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The Impact of Peer-assessment on intermediate Level Students' Writing

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By

Emma Arakelyann

Ms. Rubina Gasparyan, Advisor

Yerevan, Armenia

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By

Emma Arakelyan

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Rubina Gasparyan, Adviser

Irshat Madyarov, Ph.D.

MA TEFL Program Chair

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Abstract

Purpose-The study aimed to investigate the impact of peer assessment on intermediate-level students' writing in the Armenian EFL context. Additionally, it aimed to examine the students' attitude toward peer feedback practice.

Design/Methodology/Approach-This study used a mixed-method quasi-experimental approach to ensure the credibility of the data. The study was employed in treatment and control groups. The study instruments are pre and post-writing essays, checklists, interviews, and surveys. The data were analyzed with excel and SPSS.

Findings- The findings illustrated that the improvements made in the treatment and control groups were statistically significant and the students of both the treatment and the control groups had a positive attitude towards peer assessment. However, based on the descriptive analysis the students of the treatment group enhanced their writing more than the students of the control group.

Research limitations/Implications- The sample size for the study was small, the teachers of the two groups were not the same, and the time given for training was short.

Keywords-Peer assessment, peer feedback, checklists, attitude, pre and post-tests, essays.

Paper type: Experimental research paper

CHAPTER ONE: INTRODUCTION

In light of the growing interest in alternative assessments and their positive outcome on students' learning, this research explores one method of alternative assessment known as *peer assessment* and its influence on intermediate-level students' writing. Language assessment is an inseparable part of teaching and learning languages. It is considered a tool that assists the learner and the teacher in ascertaining the students' language progress. There are two main types of assessments: traditional and alternative assessments. Traditional assessments are the paper and pencil types of tests such as quizzes and exams that are oriented towards an end product. These tests are given by the teacher to the students to measure how much the students were able to recollect and reproduce the information studied during a course. In contrast, alternative assessments focus on the process than the product and provide the students with opportunities to demonstrate the skills and knowledge they have obtained during the process. Additionally, alternative assessments create an environment for the students' autonomous learning to take place (Belle, 1999; Coombe et al., 2012, Phongsirikul, 2018). One example of alternative assessment is peer assessment which is the focus of the current study. Peer assessment is a process during which the learners collaborate and provide feedback on one another's work or performance, illustrate the work's strengths and flaws, and suggest ways for growth. Writing assignments, portfolios, projects, oral presentations, quizzes, and tests are examples of tasks that can be used to do PA. The research shows that PA helps students become autonomous learners and take more ownership of their own learning process. Moreover, peer assessment increases their motivation, helps them improve their writing proficiency, and contributes to their learning development by identifying the strengths and weaknesses of their writing (Farhady, 2010; Bolton & Elmore, 2013; Wahyuni, 2017).

1.1 Problem statement

While numerous studies illustrate the influence of peer assessment on students' writing and learning at higher educational institutions, there is considerable limited research on the effectiveness of peer assessment among intermediate-level students and their attitude towards peer assessment. In Armenian schools, where classes are more teacher-centered, and the learners are commonly treated as passive receivers of information, learning is usually measured by traditional assessment methods oriented toward the end product. To actualize the shift from teacher-centered to a more learner-centered approach with cooperative and interactive learning, during which the learners are encouraged to demonstrate their knowledge derived from the course, alternative assessment methods such as peer assessment (PA) can be used. In addition, despite the vast empirical evidence for the positive influence of peer assessment on the students' writing, to my knowledge, no such study has been conducted in the Armenian intermediate context.

1.2 Purpose of the Study

This study investigates the impact of peer assessment on intermediate level students writing as well as their attitudes towards the practice. This study is designed to fill in the gap in the literature on peer assessment among intermediate-level EFL students to demonstrate its impact on their writing and their attitude towards giving and receiving feedback in the Armenian EFL context. In the framework of this study, the following research questions are addressed:

➢ What is the impact of peer assessment on the intermediate level students' writing in the Armenian context?

➢ What is the students' attitude towards peer assessment?

1.3 Significance of the study

Numerous empirical researches have supported the value of peer response in L2/FL writing classrooms (Alsehibany, 2021; Min, 2006; Tsui & Ng, 2000). One reason to apply peer assessment activities in the English language classroom is that it contributes to autonomous learning and assists the students in becoming aware of their performance as they monitor their work utilizing internal and external feedback. This study is significant as the findings will benefit numerous stakeholders such as the students, the teachers, language teaching centers, and more. The results of the following research will help inform the teachers on the relevance of one method of alternative methods of assessment known as peer assessment and its positive impact on students' writing and overall language learning. In addition, the attached recommendations may suggest some good ways to make peer assessment more organized and increase reliability.

CHAPTER TWO: LITERATURE REVIEW

Teacher assessment has been the primary method of evaluating students' language skills in second language classrooms. However, since they do not always accurately demonstrate the learners' language abilities, alternative methods of assessments have grown in popularity (Edwards, 2014). Numerous studies have been done to find out the influence of alternative assessment, especially that of peer assessment (PA), on students' language learning and performance, and writings skills, the vast majority of which found positive outcomes since the learners were involved in the assessment processes and showed active participation, (Bailey, 1998; Topping, 1998, Peng, 2010).

This literature review starts with reviewing the conceptual differences between testing, evaluation, and assessment since these concepts are often viewed as the same. Then the two main types of assessments, known as traditional and alternative assessments, are presented to explain the difference between them and the preference of alternative methods, also known as performance-based assessments over traditional assessments. Next, peer assessment (PA) as a form of alternative assessment method is presented since it is the focus of the study. It begins with an overview of peer assessment and its types. The implementation of PA in the classrooms is then discussed, including peer training. This is followed by the benefits and weaknesses of peer assessment and its impact on students' writing since the study aims to identify the influence of peer review on students' essay writing. The literature review section presents a few studies on the same topic in different countries such as Ecuador, Seoul, and Hong Kong on university and secondary school students.

2.1 Testing, Evaluation, and Assessment

The terms *testing, evaluation*, and *assessment* are concepts used in education that explain the progress of learning and measure the students' learning outcomes. These concepts are used interchangeably in language teaching and learning; however, according to language specialists, they are considerably divergent and represent different practices (Coombe et al., 2010; Shin & Crandall, 2014). Thus it is crucial to understand the difference between them.

T*ests* are one of the most commonly used assessment tools used to gather information about the learners' language performance and abilities. Tests can be assigned to measure specific knowledge such as vocabulary, writing mechanics, grammatical features, and more. *Testing* is the process of administering the test under standardized conditions. It involves a set of clearly developed procedures for assigning and scoring the students' performance. It can be developed by a teacher, ministry, or a standardized test given by an educational institution (Shin & Crandall, 2014; AFT, NCME, NEA, 1990:1). Tests are given to students at a particular point of time, usually at the end of a unit/ semester/year, to sample the students' learning who follow an exact procedure (Coombe et al., 2010). They can include multiple-choice answers (MCQs), short answer questions, scores, and more. In contrast, assessments include multiple ways of gathering information about the learners' language abilities. Thus, they can be done at any time. Tests are forms of assessment, and they are subcategories of assessment. (Coombe et al., 2010; Braun et al., 2016). The outcome of tests and assessments can also vary. While tests may demonstrate the students' ability to memorize figures and facts, assessments may illustrate the students' understanding of those facts and figures (Bailey, 1998; Hughes, 1989).

Evaluation is an all-inclusive term that is broader in scope than assessment and testing and includes all the factors which influence the learning process, such as the syllabus, learning materials, curricula, and programs (Coombe et al., 2010). The purpose of an evaluation is to

provide information on the quality of institutions and the individuals in the system (Brindley, 1989; Gullo, 2005; Farhady, 2010). According to Gullo (2005, p.7), "evaluation is the process of making judgments about the merit, the value or the worth of educational programs, projects, materials or techniques" based on specific criteria and standards. According to Farhady (2010), assessment is a component of the evaluation since it is focused on learners and what they do. While evaluating, tests as assessment tools can determine if the student meets a criterion. Assessment is defined as collecting evidence of information, and evaluation is the use of that information or evidence to make judgments (Coombe et al., 2010).

