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Investigating the Tertiary Level Students' Practice of Collaborative Learning in English Language Classrooms, and Its Implications at Public Universities and at Arabic Institutions

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Abstract. The benefits of *Collaborative Learning* have been emphasized in the ELT literature; however, its positive implications have remained few and far between at the higher educational institutions in Bangladesh. CLT has been introduced in Bangladesh; however, the majority of Public Universities and Madrasa Systems conspicuously lack trained ELT professionals who are aware of collaborative learning. Thus, the practical use of CLT in classrooms still remains a myth let alone the implementation of collaborative learning. The current study sought to identify the impact of collaborative learning on students' performance rate in their presentation test results, and to identity their overall perspectival response rates to (CL). The study analyzed three hundred and ten responses relating to their experience of studying in collaboration with their fellow classmates during the preparatory stages of knowledge production and gathering information that involved gathering ideas and having discussions on social media (i.e. Facebook) towards the accomplishment of their project assignments. Then, the study compares students' previous presentation test results derived from presentations conducted in the *pre-collaborative stage* to the test results derived from the *post-collaborative stage*. Finally, the study ran several statistical tests, and found that students responded positively to collaborative learning, and they made significant improvements in the post-collaborative test.

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1. Introduction

After the British left Indian Sub-Continent, India was divided into two dominions, the East and the West Pakistan. Throughout the Pakistani period, English was a second language in Bangladesh as a result of British control. In the business, professions, school, and other contexts, people who were educated or even marginally educated were compelled to use English as English was a link language between the West and East Pakistan (Hamid, 2016, p.28). The English language, however, was downgraded to the status of a foreign language in independent Bangladesh following the liberation battle in 1971. Almost everything is done in Bengali in this monolingual country, and English is not utilized in regular discourse. When they were forced to communicate in English, they began to struggle. (Akbas, 2016).

In the late 18th century, a group of British people brought English education to the subcontinent, establishing a number of English medium schools. However, it was formalized in 1835 by Lord Macaulay's Minute. The approval of this Minute by Lord William Bentinck formed the foundation for British education policy in then-British India. After the liberation of Bangladesh, the status of English as the second language was declined and remained unidentified. It was rather neglected in the offices and educational institutes.

Bengali replaced English in all official communications except those in courts, foreign missions, and armies which still use English as the official language. To stress the individuality of "Bengali" in 1972, English was omitted from the primary and tertiary level of education. Bengali became the only medium of instruction in secondary and higher secondary schools; all schools including the English medium institutes were brought under a general order to switch to Bengali with immediate effect (Islam, 1975). But it was still taught as a subject in the secondary level. Azam and Tatsuya (2018) stated, "a huge wave went on in changing the names of places and institutes into Bengali and translating books into Bengali" (p.107). This is owing to ardent nationalism that everybody instantaneously grew animosity towards learning and using English almost dramatically.

Without a doubt, Bangladesh has seen the prevalence of many streams of education, such as *Bengali medium*, *English medium*, *Madrasa* education, and other medium where discrete teaching-learning of English has been seen for a long time. Because there are no defined instructions from the authorities, particular implementation of appropriate methods such as *Communicative Language Teaching* (CLT) is exceedingly challenging under these diverse streams. Looking at Bengali medium schools and colleges, it is clear that CLT is rarely employed due to a variety of factors such as current materials, experienced teachers, and technological assistance (Ahmed, 2016, p.98). Therefore, this study aimed at investigating the implementation of

collaborative learning, and making the teachers aware of its benefits in developing English language skills, particularly speaking.

2. Collaborative Learning

The definition of collaborative learning is "the use of small groups in which students work to accomplish shared objectives and maximize both their own and others' potential" (JONY, 2019).

> *The teacher's duty is to foster an atmosphere in which students are eager and able to collaborate. The setting must also provide many chances and interesting situations for learners to collaborate with others, as well as a safe space for them to share their growing ideas and insights (JONY, 2019, p. 94*).

Students frequently learn about things that are previously known in the classroom. They only have to figure out how to make these discoveries when they have a project of their own (Davis et. al., 2006). In order to promote teaching and learning, educational institutions are continually integrating cutting-edge technologies into their instructional strategies. SNS (Social Network Services) have evolved into online learning environments for collaborative learning and knowledge exchange in the current era (Qureshi et al. 2021).

As students today are much more advanced with the use of technology and social media tertiary institutions such as mine have officially adopted Google Meet and Facebook as one of the most potential communicative tools to ease learning processes by posting dates of tests and quizzes, important events and other class-related notices, lecture notes and materials etc. In this line, Collaborative learning or CL is one of the methods that is now used to get students to work in togetherness so as to create such an environment in class as to help them not learn what is ready for them but to stimulate their thoughts towards learning through inquisitiveness and discoveries. However, collaborative learning in Bangladeshi tertiary education system has not seen a rampant spread and wide acceptance among students.

Although there is limited literature on the relationship between collaborative learning and students' cognitive development or development of critical thinking (Loes & Pascarella, 2017), the study has revealed that there is still much to learn from the relationship between these two entities that help students be critical and make critical decisions during discussions with peers. The goal of this study is to demonstrate that collaborative or group study has a positive impact on students' speaking abilities as judged by presentation test scores.

In order for the phrase to serve a wider familiarity, the term Collaborative Learning (CL) has been substituted with group work, as group work is the term researchers have frequently chosen (Nguyen, 2013; Jabbarova, 2020; Herrmann, 2013 in Novitasari, 2019). It is now widely used as a legitimate and catalytic technique for engaging kids in speaking, writing, and, in some cases, reading assignments (Remedios et al., 2008; Wiener, 1986; Sembiring, 2018; Aloisi et. al. 2016; Pattanpichet, 2011; Ibrahim et. al. 2015). Collaborative learning activities vary, but the majority focus on students' inquiry or application of course

information rather than the teacher's presentation or explanation (Smith et al., 1992).

Collaborative learning makes students more active, and it helps students share and communicate their ideas and they can solve the difficulty of the given materials easily (Tampubolon, 2018; Kelson & Distlehorst, 2000; Sembiring, 2018; Murda et. al. 2015; Almajed et. al., 2016; Laal & Ghodsi, 2012; Awerbuch & Kleinberg, 2008). The subjects of the current study are taking Intensive English-1 where the course instructors emphasize speaking over the other skills since the majority demonstrates weakness and difficulty in speaking rather than in other skills. The status of English in Bangladesh is far more than a foreign language but less than a second language. Though much emphasis is put on English from the elementary level, many students fail to achieve the target level of proficiency (Shuchi & Islam, 2016). Implementing the strategy's main purpose is to track learners' cognitive growth as they learn by sharing knowledge, comparing and contrasting old and new knowledge, and correcting misconceptions (Marsico et. al., 2013).

