞLERİNİN. *JOURNAL OF INSTRUCTIONAL TECHNOLOGIES & TEACHER EDUCATION*, 12(1), 1-13.
- Zelníčková, et.al. (2023). Classroom Climate of first Year Students at a selected Secondary Vocational School after the Covid-19 Pandemic. *R&E-SOURCE*, 5(1), 212-222. <https://doi.org/10.53349/resource.2023.is1.a1206>