Assessment comes with numerous definitions proposed in different disciplines. It is an umbrella term that includes the different types of measures such as standardized tests, exams, and exercises to assess the learners' language abilities, knowledge, attitudes, and motivation for learning English. It is an ongoing strategy through which the students' learning progress in mastering different materials, language abilities, and achievements is monitored (Bailey, 1998; Coombe et al., 2010; Gullo, 2017; Wahyuni, 2017). Assessment is an interactive process that includes both the teacher and the learner. It provides feedback to the learners and aims to help the students determine their strengths and weaknesses to become competent in the sphere (Farhady, 2010; Bolton & Elmore, 2013; Wahyuni, 2017). Students need to be actively involved in their own assessment "to picture their own learning in the light of understanding of what it means to get better" (Black and White, 1998, p.30.) The primary purpose of language *assessment* is to help the teacher gain information about the learners' abilities to support future learning (Farhady, 2010; Bailey, 1998).

2.2 Traditional assessment

Language assessment is a component of every instructional program, regardless of its purpose. Traditional assessment and an alternative assessment are the two main types of

assessments. Traditional tests or traditional assessments, also known as formal tests or formal assessments, are the paper and pencil types of tests oriented toward the end product, emphasizing a correct answer (Belle, 1999; Phongsirikul, 2018). Student learning is usually measured by traditional assessment methods, including multiple-choice questions, true-false answers, matching activities, fill-in-the-gaps exercises, and close-ended items. Traditional assessment tools are commonly used among teachers, schools, and education establishments for different reasons. Bailey (1998, p.130) suggested that traditional assessment tools such as multiple-choice questions are: "1. fast, easy, and economical to score. In fact, they are machine scorable. 2. They can be scored objectively and thus may give the test appearance of being fairer and/or more reliable than subjectively scored tests. 3. They "look like" tests and may thus seem to be acceptable by convention. 4. They reduce the chances of learners guessing the correct items in comparison to true-false items."

However, the usefulness of traditional tests has been criticized as the primary measure of student achievement. According to Bailey (1998), formal tests are indirect and inauthentic, and they fail to provide information about the learners' motivation. The adherents of the idea point out the lack of accurate information about the students' progress and the process the students engage in (Coombe, 2010; Bailey, 1998; Peng, 2010; Gullo, 2005). For instance, multiple-choice questions (MCQs) are criticized for limitations in evaluating students' language abilities. Similarly, Hughes (as cited in Bailey 1998, p. 131) criticized MCQs for the following reasons: "1. they test only recognition knowledge, 2. guessing may have a considerable but unknown effect on the test scores, 3. the technique severely restricts what can be tested, 4. it is very difficult to write successful items, 5. backwash may be harmful, 6. cheating may be facilitated." While true-false activities are criticized for giving the students a fifty percent chance of getting the correct answer (Peng, 2010; Phongsirikul, 2018; Black & William, 2006; Topping, 1998). Despite the criticism, formal tests are widely used among

teachers in the curriculum. They are considered to be helpful in gathering information about the learners' progress under specified conditions.

2.3 Alternative assessment

Alternative types of assessments, also known as performance-based assessments, measure students' overall performance and progress and require the student to implement the skills, strategies, and knowledge utilized in learning. The emphasis of alternative assessment is not on the end product but on the demonstration of the knowledge and skills obtained during the course and the reflection of their own performance. Performance-based assessments enable the learners to demonstrate their language abilities, and their progress, illustrate what they can do, and evaluate what they can produce. These assessment methods make the classes more interactive for the students. They encourage the student's active participation, are student-centered, and are focused not on assessing the product but the assessment of the process. Thus the assessment measure language proficiency rather than language knowledge (Bailey, 1998; Phongsirikul, 2018; Belle, 1999; Topping, 1998, Peng, 2010; Coombe et al., 2010; DeMauro et al., 2001; Dochy et al., 1999). Alternative assessments can involve students in grading the products of their peers but can also include more qualitative aspects such as giving feedback rather than a grade. Sometimes both feedback and grade are required (Muclellan, 2004). (DeMauro et al., 2001; Dochy et al., 1999; Phongsirikul, 2018). Alternative assessment methods include; self-assessment, peer-assessment, portfolio assessment, projects, presentations, student-designed tests, interviews, journals, and more. These tools are not necessarily made to be graded. Thus, to evaluate them, rubrics or checklists are created as a guiding tool to assist in objectively evaluating the progress and performance of the students (Coombe, 2018).

Even though the alternative types of assessments have gained popularity and various literature illustrates their numerous advantages, they still pose some disadvantages. Unlike traditional assessments such as multiple-choice tests, which are practical for the teacher to grade, the alternative methods of assessments require a teacher's effort to evaluate the learners' performance and score their works (Bailey, 1998; DeMauro et al., 2001). Thus alternative assessment is laborious in terms of energy and time. Second, they pose a threat in terms of reliability and validity. Bailey (1998) and Falchikov and Goldfinch (2000) address the issue of reliability and validity of portfolio assessment and peer assessment, during which a wide variety of student products are produced. As alternative tools of assessments allow for student negotiation and choice, it is possible for redundant variables to be counted in making judgments about the learners' progress and achievements. Since the importance of the stress of alternative evaluation is to assess the progress, the issue of the assessor becomes significant as their assessment criteria can differ (Muclellan, 2004). Nevertheless, the positive washback of portfolio assessment allows them to be widely utilized as an efficacious assessment tool (1998). Finally, alternative methods of assessments are judged in terms of cost and efficiency since they require more time to develop, administer, and score.

Overall, the studies on traditional and alternative assessments illustrate that they both have good and bad sides to measuring students' knowledge and achievement. Even though many specialists criticize the traditional evaluation method, they do not claim that it should be replaced with an alternative assessment due to some factors such as validity issues. Instead, the literature suggests accompanying traditional assessment with alternative ways of appraisal to enable the students to reflect on their performance and get a complete image of the students' learning processes, their language achievements, and the areas to improve.

2.4 Peer assessment

In literature, peer assessment (PA) is also known as peer grading, peer evaluation, peer response, peer feedback, and peer review. *Peer assessment* is a form of alternative assessment which aims to empower students, engage them in assessment procedures and foster active learning (Bruce, 1997; Topping, 1998). Falchikov (1995, p.176, as cited in Stognieva, 2015) defined peer assessment as "the process whereby groups of individuals rate their peers, who are students of equal status to one another" According to her, PA is a process where a group of individuals grades the works of their peers, which may involve the use of agreed-upon criteria among the learners and instructor. More thoroughly, Topping (1998, p. 250) defined PA as "an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar status." Students should grade and/or provide comments on their peers' work as part of the peer evaluation process, and they should be judged on the quality of their appraisals. And for Bruce (1997, p.5), peer review is a process during which an individual who is concerned about some areas of their work asks a colleague to review the quality of what he or she is working on, the aim of which is "to contribute to the professional development of participants." Similarly, Topping (1998, p.249) claims that PA as a form of formative assessment aims "to improve learning while it is happening in order to maximize success rather than merely determine success or failure only after."

2.4.1 Types of peer assessment

Peer review can be of many different types, such as summative or formative, quantitative or qualitative. During the quantitative peer assessment, the assessor assigns a grade to the draft version of the work, whereas the qualitative assessment includes providing rich written or verbal feedback on weak and strong areas of a product, suggesting ways for improvements. PA can be used in various subjects, and the products to assess vary too; for example, presentations, essays, portfolios, group projects, test performance, and more can be

tools to be utilized for peer review (McMillan, 2013; Topping, 2009; Topping, 1998). Additionally, PA can be classified into two types: simple and elaborated. During the simple form of PA, the teachers view the learners as substitute instructors and have them mark each other's works. The elaborated form does not only require the students to assess one another's works but also has the learners discuss, explain and justify their feedback with the help of examples. The process of peer assessment may involve the usage of scoring instruments such as rubrics or checklists that are made in advance to meet the group's particular needs. Oral presentation, portfolios, essays, skilled behaviors, and test performance are tools that can be used in peer assessment (Topping, 2017). Feedback from the peer can be in various forms, such as verbal feedback, written comment, or a grade, Topping (2009).

Brown (2004, p. 271) distinguished five types of peer assessment:

1. Assessment of specific performance. In this category, the learner monitors the products of her/his pair through oral or written production and evaluates the learners' performance. Also, the assessors fill out a predetermined checklist to evaluate the peers' performance.