Collaborative learning thus has a strong bearing on and indeed capitalizes on constructivism and Vygotsky's Zone of Proximal Development (i.e. quoted in literature) (Harland, 2003) with the goal of serving the same purpose of comparing and contrasting prior learning with newly acquired knowledge to test and measure degrees of improvement in any given area of learning.

3. Suggested Collaborative Learning Model

The collaborative learning model presupposes students' active engagement in an interactive way of learning where they get the opportunity to share ideas and engage in critical thinking. It refers to the formation of such a learning environment where they happen to capitalize on shared ideas and skills invested by the participants in the learning group. Learners in collaborative learning understand the connectedness and presence of their peers, which stimulates inspiration in them to get involved in group tasks. The collaborative model is a way of anticipating active discussion and shared instructions from all the participants that facilitate active processing of course material and activate fruitful learning.

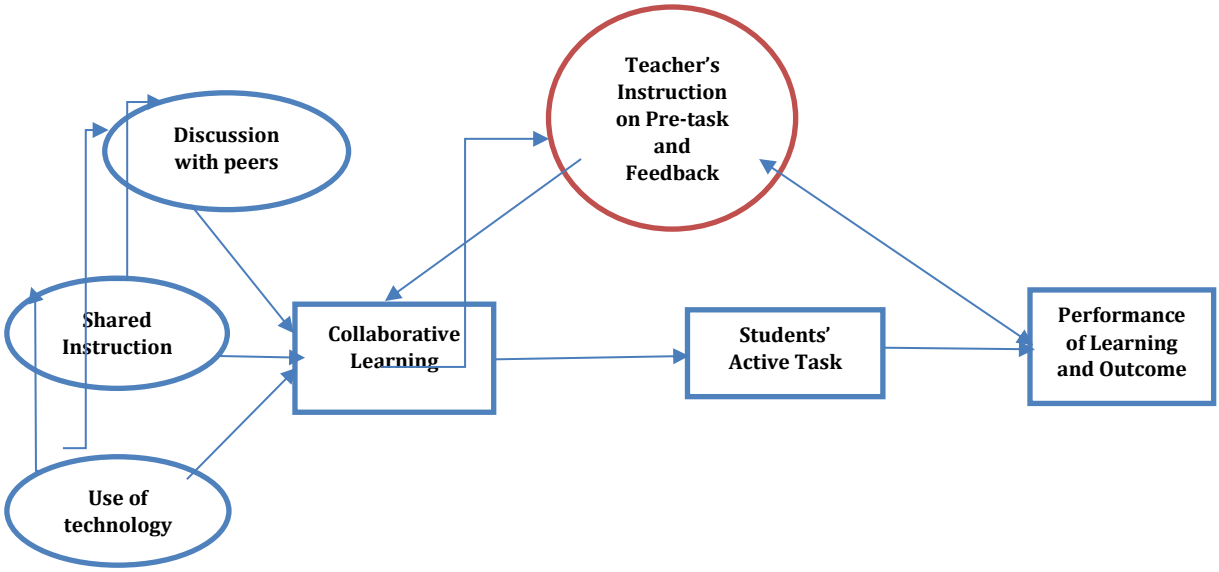

Chart 1. Theoretical Model of the Study

Teacher's instruction during the process of collaborative learning ensures students' active and organized engagement in learning, which ultimately ensures better performance and satisfactory outcome towards the end of the activity.

4. Literature Review on Collaborative Learning

Collaborative learning is a substantial departure from the traditional lecture- or teacher-centered environment found in college classes. The lecture/listening/note-taking process may not fully vanish in collaborative classrooms, but it coexists with other processes that are built on student conversation and active engagement with the course material. Teachers who employ collaborative learning strategies often consider themselves to be professional intellectual experience designers for their students rather than expert knowledge transmitters—coaches or midwives of a more emergent learning process. The benefits of using collaborative learning method is evident, and often reflected through its popularity among researchers.

"Johnson, Roseth, & Shin, 2014; La Rocca, Margottii, & Capobianco, 2014 suggest, when university students work in collaborative groups, compared to students who study individually, motivation and achievement increase, as evidenced in university achievement tests" (Weinberger & Shonfeld, 2020, p. 128).

Method of Collaborative Learning CLM is the most effective method for involving students in group work and conversation, as well as motivating them to engage in more discussion-based cooperative learning (Murda & Flora, 2015; De Hei, Strijbos, Sjoer & Admiraal, 2015). The idea of the Zone of Proximal Development (ZPD) first came into being in the 1930s by Soviet psychologist Lev Vygotsky, is frequently used as a synonym for and related to the theme of Collaborative Learning (Beheshti et. al., 2000 in Rezaee & Azizi, 2012; Harland, 2003; De Marsico et. al., 2013).

The ZPD is the difference between a learner's current degree of progress and what he has already mastered. The ZPD is thought to highlight the difference between

a child's ability to solve problems on his own and his ability to solve difficulties with help. (Schutz, 2004 in Rezaee, et al., 2012). Furthermore, "Vygotsky's educational model includes a strong bent towards social and collaborative learning" (De Marsico et. al., 2013, p.12).

Likewise, the collaborative learning has been used here to determine the difference between the learning and production of knowledge by students' individual level of regular development reflected in the pre-test result and the level reflected in the post test results derived from the collaborative studies driven by the support from the peers. Vygotsky's ZPD can be used to pinpoint a pivotal development in between two stages.

Vygotsky's views on the nature of human development and the interrelationship between learning and development are clearly reflected in the ZPD concept. Learning, which is not the same as development, can lead to development, and ZPD is the term for the mechanism and possible effect of learning on growth (Rezaee & Azizi, 2012).

Students are put in a collaborative atmosphere where they are encouraged in finding ways to express themselves and share ideas, thereby refining their own ideas, according to the constructivist theory, which is widely acknowledged as one of the most successful techniques of learning (De Marsico et. al., 2013). This is expected to increase motivation and active collaboration during learning activities, as well as improve learning efficiency and overall student satisfaction (De Marsico et. al., 2013). "Bangladeshi students become quite demotivated in speaking or practicing English for which they are gradually becoming hesitant and afraid to speak before a large audience" (Suchona & Shorna, 2019, p.36). To this end, there remains a great deal of necessity to rethink a more diplomatic and student-friendly teaching method. In this respect, collaborative learning appears to be the robust host. "Peer collaboration has also been largely studied in the L2 literature" (Nguyen, 2013, p.64).

The ambiguous status of English, as well as the vagueness of language policy, hindered English teaching and learning. The most major hindrance to improving the English teaching situation has been a serious shortage of English instructors, which has resulted from the neglect of English instruction during the post-liberation decades. Students who progress to higher education may have improved their math or science skills, but they continue to struggle with English and, in some ways, join higher education programs unprepared. "As a result, they are unable to cope with the English necessary for Madrasa level" (Golam, 2018, p. 108).

"To support EFL teachers and learners in taking advantage of peer support in developing learners' spoken English ability, there needs to be more research data in this area to inform practice" (Nguyen, 2013, p.64). It is understood that there is a need for further research on collaborative learning to see its scope and strength in connection with the development of students' interaction and discussion and proficiency in speaking. From a developmental point of view, it is social action in groups that is primary, with working alone being a particular and derivative case.

Going further in this direction, Crook (2013) has argued that "the desire to 'share', to achieve 'mutuality' is a basic and defining drive of human beings; being motivated to 'share' our experiences with others, and sometimes taking pleasure in this for its own sake, is part of what it means to be human, and not only a more or less efficient strategy for achieving a task" (in Baker, 2015, p.3).

Johnson & Johnson (2009) and Stahl (2006) cite "Despite the widespread influence of social constructivism that supports CL methods, in education teachers' perceptions of their students' learning processes are not always indicative of a concomitant internalization of these ideas" (in Weinberger& Shonfeld, 2020, p. 128). However, Weinberger & Shonfeld (2020) find that the students' grasp of collaborative learning is shown in their active participation in conversations and conversational processes, which allows them to construct new knowledge and aids in the generation of meaning through speech. Thus, the recognition of the signs of reliability of collaborative learning methods has been fully manifested.

5. Method

The current study applied quantitative data analysis method as the study used questionnaire with multiple choice questions and numerical numbers. Current study considers speaking skill as a befitting term to replace the term presentation in the title; however, the term presentation will be interchangeably used with speaking from time to time. The study bases its findings on two popular theoretical frameworks, Constructivist Approach and *Vygotsky's Zone of Proximal Development* in order to demonstrate collaborative learning in the line of the central hypothesis of this study discussed in the Significance of the Study section. Literature highlighted the positive impact of collaborative learning as opposed to self-study or individual learning with specific focus on speaking.

The current study has, thus, put students in contextual and collaborative learning process to contrast their *individual prior knowledge* with their *recently acquired knowledge* under the rubric of collaborative learning and thereby their own corrective measures.

6. Bangladeshi Context

As Bangladesh is a Muslim country and a developing country, people from middle and lower middle-class families prefer sending their children to Madrasas as a means to a spiritual sacrifice to their God. A significant body of students earns education in a number of Madrasas around the country, and the number increases every year. A total of 1.4 million pupils have been enrolled in the country's 13,902 Qawmi madrasas.

According to a study, Dhaka division has the most madrasas with 4,599, while Barisal division has the fewest with 1,040. The research, published by the *Bangladesh Bureau of Educational Information and Statistics* (BANBEIS) in response to Prime Minister's Office orders, is the first such study of Qawmi madrasas in

Bangladesh (Correspondent, 2021). In addition, a lot of students are studying at Public Universities where English is rarely practiced.

"In Bangladesh, the education system is divided into three sections -Bangla Medium, English Medium, and Madrassa System" (Suchona & Shorna, 2019, p.34). Chowdhury found,

> *English is a compulsory course in the syllabi designed for school, college, and university level. In the public universities the non-English major students are offered one or two compulsory English courses, whereas, in the private universities the students need to do two to four English courses (2012, p.43).*

Yet, Madrasa or Arabic Institutions and Bengali Medium Institutions like public colleges and universities do not have trained ELT teachers, and these teachers are not familiar with collaborative. Most teachers follow grammar translation method in which students are exposed to formal structures rather than a mixed communication environment where students can share their thoughts and ideas and can generate context-based language output.

In Public colleges English is taught as a mandatory subject, while Bengali is used as the primary language of instruction in class across all disciplines. English medium (A-Levels) schools and colleges deliver mixed modes of lectures both in Bengali and in English, while English is highly encouraged in and outside the classroom. "As the use of English is increasing day by day in different forms, there is significant evidence of use of English along with Bangla as code-mixing and code-switching" (Banu & Sussex, 2001 in Rahman, 2005, p. 29-55).

According to Hamid (2009), the government funds and oversees this instruction through a national board of religious education. In this stream, Bangla is the medium of teaching, with Arabic and English as required courses. Madrasa education students are mostly drawn from lower and lower-middle class households, and it serves around 16% of the school-age population (in Hamid, et. al. 2016, n.p.).

Finally, there is the Madrasa, or Arabic Medium, where English is practically never taught as a primary language. As a result, university students come from a diverse range of backgrounds, and the majority of them are unwilling to talk in English because they are shy, scared, or intimidated. Instructors are supposed to employ the communicative approach as an antidote to such difficulties as worry, fear, and psychological stress in order to minimize these problems with pupils. (Suchona & Shorna, 2019).

The Grammar Translation Method is still used by the majority of academics at Bangladeshi universities, although others aim to combine more student-centered instruction CLT Communicative Language Teaching. "One of the strongest criticisms leveled at the higher education system, and particularly at teacher education, is that it does not provide students with the relevant professional expertise demanded of their profession" (Libman, 2014 in Weinberger& Shonfeld, 2018, p.127).

The current study has capitalized on students' collaborative study as a potential candidate in order to facilitate such a student-friendly ambience that can minimize fear and anxiety. "There are a number of benefits that are associated with the concept of collaborative learning (CL)" (Laal & Ghodsi, 2012, p. 486).

Collaborative learning not only allows students to express themselves, but it also allows them to better understand their own strengths while also valuing their peers' contributions and abilities. However, some studies have been done on collaborative learning, and the majority of the research on the outcomes related to collaborative learning has been done at the primary and secondary levels of school (Johnson, & Smith, 1991 in Loes & Pascarella, 2017).

Aside from the literature demonstrating collaborative learning's overall positive impact on a variety of student outcomes, there is a smaller body of evidence suggesting collaborative learning may influence college students' cognitive development in general and critical-thinking skills in particular (Loes & Pascarella, 2017).

Students from both *Public Universities* and *Madras System* participated in a two-week long workshop on collaborative speaking practice following by formal presentation. Students were led through a pre-lesson activity before their active engagement in Active Task with their peers. Students were introduced to individual work and group work and peer discussions and to using their previous knowledge to collect ideas on their assigned topics. Students were instructed by the instructor through email correspondence and Google meet video conference sessions.

The samples used as subjects in the current study are first year undergraduate students from 3 Arabic Medium or Madrasas and from 2 Public Universities. Students from Madrasas are studying towards earning Fazil Degree, equivalent to Bachelor's Degrees at universities, in which English is a compulsory subject. Students from public universities participated in the survey include the Department of Business Administration (BBA), the Department of Economics (BSECO) and the Department of Engineering (BSEEE) who are required to take at least two English courses as foundation courses.

A total of 310 students participated voluntarily in the survey in a given period of 20 days. Survey has been conducted with Survey Questionnaire provided through Google Drive link to the subjects. Among 310 students, 210 students from the public universities filled out questionnaire; whereas, 100 students from madrasas filled out the questionnaire.