2. Indirect assessment on general performance. In this category, the students evaluate their peers' general abilities, not specific performance. Scaled rating sheets or questionnaires can be used to evaluate the learner's overall competency.

3. Metacognitive assessment. This type of assessment is used in groups or pairs. The purpose of this category is not merely evaluating the peers' performance; instead, it includes setting goals for each other. According to Brown (2004), the benefit of this category is that it fosters the students' intrinsic motivation and

provides the learners with the impetus of setting and accomplishing certain goals.

4. Socioaffective assessment. This type of assessment differs from the rest of the assessment because it does not only require evaluating language abilities or having a plan and accomplishing it. This type of assessment requires the learners to look at their personal skills and find ways to resolve mental or emotional obstacles, lower anxiety, and increase motivation. Questionnaire items where the test-takers designate their preference for one statement can be used in this case.

5. Student generated-tests. This assessment cannot be strictly viewed as a form of peer assessment. It is a technique of engaging the learners in the test construction process. According to Brown (2004, p. 276), tests generated by students "can be productive, intrinsically motivating, autonomy building processes."

The mode of peer assessment can be face to face, either in groups or pairs; it can also be conducted through written products either in paper and pencil format or online through computer-mediated communication (CMC). A written paper and pencil mode allows peers to provide concrete feedback, especially when peers comment on written tasks (Topping, 1998; Edwards, 2014). The setting, the number of sessions, the objectives, and the time allocated for PA may vary (Edwards, 2014; McMillan, 2013).

2.4.2 Implementation of peer assessment in the classroom.

There are numerous ways of applying peer assessment activities in the classroom. Implementing peer review in the classroom requires careful preparation, monitoring, and follow-up (Falchikov, 2003; Rollinson, 2005). According to Falchikov, preparation includes

the following stages: designing the study, supplying rationale to students, clear written instruction regarding all stages to be implemented, criteria identified, discussed, and agreed with the learners and the classroom teacher, and preparation of scoring instruments such as checklists or rubrics. Nulty (2009) views engaging the learners in the process of identifying and discussing standards or criteria as one of the two key components for success with PA. And the second component for success is engaging the learners in the process of making judgments about their peers' works which occurs in the implementation stage.

Implementation of PA follows the preparation stage, which goes through the following stages: students get into pairs and are provided checklists or rating scales. Falchikov (2003) suggested that pre-existing rating instruments can be used to carry out PA in the classroom. However, the teacher can modify them to meet a particular need before its implementation in the classroom. After the peer review session, the students mark their peers' works or provide feedback and justify their decisions. For research purposes, evaluative feedback may be collected.

The implementation stage is followed by the evaluation and follow-up stage. This stage includes collecting and analyzing the collected feedback, which can be formal or informal. Also, this stage includes identifying issues and making modifications to the procedure if necessary. This peer assessment cycle can be repeated using the same grading instruments and the same cohort (Falchikov, 2003; Min, 2005).

2.4.3 PA training

Literature notes that training is required for a successful peer assessment (Min, 2005; Min, 2006; Rollinson, 2005). The process should start with familiarizing the students with the nature of peer assessment which can help create a learning environment built on mutual respect

and trust (Stognieva, 2015). The peers should be trained on how to provide unbiased feedback. The recipient peer needs to be ready to take the feedback thoughtfully, regardless of the nature of the comments. If the assessors are not provided with coaching on giving feedback or what to give feedback on, they will proceed to correct only the surface errors (Min, 2005; Liu & Edwards, 2018; Lam, 2010).

Lam (2010) has tried peer review for two semesters, and the outcomes were not satisfactory as the learners could not give specific feedback to their peers. Thus, he planned a training workshop to make it easier for students to incorporate helpful peer comments into their final drafts, following Min's (2005) four-step procedure and adapting Ferris's (1999) notion of error correction methods. The peer-review training lasted three weeks. During the first week, the students got familiarized with the nature of peer assessment, its purpose, the benefits, and the objectives of the workshop, which aimed to "equip attendees with sufficient revising skills to complete peer review tasks and to raise their awareness in giving effective peer feedback to their course mates" (Lam, 2010, p.117).

Moreover, to code the peer feedback, the students were taught about A) global and local feedback areas. The organization of writing, the concert, the purpose, and the idea development refer to the global areas. Punctuation, mechanics, and grammar are components of the local feedback areas; b) revision and non-revision-oriented types of errors, and c) the four types of peer feedback (evaluation, clarification, suggestion, and alteration).

Then, to prepare the students for the peer review session, Lam (2010) introduced the learners' to the four-step procedure developed for paired PA by Min (2005). The steps included "clarifying writers' intentions, identifying problems, explaining the nature of problems, and making suggestions by giving specific examples" (Min, 2005, p. 296). According to him, explaining the nature of errors and offering realistic and feasible recommendations are crucial

factors in assisting authors in revising the draft versions of their works. Without a solid rationale, writers may be hesitant to incorporate peer feedback into their revisions. Then the students were taught about Ferris's (1999) treatable and non-treatable errors, according to whom treatable errors are rule-governed, making it easier for peer reviewers to explain the nature of these errors. Additionally, Ferris (1999, as cited in Lam, 2010) discussed instances of treatable mistakes, which primarily include verb-related categories such as tense, form, passives, and modal use. Non-treatable faults, on the other hand, are those including prepositions, sentence patterns, and unidiomatic phrases, which are challenging for peer reviewers to explain or address by offering correction advice unless the proper solutions are offered directly to the writers.

During the second week, Lam (2010) taught the students categorization-the first writing genre- and assigned them to write a small essay in the genre of categorization, which they were expected to bring the categorization essay to class the following week. He named the third-week *consciousness-raising stag*e since the learners were already coached and expected to engage in peer assessment activities actively. During the PA session, the students were expected to code the feedback they received and "analyze how much peer feedback they had incorporated in their first revision, and investigate why certain peer feedback could not be incorporated" (Lam, 2010, p. 120).

PA training can be done in different ways, and the researchers do not always hold pre-training sessions on how to give feedback and code the comments. Others use so-called "intervention training," which means the learners receive systematic and ongoing assistance from the teacher "to maximize the benefits of the peer response activity for each group and each student" (Rollinson, 1998, as cited in Rollinson, 2005, p.28). The intervention training requires the teachers to keep close contact with pairs or groups to answer their questions. The

downside of the intervention training is that it requires a significant amount of effort from the teacher to be effective (Rollinson, 2005).

Numerous studies have been done to examine the influence of trained peer feedback on EFL learners' revisions. For example, a study done by Min (2006, p. 129) on 18 sophomore students studying in an urban university in Taiwan demonstrated that the training had a pivotal role in revising the essays, "68% of the revisions were made in response to peer comments before peer review training and 90% of them were a result of peer comments after training." Kim (2009) has done similar research to investigate the impact of trained responder feedback on the quality of revisions made by forty-two freshman students majoring in different departments at a university in Seoul. The experimental study implemented *intervention training* and the findings showed that 96% of total revisions were made after the training and it helped to enhance the quality of those revisions.

2.4.4 The advantages of PA

Peer assessment has been advocated for many benefits. A common benefit mentioned by numerous researchers is the students' involvement in the process of making judgments about their peers' products (Bolton & Elmore, 2013; Edwards, 2013; Nulty, 2009). Since the learners are directly involved in the peer-review process, it increases the students' sense of ownership, motivation, and responsibility (Nulty, 2009; Peng, 2010). When they are involved in the assessment procedure, they become active learners; thus, " they feel the ownership of the assessment (and learning) process rather than alienated or victimized by it" (Nulty, 2009, p. 3).