Data Collection and Instruments

"In order to develop a survey/questionnaire first the researcher should decide how to collect the required data" (Taherdoost, 2018 in Taherdoost, 2019, p.3). Data was collected with 310 questionnaires through Google-Class as "questionnaire is the most considered the most effective tool by researchers to collect survey data" (Taherdoost, 2019, p. 2). A fixed time frame was given for the questionnaire to be filled out with attention and carefulness and returned to the researcher. The main purpose of the survey questionnaire was to collect date on open ended and close

ended questions. Students filled out the questionnaire providing responses in accordance their personal perspectives. As this research conducted a quantitative method, questionnaire was a useful method of data collection.

Teachers provided feedback on their individual work on the collection of ideas on the given topic in the first three days of seven-day session followed by individual presentation that was assessed on 10 points each. Then, a similar session was executed guiding them through first 3 days followed by their group activities of collecting information and the final group presentation assessed on 10 points each. After the two sessions were successfully conducted, students were given feedbacks on their sessions. Then, the students were given their respective individual and group presentation test scores after three working days. In both cases, in group and individual evaluations students were evaluated separately to show their individual performance.

The Likert Scale has been used as an efficient measurement tool to assess the numerical values of the responses by the study participants during the initial phase of data collection. The Likert Scale is considered one of the most fundamental and common scaling methods in social science research. (Taherdoost, 2019). "It is also the means to collecting data with NON-FORCED choice" (Polland, 1998, p. 11) using measurement scale.

Likert scale has been used as the measuring tool to scale the weight of responses from Strongly Agree (SA)-Strongly Disagree (SD) using numeric values on 1 to 5 scale where 5=Strongly Agree, 4=Agree, 2=Disagree & 1= Strongly Disagree with 3=Neutral in the middle as per the degree of intensity in opinion and feelings of the subjects on a given question. As there is no substantial standard on how many points to be put on the Likert scale code [1-5] has been used to denote the degree of intensity under the measuring.

7. Findings

Data have been presented in numbers and percentages using graphs appropriate for the representation and analysis. The following table demonstrates that among the students taking part, 67.7% are from public universities while 32.3% are from madrasa system.

Table 1. Total number of participants and the ratio of Public and Madrasa participant

Institutions	Number of Participants	Ratio
Public University	210	67.70%
Madrasa System	100	32.30%
Total	310	100.00%

Chart-2 demonstrates the graphic representation of the above table. The subsequent table-2 has exhibited all the responses from the total participants, which have been represented on Likert Scale, Rensis Likert (1931), has been used to measure the numerical values worth specific ranges from SA(5)=Strongly Agree to SD(1)=Strongly Disagree and N(3)= Neutral has been used to determine the midpoint to represent Neither Agree nor Disagree.

A Likert-type scale "requires an individual to respond to a series of statements by indicating whether he or she strongly agrees (SA), agrees (A), is undecided (U), disagrees (D), or strongly disagrees (SD)" (Jamieson, 2004; Croasmuns & Ostrom, 2011, p.19). "A Likert rating scale measurement can be a useful and a reliable instrument for measuring self-efficacy" (Maurer, 1998 in Croasmun, & Ostrom, 2011, p.19).

Chart 2. Representation of Public and Madrasa participants in the survey

Chart-2 represents the total number of participants [n=310] in the current survey where [Public=210] & [Madrasa=100]. 310 questionnaires were dispatched to the subjects of the current study and the study has received full attendance, 310 data on the questionnaire.

Table 2. Representation of the variables and percentage of dependent variables

Variables	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.7	Q.8	Q.9	Q.10	Q.11	Q.12	Q.13	Q.14	Q.15	Q.16
SA	44%	45%	33%	34%	60%	48%	42%	29%	52%	59%	48%	61%	46%	37%	44%	35%
A	56%	55%	67%	62%	40%	48%	32%	63%	45%	41%	52%	39%	54%	56%	52%	58%
DA	0%	0%	0%	3%	0%	3%	21%	8%	3%	0%	0%	0%	0%	4%	4%	8%
SD	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	4%	0%	0%

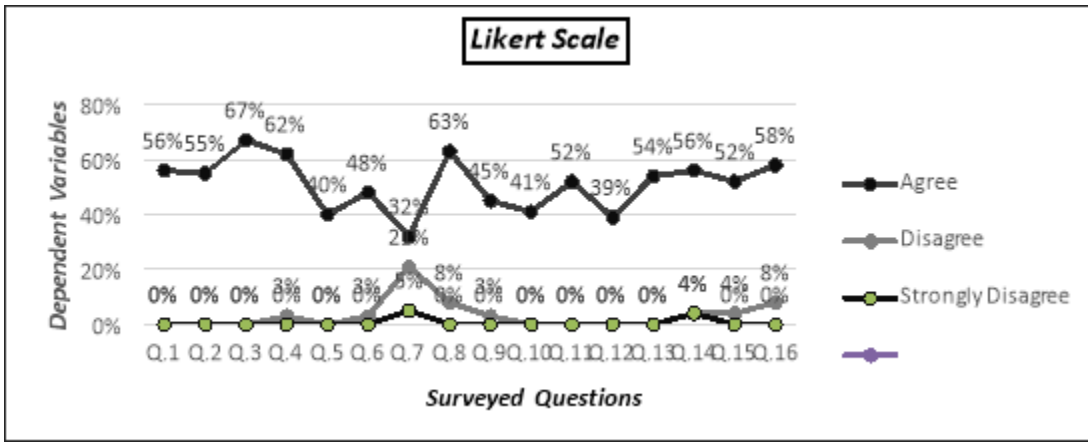

Chart 3. Representation of overall responses on the questionnaire

Table-2 consists of variables on the extreme left vertical and the questions on the top row labeled as Q.1 to Q.16. The subjects of the current research were delivered a set of 16 questions covering different aspects of collaborative learning related predominantly to its predicted positive and negative impact on students' performance on speaking / presentation tests. Students have been divided into six different groups with five general members working under a selected team leader towards accomplishing the assigned presentation project followed by a presentation test. Table-2 represents the response ratio in percentile on the scale of [1-5] on each and every 16 questions. The first two questions have been omitted from the above table which has been displayed at a later stage.

According to the responses on Table-2, it is clearly evident that subjects of the study have responded enthusiastically enough to get their voice heard. Some of the major research questions from among the 16 have been discussed here. The first question is about whether a collaborative learning environment creates a better opportunity for learning. Among the total participants 44% responded (SA) and 56% responded (A), while 0% students responded SD & DA.

For the second and third question-Collaborative learning helps you better understand, and Collaborative learning improves students/ increases a student's desire to excel-most students acknowledged the positive impact of collaborative learning on their cognitive development (i.e. Zone of Proximal Development) which helps them understand their peers who come from culturally different backgrounds and they believe that collaborative learning improves or increases their desire to excel in their work. For, Q.2& Q.3 45% & 33% said (SA) and 55% &67% responded (A), while 0% students responded (D) & (SD) for both the questions respectively.

Survey questions [Q.6, Q9, and Q.10. & Q.11] have been intended to determine whether collaborative learning helps students develop better communication skills, speaking skills, think of new ideas, and create a better environment for speaking practice. 48%, 52%, 59%, &48% students responded positively as they have strongly

agreed with the statements, while only 3% students think that collaborative learning does not help them develop better communication skills and speaking skills, while none disagreed with the statements.

According to Table-2, we can make a strong case that most students are in favor of collaborative learning and they understand that collaborative learning helps perform better in their speaking and presentation. At this stage, the research has undergone a number of tests to determine the data consistency and reliability and to extract more elaborate analysis of different variables in the data.

In addition to the fundamental questions to Collaborative Learning and its impact, two introductory questions have been asked to measure the level of familiarity and students' overall preference to collaborative learning. The results on the two questions have been generated below.

Table 3. Students' familiarity and preference to Collaborative Learning

Responses	Institutions	Familiarity	Presences
Yes	*Public University*	74.4%	93.5%
No	*Madrasa System*	22.6%	6.5%

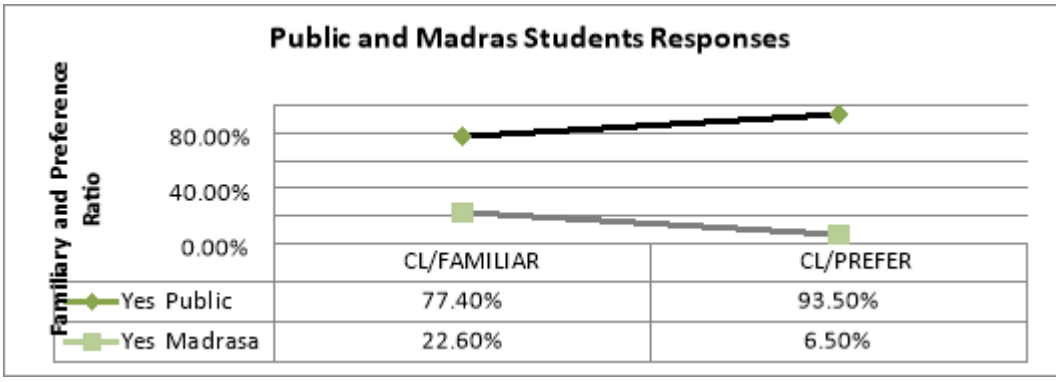

Chart 4. Public and Madras students' familiarity and preference to collaborative learning

Table 3 corresponds with Chart 4 as both are representing students' reflection on the questions, Are you familiar with collaborative learning or group learning. And do you prefer studying in groups? In response to these questions, 77.4% and bulk 93.5% Public University students have confirmed that they are familiar with collaborative learning, and they prefer collaborative learning, as they love studying in groups rather than individually.

Table 4. Comparative Test Scores and their sum total, mean value and standard dev.

Test Scores**	Sum	Mean*	Standard Deviation*
Individual Test Scores	1694	5.464516129	1.328198632
Collaborative Test Scores	2281	7.358064516	0.928442791

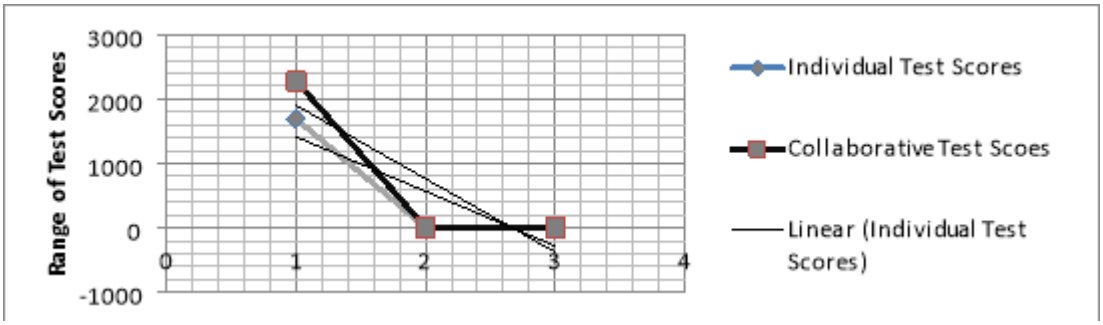

Chart 5. Graphic representations of the comparative test score

Chart 5 displays graphical representation of table 4 both of which demonstrates the total score earned in the individual test and in the collaborative test by Madras students as well as Public University students. It also shows the mean difference and standard deviation between the two test scores. It is evident that scores earned in collaborative test outweighs the scores earned in the individual test. The mean difference between the two tests is also remarkable together with the standard deviation 0.92844 between the test scores of all students in their collaborative test, which means that all students in the collaborative learning and collaborative test scored equally consistently compared to 1.328 (standard deviation) between all the scores earned in individual test scores both by Public university students and Madrasa Students.

It is evident that students from both Arabic and Bengali medium institutions show similar improvement upon collaborative learning. The study also suggests positive improvement in students' English language learning through collaborative learning.

8. Reliability Test

Numbers instead of texts have been used on Excel and SPSS Spreadsheet for the analysis of data at different phases of the data incorporation and analysis at different sections. A reliable validity testing tool has been adapted to test internal consistency of the data. First, a validity test has been conducted following Cronbach's alpha to measure "internal consistency" reliability as "Cronbach's alpha is the most widely used tool to measure consistency in scientific research" (Bonett & Wright, 2014, p.3). Lee Cronbach in (1951) provides a measure of the internal consistency and reliability of a test or scale; it is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test.

A two-sample F-test, Correlation, and Regression analysis also have been run to see the internal correlation and variance between two sets of data variables (i.e. in between dependent variables as well as between test scores of individual performance & test scores of collaborative performance) gathered from students' responses and test scores generated by individual effort and the post-test scores.

A two sample T-test has been conducted to test [t-stat] and the distinction between M=mean values between two different variables. The T-test is followed by the significant correlation and regression testing on ANOVA hypothesis tool to determine r values (reliability coefficient) and p= (probability) of the positive or negative relationship between two variables.

9. Pilot Study

The primary collection of data samples has been tested to see internal consistency of the data against Cronbach Alpha ($a \geq .75$) and *KR*-21 formula see Reliability Coefficients. It is common to see the reliability of instruments used in published science education studies framed in terms of a statistic known as Cronbach's alpha (Taber, 2018) Cronbach's alpha has been described as "one of the most important and pervasive statistics in research involving test construction and use" (Cortina, 1993, p. 98 in p.1275).