Peer assessment is not merely a grading procedure but a learning process where numerous skills such as critical thinking, communication, and collaboration are developed

(McMillan, 2013; Topping, 1998). Also, peer review is a powerful metacognitive tool that positively influences the students' social, cognitive, and linguistic skills (Mendonca & Johnson, 1994; Liu and Carless, 2006). Numerous educational researches illustrate the positive impact of peer assessment on the learners' academic performance; for instance, according to Vygotsky (1978), peoples' minds are developed through interaction with the world around them. He claims that learning is more of a cognitive activity that happens within a social context where interaction occurs rather than an individual activity. Topping (1998) and Long (1985) share Vygotsky's (1978) view claiming that the process of peer assessment not only involves the collaboration and interaction of the students in the learning process but also assists the learners to reflect on their own learning and critically evaluate their learning achievements which help them take a more active role in their own learning. When the students provide and receive written or oral feedback, it knits language's social and cognitive aspects (Vygotsky, 1978; Mendonca & Johnson, 1994). Topping (1998) argued that the effects of implementing peer assessment are "as good as or better than the effects of teacher assessment" (p. 262). Her *interactionist theories* and *scaffolding* theory illustrate the positive impact of peer assessment on the learners' academic performance. Since peer review has a collaborative nature, it enables the students' to be scaffolded as they communicate with more knowledgeable peers. They exchange knowledge, whether linguistic knowledge or content knowledge, which creates an opportunity for scaffolding to take place. Thereby, they claim that peer interaction positively influences students' learning. Lastly, the interactionist theory is proved due to the communicative nature of peer assessment, during which negotiation of meaning, suggestions, and asking for clarification occurs, which is believed to improve comprehension and acquisition (Long, 1985). Finally, PA leads to self-assessment through which the learners reflect on their own learning process and make judgments about their learning outcomes and guide them reflect on the same elements of their writing (Boud & Falchikov, 1989; Hicks et

al., 2016). Moreover, self and peer assessment encourage students' involvement by combining different types of assessment with PA, such as self-assessment or collaborative assessment, which may increase the reliability and validity of peer assessment, Peng (2009).

2.4.5 The downsides of peer assessment

Even though many researchers have recognized peer assessment as a valuable tool for assessment and learning in education, PA is not widely applied in teaching practices due to numerous factors such as friendship bias (Liu & Edwards, 2018; Dochy et al.1991; Topping, 1998). A common drawback cited by researchers is that peer checking may take too much class time. The collaborative nature of PA during which the participants discuss the received and given feedback, the creation of rubrics or checklists, and training the students on how to give feedback using the assessment instruments takes a lot of class time (Edwards, 2013; Falchikov, 2003; Nulty, 2009). Another drawback is that the assessors may not have enough confidence in their language abilities to give feedback to their peers on grammar or other linguistic features. Students who received feedback may find their peers' comments invalid and not worth enough to make changes in their initial works (Edwards, 2013). Additionally, the students may not always actively participate in the peer assessment process; thus, the teacher needs to monitor the process of giving feedback. Cultural issues may also negatively affect the implementation of peer assessment. In countries where the teachers are viewed as authorities, the learners might be unwilling to give feedback to another learner, assuming that they do not have enough linguistic knowledge to judge their peers' works or do not have the right to do so. The studies illustrated that this is typical in Asian countries where the teachers are viewed as authorities and the learners view them as the only person who can grade or give feedback to learners (Edwards, 2013; Liu & Edwards, 2018; Peng, 2010; Tsui & Ng 2000). Consequently, the students may dislike getting feedback from their peers and get arbitrary marks (Peng, 2010).

2.4.6 Peer feedback and writing

The efficiency of peer assessment in writing is significant, specifically in the context of peer editing (Topping, 1998). PA of writing can include giving general comments or specific comments to the peer for improvements. "The importance of giving feedback on students' writing is equal to the importance of doing revisions and/or editing in the writing process" (Wahyuni, 2017, p. 40). Usually, an oral dialogue between the assessor and the assessee follows after the written PA to discuss the given and received feedback which fosters the learners' active participation and improves communication skills (Topping, 1998; Edwards, 2014).

Numerous studies have been conducted to investigate the influence of peer feedback on students' academic writing. Some studies indicated that peer feedback had a pivotal role in L2 learners' language achievements and writings, while others suggest that the students favor teacher comments more than peer feedback findings (Brusa & Harutyunyan, 2019; Tsui & Ng, 2000; Kuyyogsuy, 2019; Meletiadou, 2021). All of the studies had an experimental nature that was carried out in two groups: treatment and control groups. The data collections in the majority of the studies included pre and post-tests of writing assignments, peer-reviewed checklists, the second drafts, and questionnaire surveys. The majority of the findings indicated that peer feedback provides a feasible method to enhance the students' writing skills and learning achievements since they generally took their peers' comments into account when revising their writings. A research done by Harutyunyan and Brusa (2019) in one of the private universities of Ecuador and another research done by Meletiadou (2021) in Greece aimed at identifying the effect of trained peer assessment on the quality of the students' academic essays. The findings suggested that the PA assisted in enhancing the quality of the students' academic writing. Moreover, the study showed that the areas in which the participants made more improvements, were the organization, contents, cohesion, and

punctuation. This proved that well-trained students were able to make more profound changes in their second drafts than only surface-level changes.

Nevertheless, research findings may also be conflicting depending on the modes of peer assessment, the tasks, training, and the variation in the foci (Edwards, 2014). For example, the research findings by Tsui & Ng (2000) aimed to explore the role of peer and teacher comments in revisions in writing. The findings illustrated that all of the participants in the peer review study favored teacher's comments more than students' written peer feedback. Out of 27 participants, only four incorporated both the peer and teacher comments into the second version of the writing. Meanwhile, 21 students incorporated less than 50 percent of peer comments and more than 50 percent of teacher comments into the final version of their writings. The study showed that the students used teacher comments in the revised version of the writings notably more than they did peer-written and oral comments. Moreover, the two students incorporated less than 50 percent of both the teacher and peer comments. Overall, the study showed that some of the students made significant changes to their second drafts incorporating both peer and teacher comments in revised versions, while others made changes only based on their teacher comments. All in all, the study showed that teacher comments were mostly favored by the students, Tsui & Ng (2000).

Summary

Assessment is an integral part of learning that illustrates the learner's language progress and helps both the teacher and the learner to the strengths and weaknesses of a learner. To actualize the shift from a teacher-centered to a learner-centered approach where the students actively reflect on their performance and behavior, the teachers use alternative assessment methods such as peer assessment. The literature review showed that peer assessment is considered an effective, learner-centered, and engaging activity for students in various

contexts, particularly when organized and delivered carefully (Falchikov, 2005; Rollinson, 2015; Topping, 1998). The common benefit suggested by many language experts is the students' engagement in developing criteria and evaluating the works of their peers. Also, it encourages active student participation and aids learners in identifying their strengths and weaknesses, developing metacognitive skills and social skills such as communication, collaboration, and negotiation (Topping, 1998; Peng, 2010). However, the literature review has also demonstrated the drawbacks of peer evaluation; it is time-consuming and requires a lot of effort from the teacher to prepare all the materials needed to implement it in the classroom. Peer assessment can be done in different ways through oral feedback, written mode, or online through computer-mediated communication using different instruments such as rubrics or checklists. To conduct a successful peer assessment, the students must be trained on how to give unbiased feedback and code the given feedback; otherwise, they might reflect only on their peers' surface errors. The studies suggest implementing Min's (2005) four-step procedure of paired peer review in training, which includes a) clarifying writers' intentions, b) identifying problems, c) explaining the nature of problems, and d) making suggestions by giving specific examples, and Ferris's (1999) notion of error correction methods which includes teaching about treatable and non-treatable types of errors. This will aid the assessors in providing profound written feedback, and the assessee code the feedback to mend their draft versions. Additionally, the literature review presented several studies that aimed to investigate the influence of PA on students' writing, and the findings mainly elucidated positive outcomes, meaning the students incorporated the peer feedback into the draft version and mended their writing before submitting the final version for teacher feedback.

CHAPTER THREE: METHODOLOGY

3.1. An Overview:

Numerous studies have been done on the topic of peer assessment and its influence on EFL students' writing (Topping, 1998; Kim, 2009). However, no results can be found while searching about peer assessment and its impact on writing in the Armenian EFL context. In an attempt to address the issue, the present aimed to investigate the impact of peer assessment on the quality of students' writing and their attitude towards giving and receiving feedback from their peers. This present research was followed by a similar study done by Kuyyogsuy (2019) and Meletiadou (2021). The two studies aimed to demonstrate the influence of PA on students' writing performance. Few changes have been made in the methodology due to the experimental nature of the research, the level of the students, and the context it was carried out.