Table 5. Summary of participants

Case Processing Summary			
		N	%
Cases	Valid	310	100.0
	Excluded	0	.0
	Total	310	100.0

Above table-5 displays a case processing summary of the number of participants with 0 excluded. At first, the collected data has been set in excel spreadsheet and then transferred to SPSS for final testing. The raw data has been renamed with specific numerical values in order for them to fit SPSS criteria. Data labels have been put properly. For the first two questions on students' familiarity and preference numerical values Yes=1 and No=0 have been used on the SPSS spreadsheet. Likewise, Public University=1 and Madrasa=0 have been put along with 5=Strongly Agree, 4=Agree, 3=neither Agree nor Disagree, 2=Disagree and 1=Strongly Disagree have been set as data to run a reliability test on all the variables.

Following table-6 shows the Cronbach's Alpha α=*.897 on N=19 items put on SPSS. It is clear that the data set has successfully passed the important critical point of Cronbach Alpha in order for the data to be recognized as statistically reliable. Alpha value is considered Excellent at (0.93–0.94), strong (0.91–0.93), dependable (0.84–0.90), robust (0.81), quite high (0.76–0.95), high (0.73–0.95), good (0.71–0.91), somewhat high (0.70–0.77), moderate (0.61–0.65), satisfactory (0.58–0.97), acceptable (0.45–0.98), sufficient (0.45–0.96), not satisfactory (0.45–0.96) (0.11) (Taber, 2018).

As α=*.897 is higher than 0.81 set by (Taber, 2018) and fits within [0.84-0.90] we can consider it reliable. Hence, the internal consistency of the collected data is proven at this stage. Table-6 measures the item-means and inter-item correlation summary which shows that the average correlation between items is at significant level = *.377 which suggests that all the respondents responded positively towards collaborative learning.

Table 6. Reliability Statistics

Reliability Statistics

Cronbach's Alpha	Cronbach's *Alpha Based on Standardized Items*	N of Items
α = *.897	.920	19

Table 7. Demonstration of internal consistency and variance

Reliability test results showing Cronbach's Alpha

SUMMARY				
Groups	Count	Sum	Average	Variance
FAM/CL	310	24	0.774194	0.180645
PREF/CL	310	29	0.935484	0.062366
CL/BETTERLERENVIRON	310	132	4.258065	0.464516
CLLERCULTURE	310	135	4.354839	0.369892
CLLERDESIREEXCEL	310	129	4.16129	0.406452
CLRESPONSIBLE	310	130	4.193548	0.494624
CLIMPORTANCETEAMWORK	310	141	4.548387	0.322581
CLBETTERCOMSKILLS	310	134	4.322581	0.55914
CLCHAOS	310	109	3.516129	1.258065
CLHELPSCRITICAL	310	120	3.870968	0.716129
CLIMPSPEAK	310	135	4.354839	0.569892
CLNEWIDEAS	310	139	4.483871	0.391398
PRACTSPEAKCL	310	136	4.387097	0.378495
CLMOTIVATIONMORE	310	138	4.451613	0.455914

CLACTIVE	310	134	4.322581	0.425806
CLINTERESTNEWIDEAS	310	125	4.032258	0.898925
CLENERGY	310	127	4.096774	0.690323
CLMOREENGAGED	310	124	4	0.733333
CLPRESTEST	310	208.5	6.725806	1.813978

Table 7 demonstrates inter-item consistency along with mean variance in between variables. Column on the very left (Groups) represents the shortened forms for the each and every survey question with CLPRESTEST=Presentation Test after Collaborative Learning at the very bottom. On the extreme right column variances are presented. There is no significant variance among the variables except the first two variables which are outstanding items with close-ended questions (Yes/No). The reason perhaps is because for the first two items only two options / two numerical values 1 & 0 were put in the processing sheet.

Study shows that ANOVA single factor P value is ($p<0.05$) we can say that there is no significant difference between the variables, which means that there is internal consistency in the responses from all the subjects of the research. Smaller ($p=8.3E-148$) suggests that the data is statistically significant and it allows us to reject the null hypothesis to accept the alternative hypothesis that there is a significant relationship between the given variables. Hence, the data has been proven reliable according to Bowling (2009) that "the reliability in quantitative research as synonymous to dependability, consistency, reproducibility over time, over instruments and over groups of respondents" (in Oluwatayo, 2012, p. 391).

10. Discussion

At first, the two sets of data collected on students' individual performance in the test scores [INDVPRESTEST] and the presentation test scores generated by collaborative preparation and performance [CLPRESTEST). These two sets of data have undergone a reliability test on SPSS to measure internal consistency and reliability on the basis of Cronbach's Alpha.

Table: 8 Reliability and Consistency testing of Individual Test and Collaborative Test

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
*.991	.992	2

Above table-8 demonstrates reliability and internal consistency between two test results by the students. The testing results of Cronbach Alpha stands (α= *.991) and the number of items (N=2). According to statistics the Alpha complies with and stands higher than Excellent = (0.93-0.94) set by Taber (2009). Therefore, both the data

sets are statistically reliable to conduct correlation and regression with other variables. It also suggests that the students' performance in both individual and collaborative tests have consistency. In order to determine the points of fluctuation, an F-test was conducted. In addition, a Regression analysis was done on the two sets of results to pinpoint variance in data.

Regression analysis shows that the correlation between the two variables is statistically significant as the P= possibility of null hypothesis that two variables are different proves wrong and (p=0.0000) is obviously very small and $p<0.05$ which suggests that we can easily reject the null hypothesis that these two variables are different. Hence, there is no significant difference observed at this level.

It can be said that students in both cases performed quite well. However, the current findings require a different test to measure the degree of improvements in the collaborative test score in order for the responses to match the test results. The table also demonstrates important clues for us to reject the null hypothesis and form an alternative hypothesis at this stage. Table-10 which is part of table-11 also shows the similar signs of correlation between these two items, where R-square =*0.968464389 which is statistically significant, which means that there is significant correlation between the two items.

To determine any significant variance between the test after individual performance and test after collaborative performance a T-test and an F-test have been conducted to highlight the mean difference, which can provide an important sign of difference between the two tests.

T-test exhibits the statistics found in t-test, which shows that (p=0.38252) which is (*$p>0.05$) which is larger, and it suggests that we cannot reject the Null Hypothesis. Also, t-stat is smaller than t-critical value which suggests that there is no significant difference; however, there is a difference in mean in the t-test as well as in F-test which suggests otherwise. Though the difference is small, students have performed better and made better improvement in collaborative learning by contrast.

F test shows the same test results where there is a marked difference between the two sets of tests-data, which suggests that though the p-value suggests otherwise there is still a sign of better performance in the Collaborative performance results made possible by students' participation in the collaborative learning process. Hence, the findings of table13 match with students' responses on the Likert scale. The tests also demonstrate the relationship between dependent variable CLPRESTEST and other independent predictors that predict the improvement in performance and test-scores after collaborative learning. Inter-item correlation has been displayed as a valid manifestation of the positive impact of collaborative learning according to the findings.

At this stage, the research has succeeded in replicating the kind of context the Constructivist Approach of learning suggests through learners' immersion in collaborative engagements and sharing and refining their ideas reflected in chart-8.

In other words, "a research can be deemed valid if the extent to which a research instrument consistently has the same results, if it is used in the same situation on repeated occasions" (Heale, R., & Twycross, A., 2015, p.66).

In order to prove further consistency in the data the current study has represented several other tests, and the following correlation test on SPSS has been conducted to measure +/- relationship between Collaborative Test-Score and other indicators. For Salvucci, Walter, Conley, Fink, and Saba, in terms of the range of reliability measure, when the r value is less than 0.50, the reliability is considered low; if the r value is between 0.50 and 0.80, the reliability is regarded as moderate whereas the r value is greater than 0.80, the reliability is treated as high (1997, p. 121). The data have also undergone a regression test to determine the p value to see whether $p</>.05$ to reject the null hypothesis and reach an alternative hypothesis.

The correlation between the significant indicators and their consistent relationship with CLPRESTEST=Collaboration Presentation Test. Based on the correlation statistics, we see there are negative and positive correlations between the variables, which will be further interpreted below; however, the correlations between inter-items are statistically significant at (P<0.01) level and (P<0.05) level.

To further clarify the correlations one by one, the correlation between Collaborative Presentation Test (Individual performer) and CLMOREENGAGED= Collaborative Learning and More Engagement in lesson, CLINTERESTNEWIDEAS= Collaborative Learning and More Interest in New Ideas, PRACTSPEAKCL= Collaborative Learning and Practice Speaking, CLIMPSPEAK= Collaborative Learning and Importance of Speaking, CLBETTERCOMSKILLS= Collaborative Learning and Communication Skills, CLHELPSCRITICAL Collaborative Learning and Critical Thinking show that the correlations are not statistically significant as the P value is larger than (P≥0.05) at (P=0.312, 0.603, 0.423, 0.933, 0.398, and 0.126) respectively.

Though the test displays negative Pearson (r= *-0.188, *-0.097, * -0.149, -0.016, -0.157, -0.281) respectively it suggests that the correlation is still statistically significant and has bearing on the test results. According to Taylor (1990), the correlation's strength is independent of its direction or sign. A negative correlation denotes an inverse relationship, in which one variable rises while the other falls. One of the reasons for the negative association is that the numerical values assigned to test scores are higher than those assigned to other indicators, such as the Likert Scale options. (5-1).

Regression analysis demonstrates the findings on the regression analysis between INDIVPRESTEST and other predictors, where INDIVPRESTEST is considered Dependent Variable. Coefficient $R2$=*0.1 and R=*316 prove that the correlation between the items is statistically at close variance and there is a relationship among the items. Whereas, (P>.842) is not statistically significant. We can make a case that the earlier between the two tests shows better statistically significant P value than the latter, which suggest that students' performance on CLPRESTEST is better than on INDIVPRESTEST. That means students in collaborative learning perform better than

in individual learning. The study hence is ready to suggest collaborative would very likely ensure better results.

11. Implications of the Study

The current study provides strong, positive implications for both Public University students and Madrasa students that they are more active and responsible in collaborative learning than in individual learning. "While the effectiveness of collaborative learning cannot be negated or questioned, limitations to implementing its full force is often ascribed to students' inability to communicate effectively (i.e. language) and unequal individual participation in group tasks not to Collaborative Learning" (e.g. Freeman & Greenacre, 2010; Janssen et. al., 2007 in Le, Janssen, & Wubbels, 2018, p. 104).

Thus, the current study provides successful data on ZPD together with a reflection on students' engagement in dialogues through contextual learning process as suggested by *Constructivist Approach*. This study strongly suggests that the collaborative learning method can facilitate more productive and ensure much better learning compared with other methods and provide learners student-centered learning environment in both Public Universities and Madrasas.

12. Conclusion

Collaborative learning can be used as a universal communicative teaching method where both adults and children can get a proper ambience to learn through their shared interests and previous knowledge. The study has shown that collaborative learning is more productive if properly enacted irrespective of Bengali medium universities and Arabic education systems. It not only helps school children do better on exams but it also helps tertiary level students and help them develop their critical thinking skills. "Students are not only expected to speak well but also expected to address complex scientific and social issues, greater involvement of students in dialogue, and an increased emphasis on collaborative discourse and argumentation, have become essential modes of engagement and learning" (Harney, Hogan, & Quinn, 2017 in Weinberger et. al., 2020, p.127).

Collaborative learning supports ZPD by allowing students to learn in context. Collaboration is also mentioned, if indirectly, in UNESCO's document from the summit on rethinking learning in the digital era (Shonfeld et al., 2017 in Weinberger, 2020). Yet, "despite the widespread influence of social constructivism that supports CL methods in education" (Johnson & Johnson, 2009; Stahl, 2006), "teachers' perceptions of their students' learning processes are not always indicative of a concomitant internalization" (Weinberger et al., 2020, p. 28).

13. Limitation of the study

However, the data from the present study has several limitations. 310 students from two distinct universities, each using a different teaching method and academic structure, participated in this study. This study demonstrates not just the advantages of collaborative learning but also highlights parallels between

madrasa and university students' perceptions. To that aim, this study suggests further research among college students at various levels from other schools in order to acquire more information and develop a more comprehensive grasp of the subject.

14. References

Ahmed, M. K. (2016). Communicative Language Teaching: A Practical Scenario in the Context of Bangladesh. *Advances in Language and Literary Studies, 7(*5), 97–104. https://doi.org/10.7575/aiac.alls.v.7n.5p.97

Akbas, I. (2016). Difficulties of English Language Teaching in Bangladesh. *International Journal of English Language Education, 4*(1), 17-36. https://doi.org/10.5296/ijele.v4i1.8575

Almajed, A., Skinner, V., Peterson, R., & Winning, T. (2016). Collaborative learning: Students' perspectives on how learning happens. *Interdisciplinary Journal of Problem-Based Learning*, *10*(2), 9. https://doi.org/10.7771/1541-5015.1601

Aloisi, G., & Scana, M. (2016). Social networks and collaborative learning. *European Journal of Open Education and E-learning Studies.*

Awerbuch, B., & Kleinberg, R. (2008). Competitive collaborative learning. *Journal of Computer and System Sciences*, *74*(8), 1271-1288. https://doi.org/10.1016/j.jcss.2007.08.004

Baker, M. J. (2015). Collaboration in collaborative learning. *Interaction Studies, 16*(3), 451-473. https://doi.org/10.1075/is.16.3.05bak

Bonett, D. G., & Wright, T. A. (2015). Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior, 36*(1), 3-15. https://doi.org/10.1002/job.1960

Chowdhury, N. (2012). Classroom code switching of English language teachers at tertiary level: A Bangladeshi perspective. *Stamford Journal of English*, 7, 40-61. https://doi.org/10.3329/sje.v7i0.14462

Correspondent, S. (2021). 1.4m students study in 14,000 Qawmi madrasas. https://en.prothomalo.com/bangladesh/14-lakh-students-study-in-14-000-Qawmi-madrasas.