The experimental study was conducted in two groups: experimental and control groups. The study found answers to the following research questions:

- What is the influence of peer assessment on the quality of students' writing?
- What is the students' attitude toward peer assessment?

3.2. Research methods

This study, as mentioned above, attempted to investigate the impact of peer assessment on learners' writing proficiency. The study employed a quasi-experimental method to answer the research questions. The quasi-experimental design has the same underlying principles as experimental research. The only difference is that the participants of this study were not randomly assigned to groups rather they were natural or intact (Paltridge and Phakiti, 2015). In addition, this experimental study was conducted in two groups namely treatment and control groups. The treatment group as opposed to the control group was provided with training on

how to use the checklists while giving written feedback to peers and also was assisted by the researcher whenever there was a need for it. The groups were selected via convenience sampling which means those were the groups the researcher had access to (Paltridge and Phakiti, 2015). The groups had the same intermediate-level proficiency in English which was determined by a pre-test advantage and disadvantage in essay writing.

3.3. Setting and participants

3.3.1 Setting

The study was done in Yerevan at a local language center. The lessons at the language center take place twice a week. The lessons last one academic hour in levels true beginner through pre-intermediate and two academic hour sessions from intermediate through advanced groups. This study was conducted in two intermediate-level groups of afterschool language program.

3.3.2 Participants

The participants of the study were eighteen intermediate-level students taking English classes at local language center with an average age of fifteen to seventeen. Fourteen students were in an experimental group which was randomly chosen to be the experimental group and twelve students were in the control group which was randomly chosen to be the control group. Among the participants were two English language teachers of the two groups. Because the classroom teachers observed the whole process they were asked to grade both the pre and the post essays produced by the students of the two groups. This way they would also be able to reflect on their students' progress during the post-interview with the researcher. The researcher conducted the whole peer assessment sessions and whole group discussions with the learners. The students were native speakers of Armenian. The two groups had English classes twice a week which normally lasted for two hours with a ten-minute break. Altogether, 28 people participated in the study.

3.3 Intervention (training in the treatment group)

A week after the pretest, the students of the treatment and the control groups were given two treatments: argumentative essay writing and descriptive essay writing. The students of the treatment group were also provided with training before jumping to peer assessment activities. The training in the treatment group took lasted one week for 20 minutes during each class. The training was in the form of in-class activities and homework activities. During the first day, the students were introduced to the concept of peer assessment. During the class, the treatment group students were taught about surface-level issues such as spelling and punctuation. For that purpose, they were seated in pairs and were provided with proofreading activities that were concentrated on helping the learners find spelling, punctuation, and grammar during the class that had been downloaded from the internet (See examples in Appendix F-H). Additionally, few proofreading activities were assigned as part of homework. During the second day, the treatment group students were seated in pairs and were provided with argumentative essays and checklists. They were introduced to every component of the checklists and were asked to assess the given essays while filling the questions on the checklists. The aim of giving the students argumentative essays to assess was to teach them the structure of the essay and teach the learners to give feedback on more global areas such as the content and organization. Whereas the control group students were not provided with training and were not familiarized with the checklist beforehand. During the peer assessment procedure, the students of the two groups were seated in pairs of two and were asked to exchange essays with their peers and give written peer feedback on the checklist. After giving and receiving feedback on checklists, the students were asked to exchange their essays and revise their initial works.

The following week after the first treatment, the students in the two groups were given the second treatment which was argumentative essay writing. The students were required to exchange essays with their peers and give written peer feedback on the checklist.

3.4 Data collection Instruments

The quantitative data from the treatment and control groups were collected through

- Pre-test (advantage/disadvantage essay writing)

- Treatment (descriptive and argumentative essay writing)

- Post-test (advantage/disadvantage essay writing)

- Post-study survey

The qualitative data from the treatment and control groups were collected through

- Post-study interview (the teachers of the control and the treatment group)

- Whole group discussion with the students of treatment and control groups

3.4.1 P*re-study test*

The experiment was conducted in treatment and control groups. The data for this study were gathered through essay writing pre and post tests. First, the students in both the treatment and control groups wrote an *advantage and disadvantage* essay as a diagnostic pre-test intended to see the learners' preliminary competence in writing. For the pre-test, the students in the two groups produced about 200-word essays which have been graded with an analytic rubric (See appendix A). This stage lasted around two weeks during which the classroom teachers and independent teachers graded the pre-tests.

3.4.2 *Post-study test*

The students of both the treatment and the control groups wrote a post-test to check if the treatment had an impact on their writing. The post-test was an *advantage and disadvantage* writing with a slight change in the title such as the title of the pre-test was "the pros and cons of using cellphones at school" and the title of the post-test was "The pros and cons of restricting children's screen time." Both the grades of the pre-test and the post-test were compared and analyzed to see if the treatment in the groups had an impact on the students' writing.

Comparing the results of the pre and post-tests aimed to reveal the impact of peer assessment on the students' writing.

3.4.3 *Post-study Survey with the Students*

A week after the post-test the students in the treatment and control groups completed a survey to examine their attitude toward peer feedback activity with checklists (See appendix C). The survey was applied to answer the second research question (students' attitude toward peer feedback). The questions of the survey were adapted from Kim's (2009) and Tsui and Ng's research (2000) studies with few modifications. The survey consisted of four parts. The first part was general information about the participants' names, ages,s and experiences in essay writing. The second part was the learners' attitude toward peer assessment. The third part was about the usefulness of the checklists and the fourth part included open-ended questions about the whole peer assessment process. Additionally, after taking the survey which lasted around 25 minutes, the two students were engaged in whole group discussions to reflect on their overall experience of giving and receiving feedback on their written works and if they noticed any positive changes in their writing abilities after PA (See appendix E). The researcher took notes of the students' responses.

3.4.4 *Post-study Interviews with the Teachers*

Since the classroom teachers observed the whole process and graded the students' essays, both the draft and the revised versions, an interview was conducted with them to understand what changes they noticed in students' writing (See appendix E). Also, the interviews with the teachers were done to investigate their perception of the students' engagement in the process of giving and receiving feedback, the treatment procedure, and the teachers' perception of the development of students' writing skills after the treatment procedure.

3.4.4 *Whole group discussion with the students*

After the study, the students of the two groups were engaged in a whole group discussion with the researcher to reflect on their overall practices, and attitudes and make suggestions. The researcher took notes and the results were documented.

3.5 Data collection Procedure

The table below presents the procedure of the study.

Table 3.5.1

The procedure of the study

Procedure	Instruments	Duration
Pre-implementation phase	Piloting the checklists Administrating the pre-tests in the treatment and control groups	2 weeks (February 2 to February 13)
Implementation phase	Intervention (PA and training in the treatment group) Only PA in the control group	4 weeks (February 14 to March 11)
Post-implementation phase	Post-test Student Survey Post-study teacher interviews	2 weeks (March 14 to March 28)

3.5.1 *The pre-implementation phase: Pre-tests in treatment and control groups*

This study was divided into three phases: the pre-implementation phase, implementation phase, and the post-implementation phase. The pre-implementation stage started on January 24 and took one week. During this stage, all the instruments were piloted during this stage before applying them in the class. After piloting the instruments with the researcher's students, a diagnostic pre-test was administered in the treatment and control groups to ensure that the participants of the two groups were at the intermediate level. The piloting revealed that the students skipped some parts related to thesis statements and topic sentences because they could not find them in the provided essays. Therefore, to check the student's comprehension, a few more questions were added to guide them in giving feedback. For example, before piloting, some questions were asked to suggest ways to improve the thesis statements if necessary. After piloting the checklists, the researcher added parts that required copying and pasting the topic sentences and thesis statements into the checklist. When the students' found the thesis statement and topic sentences, they copied them on the checklists and gave necessary feedback. This made it easier for them to suggest ways of improvements if they were necessary. Otherwise, they used to skip the questions that were related to thesis statements and topic sentences. The administration of the pre-test started on February 2 in the control group and February 4 in the treatment group. The diagnostic pre-test was an *advantage and disadvantage* essay on the topic "Discuss the pros and cons of being allowed to use cell phones at school" the structure of which the students of the control and treatment groups were familiar. The students of the two groups were asked to produce around 200-word essays in class. They were required to write the essay in 20 to 25 minutes. Since many students in both groups said that writing in class caused tension among them and they found it hard to concentrate and write the essays in class, thus the students were asked to write the essays at

home and hand them in the next class to the teacher. The pre-tests were graded using an analytic rubric within a week (See appendix A). All of the essays were marked by the teachers of the control and treatment groups and by two external assessors.

3.5.2 *The implementation phase: The treatment procedure*

The pre-implementation phase was followed by the implementation phase. The implementation phase lasted around four weeks. During this phase, the students of the treatment group were provided with short training. During the first day of the training, the students were taught by the researcher about the importance of peer assessment and the nature of peer review. Then they were divided into pairs and were provided with proofreading activities (See Appendix E-H). The activates helped them find spelling, grammar, and punctuation issues in the paragraphs and correct them. This way they were taught about the surface-level errors. During the next day, the students were trained on how to give feedback on more profound areas such as content and organization. Also, they were taught how to use the checklists. For that purpose, they were seated in pairs and were provided with argumentative essays produced by the students of the researcher. Also, the students were provided with checklists. They were taught about each area of the checklists and were asked to fill it out while assessing the essay given to them. This way they were also taught about the structure of an argumentative essay. Additionally, the students were taught about thesis statements and topic sentences as they were not familiar with them. The researcher observed the process and provided systematic and ongoing assistance whenever needed.

A week after handing in the pre-tests, and getting training, the students of both groups were asked to write an *argumentative essay*. In order to avoid the tension among the participants, the task was assigned to complete at home. Prior to assigning any type of essay the students of both the treatment and control groups were introduced to the specific genre.

During the next class, the students of both the treatment and the control groups were randomly assigned with pairs and were asked to read each other's essays and fill out the *checklists* that were developed for the particular essay (See appendix B). The checklists had open-ended questions about the content, organization of the essay, the introduction and the thesis statement, the topic sentences, body paragraphs, the conclusion as well as the vocabulary, language mechanics, and grammar. The process of the first peer assessment took around 20-25 minutes in the two groups. After finishing the peer assessment the students of the two groups were asked to exchange the essays and the checklists with written peer feedback and make necessary changes based on their peer's comments at home and hand in both the draft and the revised version to the teacher. Since the students in the two groups had only one or two days gap from one class to another as the classes were on Monday and Wednesday or Friday and Saturday and it would be hard for them to revise their essays in a short period of time, therefore they were given a week to work on the redrafts. Thus the time for the first and the second drafts was regarded as sufficient for the learners to redraft their works without feeling any pressure. The next day when the students of the two groups redrafted their essays and handed them in to get grades, they were introduced to a new genre of writing which was an *descriptive essay.* They were asked to write an essay at home on the topic "A trip I will never forget" and bring the draft version to class to do peer assessment. During the process of peer assessment, the teacher used "teacher intervention" training in the treatment group suggested by Rollinson (2015) which means the learners of the treatment group as opposed to the learners of the control group were provided with systematic and ongoing assistance from the researcher whenever needed (Rollinson, 2005).

The treatment procedure phase was repeated twice during which the students produced two types of essays after being introduced to the specific genre if needed. The two types of

essays the student's produced during the implementation phase were *argumentative and descriptive essays.*

3.5.2 *The Post-implementation Phase: The post-tests*

At the end of the experiment, the two classes were assigned to write a post-test which was an *advantage and disadvantage essay* similar to the pre-test with a slight change in the title. The title of the post-test was "Discuss the pros and cons of restricting students' screen time". Overall, the data were collected from 26 students (14 in the treatment group and 12 in the control group) who participated in each phase of the process. After the treatment, the students of the two groups wrote a post-test *advantage and disadvantage essay*. To establish inter-rater reliability, the teachers of the groups and two independent teachers marked both the pre and the post-tests. The grades of the post-tests were compared with the grades of the pre-tests which aimed to explore whether the treatment had a positive impact on the development of the students' writing abilities.

At the end of the study, after grading the pre-test and the post-test, the two classroom teachers participated in interviews via Zoom that took around an hour. The teachers reflected on the students' performance on PA and any changes the teachers noticed in students' writing abilities after grading their works.

To answer the second research question which aimed to reveal the students' attitude toward the implementation of peer assessment in the classroom the participants were asked to fill a survey that had close-ended, open-ended questions, and five-point Likert scale type questions to choose from. The student filled out the survey in the classroom which took around 20-25 minutes.

3.4.1 Data analysis

The quantitative data obtained from the pre-test and post-test and surveys were analyzed via statistical analysis for social sciences (SPSS software, version 26) and Excel, respectively,

while the qualitative data from the interviews were analyzed descriptively. The data was studied in-depth to determine any significant factors or turning points throughout this study. The data from the interviews, observations together with the essay grades, and the survey were used to determine the findings. The grades of the draft version and the revised versions were presented in a table of a numeric scale to calculate the difference in grades between the draft and the revisions versions using the mean, median, and standard deviations. Wilcoxon signed-rank test was performed to see the difference between students' draft essay grades and after peer assessment essay grades in the treatment group and in the control group. To compare the results of the two groups Mann-Whitney U test was used. Additionally, the students' pre and post-test grades were compared to see if the treatment had an impact on students writing.

At the end of the peer assessment session, the learners completed a Likert scale survey to show their attitude about the whole process. The data from the survey and the essay grades were analyzed quantitatively using the SPSS program and excel. SPSS helped to easily create tables and graphs handling the huge data gathered for this study. Additionally, the data from the teacher interviews, the whole group discussion with the two groups, and the researcher observation notes were analyzed qualitatively using pre-coding and coding techniques.

3.5 Ethical considerations

Prior to the study, it has gone through an IRB review. Next, all participants, the students, and the teachers gave their oral consent to participate in the study. The participants were told that they were free to terminate their participation at any given moment and that no personal information that could lead to their identification would be shared in the study. The students were identified by pseudonyms instead of their real names. The results showed that no one wanted to terminate their participation even if they were reluctant to revise their essays based on their peers' comments. In this case, they wrote a line under the essays that they have not made any changes in the draft versions.

CHAPTER FOUR: RESULTS

The current study is set out to determine the impact of peer assessment on the learners' writing. Equally important for the study is to identify the attitudes of the participants towards the implementation of the tool. Thus, based on the findings revealed by the research instruments, the upcoming sections of the chapter demonstrate the answers to the guiding research questions.

Before summarizing the research questions, it is significant to demonstrate the pre-study findings on the writing practice incorporated in the treatment and control groups. The results of the pre-tests can be found below. To cross-check the same set of data from different perspectives and to ensure the credibility of the results data triangulation method was employed (teachers' interviews, students' surveys, and classroom observations by the researcher).

4.1 Research Question 1

What is the influence of peer assessment on students' writing performance?

To find the answer to the first research question and to explore whether the students in the treatment and control groups improved their writing performance after peer assessment, the grades of their pre and post-test scores have been compared. The pre and post-tests were *advantage and disadvantage* essays that were graded by the classroom teachers of the treatment and control groups and two independent teachers to ensure inter-rater reliability. The data obtained from the pre-test and post-tests were analyzed via statistical analysis for social sciences (SPSS). At first, the averaged teacher grades of the diagnostic pre-tests of both the treatment and the control groups were analyzed and compared using a Mann-Whitney U test. Mann-Whitney U test is a non-parametric test that is used to compare two independent samples. It is used when assumptions for normality are not satisfied. The hypothesis of the Mann-Whitney U test is to test whether the mean scores of two independent

samples are equal (McCrum-Gardner, 2008). Additionally, the Mann-Whitney U test was

applied due to the study's small sample size.

The aim of comparing the pre-test scores of the treatment and control groups was to

ensure that the participants of the two groups were at the intermediate level. Table 4.1.1

illustrates the mean scores of pre-tests in the two groups. The statistical comparison of the

pre-test scores between the treatment and control groups in Table 4.1.2 reveals no significant

difference between the two groups, as the p-value is .742, which is not less than .005. This

indicates that there was no significant difference between the writing abilities of the

participants from the treatment and control groups, as the p-value was higher than .005.