Croasmun, J. T., & Ostrom, L. (2011). Using Likert-Type Scales in the Social Sciences. *Journal of Adult Education, 40*(1), 19-22.

Davis, L., McGraw, P., & Mileham, M. (2006). Collaborative Learning. *Linfield Magazine, 3*(1), 5.

De Hei, M. S. A., Strijbos, J. W., Sjoer, E., & Admiraal, W. (2015). Collaborative learning in higher education: lecturers' practices and beliefs. *Research Papers in Education*, *30*(2), 232-247. https://doi.org/10.1080/02671522.2014.908407

De Marsico, M., Sterbini, A., & Temperini, M. (2013). A strategy to join adaptive and reputation-based social-collaborative e-learning, through the zone of proximal development. *International Journal of Distance Education Technologies*, *11*(3), 12-31. https://doi.org/10.4018/jdet.2013070102

Golam, A. M., & Kusakabe, T. (2018). A qualitative study of English teaching in Bangladesh: A case study of Madrasa education. *US-China Education Review, 8*(3), 106-122. https://doi.org/10.17265/2161-623X/2018.03.003

Harland, T. (2003). Vygotsky's zone of proximal development and problem-based learning: Linking a theoretical concept with practice through action research. *Teaching in higher education, 8*(2), 263-272. https://doi.org/10.1080/1356251032000052483

Hamid, M. O., & Erling, E. J. (2016). English-in-education policy and planning in Bangladesh: A critical examination. In English language education policy in Asia (pp. 25-48). *Springer*, Cham. https://doi.org/10.1007/978-3-319-22464-0_2

Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence- based nursing, 18*(3), 66-67. https://doi.org/10.1136/eb-2015-102129

Ibrahim, N., Shak, M. S. Y., Mohd, T., Zaidi, A., & Yasin, S. M. A. (2015). The importance of implementing collaborative learning in the English as a second language (ESL) classroom in Malaysia. *Procedia Economics and Finance*, 31, 346-353. https://doi.org/10.1016/S2212-5671(15)01208-3

Jabbarova, A. (2020). MODERN APPROACHES IN TEACHING SPEAKING. АрхивНаучныхПубликаций JSPI, 1-5.

JONY, M. S. (2019). Exploring the effectiveness of cooperative learning at secondary level in Bangladesh. International *Journal of Educational Research Review, 5*(1), 93-99. https://doi.org/10.24331/ijere.669388

Laal, M., & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia-social and behavioral sciences*, 31, 486-490.https://doi.org/10.1016/j.sbspro.2011.12.091

Le, H., Janssen, J., & Wubbels, T. (2018). Collaborative learning practices: teacher and student perceived obstacles to effective student collaboration. *Cambridge Journal of Education, 48*(1), 103-122. https://doi.org/10.1080/0305764X.2016.1259389

Likert, R. (1931). A technique for the measurement of attitudes. Archives of Psychology. New York: Columbia University Press.

Murda, L. A., & Flora, H. (2015). The Effectiveness of Collaborative Learning in Improving Students Speaking Skill. Lampung University: Teacher Training and Education.

Loes, C. N., &Pascarella, E. T. (2017). Collaborative learning and critical thinking: Testing the link. *The Journal of Higher Education*, *88*(5), 726-753. https://doi.org/10.1080/00221546.2017.1291257

Oluwatayo, J. A. (2012). Validity and reliability issues in educational research. *Journal of educational and social research, 2*(2), 391-391.

Pattanpichet, F. (2011). The effects of using collaborative learning to enhance students English speaking achievement. *Journal of College Teaching & Learning (TLC), 8*(11), 1-10. https://doi.org/10.19030/tlc.v8i11.6502

Polland, J. Ronald. (1998). Essentials of survey research and analysis.

Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Yousufi, S. Q. (2021). Factors affecting students' learning performance through collaborative learning and engagement. *Interactive Learning Environments*, 1-21. https://doi.org/10.1080/10494820.2021.1884886

Rahman, S. (2005). Orientations and motivation in English language learning: A study of Bangladeshi students at undergraduate level. *Asian EFL Journal*, *7*(1), 29-55.

Remedios, L., Clarke, D., & Hawthorne, L. (2008). Framing collaborative behaviors: Listening and speaking in problem-based learning. *Interdisciplinary Journal of Problem-Based Learning, 2*(1), 1-20. https://doi.org/10.7771/1541-5015.1050

Rezaee, A. A., & Azizi, Z. (2012). The role of zone of proximal development in the students' learning of english adverbs. *Journal of Language Teaching and Research, 3*(1), 51. https://doi.org/10.4304/jltr.3.1.51-57

Salvucci, S., Walter, E., Conley, V., Fink, S., & Saba, M. (1997). Measurement Error Studies at the National Center for Education Statistics.

Sembiring, L. T. A. B. (2018). RESEARCHING STUDENTS'INTERACTION IN COLLABORATIVE LEARNING CLASS. *Journal of Applied Linguistics and Literacy, 2*(2), 125-134. https://doi.org/10.25157/jall.v2i2.2197

Shuchi, I. J., & Islam, A. B. M. (2016). Teachers' and Students' Attitudes towards L1 Use in EFL Classrooms in the Contexts of Bangladesh and Saudi Arabia. *English language teaching*, *9*(12), 62-73. https://doi.org/10.5539/elt.v9n12p62

Smith, B. L., & Mac Gregor, J. T. (1992). What is collaborative learning?

Suchona, I. J., & Shorna, S. A. (2019). Speaking problems in English and solutions: Scrutinizing students' perspective. *International Journal of English*, *8*(1), 34-41. https://doi.org/10.34293/english.v8i1.661

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education, 48*(6), 1273-1296. https://doi.org/10.1007/s11165-016-9602-2

Taherdoost, H. (2018). A review of technology acceptance and adoption models and theories. *Procedia Manufacturing,* 22, 960-967. https://doi.org/10.1016/j.promfg.2018.03.137

Tampubolon, T. C. Improving Students' Motivation in Speaking through Collaborative Learning. *International Journal of English Literature and Social Sciences*, *3*(2), 239289. https://doi.org/10.22161/ijels.3.2.10

Wiener, H. S. (1986). Collaborative learning in the classroom: A guide to evaluation. *College English, 48*(1), 52-61. https://doi.org/10.2307/376586

Weinberger, Y., & Shonfeld, M. (2020). Students' willingness to practice collaborative learning. *Teaching Education, 31*(2), 127-143. https://doi.org/10.1080/10476210.2018.1508280