Table 4.1.1

Mann-Whitney U Test for Pre-test (Treatment and Control groups)

	Group	N	Mean rank	Sum of ranks
Pre-test	Treatment	14	12.79	179.500
	Comparison	12	14.33	172.00
	Total	26		

Table 4.1.2

Test Statistics[a] *(Mann-Whitney U Test: Pre-test)*

| *Pre-tests of treatment and* |
| *control groups* |

Mann-Whitney U	*74.000*
Wilcoxon W	*179.000*
Z	*-0.526*
Asymp. Sig. (2-tailed)	*0.599*
Exact Sig. [2*(1-tailed Sig.)]	*0.631[b]*

a. Grouping Variable: Group

b. Not corrected for ties.

To find out whether peer assessment assisted the learners of the treatment group in enhancing their writings Wilcoxon signed-rank test was used. Wilcoxon signed-rank test is a non-parametric test used to compare two sets of data, such as a pre-test and a post-test from the same group. Thus it is used to do a within-group analysis (McCrum-Gardner, 2008). Additionally, the effect size of the Wilcoxon Signed-Rank test was measured to identify the magnitude of the change in each group. The effect size is "the standardized difference between two groups on a given measure" (Goldberg et al., 2003, p.9). One way to reveal the importance of the findings is by calculating the effect size. According to Pallant (2007), measuring the effect size for Wilcoxon signed-rank test (r) can be done by dividing the test statistic (Z) by the square root of the total number of cases (r=Z/ N). In addition, Cohen's (1988) identified three criteria for estimating the effect size: small $0.10 - < 0.30$, medium $0.30 - < 0.50$ and large $\geq$ determine pre and post-test analysis of the treatment and control groups illustrated that there was an improvement in the writing skills in both the treatment and the control groups. The treatment group students improved their writing performance by 2-4 marks out of 20. Before the intervention, the average mean score of the treatment group

was about 14.8. After the intervention, all of the students in the treatment group scored higher

on their post-tests, and the average score was about 17.2. As opposed to the treatment group,

the post-test scores of the control group increased by only 1 or 2 points, and the mean score

of the pre-test was 15 while that of the post-test was 16.66. The means of the pre and -post-

intervention scores are presented in Table 4.1.3.

Even though there results of the treatment and the control groups were statistically

significant, which means that the treatment was not effective, the results of the descriptive

analysis (Table 4.1.3) suggest that after the intervention, the mean score of the post-test for

the treatment group increased dramatically from 14.8 to 17.2. In contrast, that of the control

group increased by 1 point. This implies that the intervention (the training and the peer

assessment activities) positively impacted the treatment group students' writing performance

more than the control group's writing performance.

Table 4.1.3

Descriptive Statistics (Wilcoxon Signed-Rank Test: Pre-test and Post-test of the treatment gorup)

Group	Test	N	Mean	Std. deviation	Minimum	Maximum
Treatment	Pre	14	14.893	1.27	11.5	16.5
	Post	14	17.214	.726	15.5	18.0
Comparison	Pre	12	15.083	1.12	12.5	16.0
	Post	12	16.042	1.25	14.0	18.0

To analyze the scores of the two groups and to see if the improvements they made were statistically significant Wilcoxon signed-rank test was used. As demonstrated by the summary of the results in Table 4.1.4, the improvements after peer assessment of the treatment group (p-value 0.001 <0.05) and control group (p-value 0.007 < 0.05) were statistically significant which means that the students of the two groups improved their writing skills after peer assessment activities.

Table 4.1.4

Test Statistics[a] (Wilcoxon Signed-Rank Test: Pre-test and Post-test of the treatment and control groups)

Pre-test-Post-test	Treatment group	Comparison group
Z	- 3.333[b]	-2.714[b]
Asymp. Sig. (2-tailed)	0.001	0.007

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

The effect size in the pre-and post-tests of the treatment group is equal to 0.72 which based on Cohen's (1998) criteria, is higher than the large size effect (0,5). This indicates that the magnitude of the difference between the value from the pre-test and the post-test is large. Thus, it implies a significant change in writing proficiency in the treatment group. This finding has also been noticed by the teacher of the group who graded the essays during the post-study interview.

The effect size in the pre-and post-test of the control group is equal to 0.37. It is considered to be "moderate" based on Cohen's (1998) criteria. Thus it indicates moderate improvement in writing for the control group.

In order to explore the difference between the post-test scores between the treatment and the control groups, the grades on post-tests of the two groups were analyzed with the Mann-Whitney U test. Table 4.1.5 shows that the mean rank of the post test in the treatment group was higher than the mean rank of the control group. Table 4.1.6 illustrates the comparison between the post-tests of the treatment and control groups. Based on the statistical analyses the improvements of the two groups were statistically significant (p-value 0.017< 0.05).

Table 4.1.5

Mann-Whitney U Test for Post-test

	Group	*N*	*Mean rank*	*Sum of ranks*
Post-test	Treatment	14	16.79	235.00
	Comparison	12	9.67	116.00
	Total	26		

Table 4.1.6

Test Statistics[a] (Mann-Whitney U Test: Post-test)

Post-tests of treatment and control groups

Mann-Whitney U	*38.000*
Wilcoxon W	*116.00*
Z	*-2.397*
Asymp. Sig. (2-tailed)	*0.017*
Exact Sig. [2*(1-tailed Sig.)]	*0.017[b]*

a. Grouping Variable: Group

b. Not corrected for ties.

Lastly, in order to see how improvement spread across the four categories included in the analytical PA rubric: Conte, Organization (Form), language and mechanics (Vocabulary, spelling, punctuation), and grammar (Hughes, 1999). Each writing component was divided into five rating levels "not much to evaluate; unsatisfactory; satisfactory; good; excellent." Each component was worth five points. The teachers' grades for each category in pre-test and post-test were analyzed to explore which aspects of students' writing performance in the treatment group improved (See table 4.1.7). Based on the descriptive statistics, the mean ranks of each criterion increased. However, when comparing the mean ranks of each criterion, it becomes obvious that the treatment group students improved their essays' content and organization more than the mechanics and grammar.

Table 4.1.7

Findings from the descriptive statistic of the four categories in the treatment group (Analytic scores)

Criteria	Writing Test	*N*	*Mean*	*SD*

Content	Pre	14	3.5	0.65
	Post	14	4.71	0.46
Organization	Pre	14	3.7	0.61
	Post	14	4.5	0.64
Mechanics	Pre	14	3.9	0.61
	Post	14	3.8	0.77
Grammar	Pre	14	3.7	0.61
	Post	14	4	0.55

In order to see whether the improvements of each criterion are statistically significant the results were analyzed with the Wilcoxon Signed-Rank Test. The results can be found in table 4.1.8 and 4.1.9 according to which the mean rank of each category increase. Tables 4.1.10 and 4.1.11 indicate that the improvements made in content and organization were statistically significant, whereas that of the mechanics and grammar were not.

Table 4.1.8

Wilcoxon Signed-Rank Test (content and organization in the treatment group)

Pre-test-Post-test		N	Mean rank	Sum of ranks
(Treatment group)		14		
Content	Negative Ranks	0[a]	0.00	0.00
	Positive Ranks	11[b]	6.00	66.00
	Ties	3[c]		
	Total	14		

Organization	Negative ranks	0[a]	0.00	0.00
	Positive ranks	10[b]	5.50	55.00
	Ties	4[c]		
	Total	14		

Table 4.1.9

Wilcoxon Signed-Rank Test (mechanics and grammar) in the treatment group

Mechanics	Negative Ranks	4[a]	5.00	20.00
	Positive Ranks	4[b]	4.00	16.00
	Ties	6[c]		
	Total	14		
Grammar	Negative ranks	2[a]	3.00	6.00
	Positive ranks	4[b]	3.75	15.00
	Ties	8[c]		
	Total	14		

a. Post-test < Pre-test
b. Post-test > Pre-test
c. Post-test = Pre-test

Table 4.1.10

Test Statistics[a] (Wilcoxon Signed-Rank Test: four categories in the treatment group)

Pre-test-Post-test	Content	Organization
Z	- 3.002[b]	-2.972[b]
Asymp. Sig. (2-tailed)	0.003	0.003

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Table 4.1.11

Test Statistics[a] (Wilcoxon Signed-Rank Test: four categories in the treatment group)

Pre-test-Post-test	Mechanics	Grammar
Z	- 3.002[b]	-1.000[b]
Asymp. Sig. (2-tailed)	0.003	0.317

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

RQ1: *Treatment and control group teachers' perception of peer assessment and its influence on the students' writing performance*

Interviews conducted with the teachers of the treatment and control groups, as well as the student's reflections during the whole group discussions and the survey questions contributed to the main findings of the RQ1 that are stated above. The findings have been

supported by the interview conducted with the teachers of the treatment and the control groups. During the interview, the teachers reflected on the students' performance and improvements in writing. The two teachers mentioned that the participants of the two groups enjoyed the practice, and they were very engaged in the process however some participants performed better than the others which have also been reflected in the students' pre and post-grades. Both of the teachers indicated that the students in the two groups are exceptionally eager to learn, but they do not always favor writing activities because they find it hard to sit and concentrate on a given topic. According to the teacher of the treatment group, "the students really liked the idea of peer assessment and giving written feedback to each other. It was a new, exciting, and challenging task for them." The statistical analyses showed that the improvements the treatment and the control group made on their post-test were statistically significant which means that the peer assessment had a positive impact on the two groups' students' grades. The interview with the teacher of the treatment group as well as the students' responses to the survey validated the results. To the question on which part, the students made more changes to- the structure, content, organization, grammar, and language mechanics, the treatment group teacher mentioned that the students made more content-wise changes, "they removed a redundant paragraph, referenced quotes, but very few changes were made in terms of grammar." And from the control group teacher's perspective, "this new practice helped them enhance their writing skills, and they learned different essay types such as descriptive essay and argumentative essays." Even though the improvements the students of the two groups made were statistically significant. However, the descriptive statistics mentioned above showed that the treatment group students enhanced their writing skills more, as the grades on their post-tests were higher than that of the control group. The interview with the teacher of the control group validated the results. From her observations, the students gave more feedback than incorporated them into their revised versions of essays.

She mentioned that there were students who provided detailed feedback to their peers on the checklists; however, their peers did not take the feedback "seriously" and did not make necessary changes even if the feedback their receives was of good quality.

Additionally, the teacher of the treatment group mentioned that giving and receiving written feedback on checklists from their peers helped the learners become autonomous learners. Numerous studies have been advocating for peer assessment as a way to enhance students' writing skills and promote autonomy that requires the learners to become responsible for their learning (Little, 2009). The following comment made by a student from the treatment group is a good example of how different stages of peer assessment process can lead to autonomous learning, "*Even though, the researcher effectively explained the essay structures, thesis statements and topic sentences, gave us examples and list of new words to use in our essays, still I could not very much understand what thesis statement is, also because I have never heard about it before. Therefore I googled it after the first essay and looked for information about it to make the revised version of my essay better.*"

Overall the teachers of the treatment and the control groups have mentioned that writing skills are usually ignored and they were considering including writing activities in their practice. Thus they were very happy that the current study was conducted in their groups since they could see their students' progress in writing, their engagement in the process and the autonomy that PA promoted. The teacher of the treatment group said; "the students were not very skilled in writing, but this was a good starting point for them to realize their weakness in writing and work on themselves to develop their writing skills."

4.2 What is the students' attitude toward peer assessment?

What is the students' attitude towards peer assessment?

In order to answer the second research question, the students of the treatment and the control groups were asked to take a survey, the teachers of the treatment and the control groups

were interviewed and the researcher took notes of the whole group discussions with the students. The given survey consisted of 22 Likert scale questions and 4 open-ended questions seeking to find answers about students' attitudes towards peer assessment, peer relationships, and the checklists they were using throughout the process. The data obtained from the post-study student survey questions (Appendix C, questions 8 to 25) were analyzed both quantitatively and qualitatively.

Based on the researcher's observation, teachers' interviews, and the survey results, getting into pairs while sharing each other's essays and giving written feedback to one another with checklists, was a **new**, **challenging,** and **exciting** practice for the students of the two groups.

From the teachers' perspective, the vast majority of the students both in the treatment and control groups had a very positive attitude towards peer assessment. This attitude is confirmed by the students' responses to the survey (Figure 1). The percentages of the responses can be found in table 4.2.1 below.

Figure 1
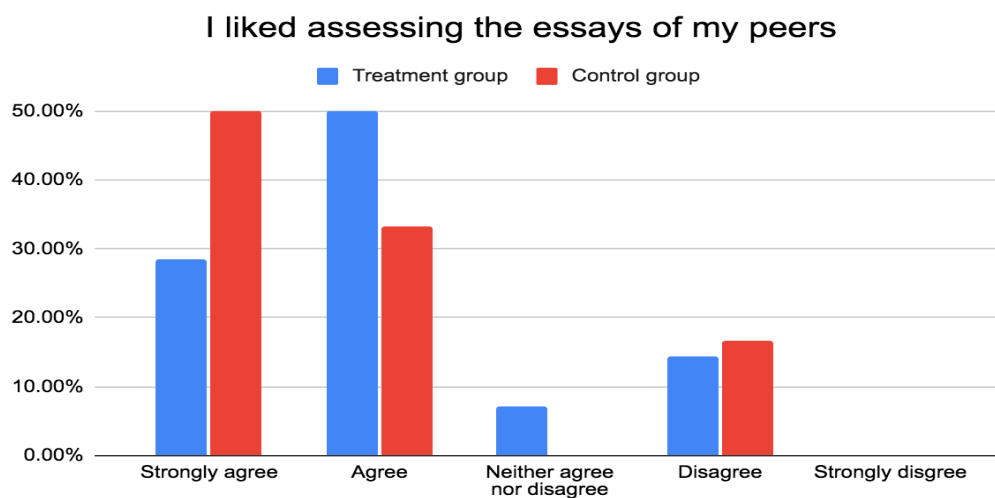
Consequently, Figure 2 depicts the areas of writing that, according to the students, were enhanced due to peer assessment. Based on the participants responses, they have mostly improved the conten and orgnization of their writings.

Figure 2

Students' opinions about the developed writing areas

In what areas of your writing have you seen improvements

Treatment group ■ Control group

Area	
Content and organization	
Vocabulary	
Spelling	
Grammar	

0.00%   20.00%   40.00%   60.00%
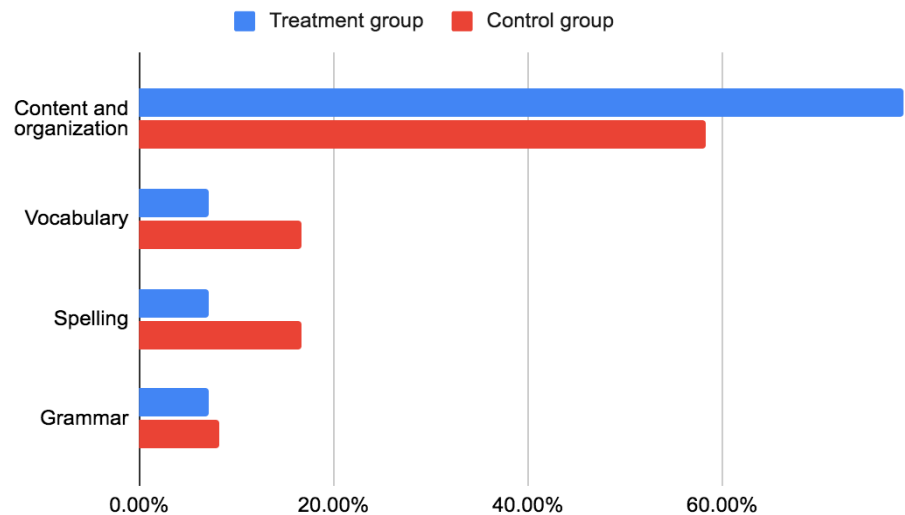
The teacher of the treatment group during the interview with the researcher emphasized that there were close friends in the group who were working as pairs which could have affected the objectivity of the students in giving and receiving feedback. However, from her viewpoint, it did not affect their objectivity, rather they mostly approached it as a way to help each other and make their essays better. This finding has been confirmed by students' responses who mainly agreed that they were objective in giving feedback to their peers. Figure 3 demonstrates the participants' responses. While those who were neutral or disagreed indicated that they did not want to give negative feedback to their students.

Figure 3

I was objective in giving feedback to my peers

Treatment group ■ Control group

```
80%

60%

40%

20%

0%
     Strongly agree    Agree    Neither agree nor    Disagree    Strongly disagree
                                    disagree
```
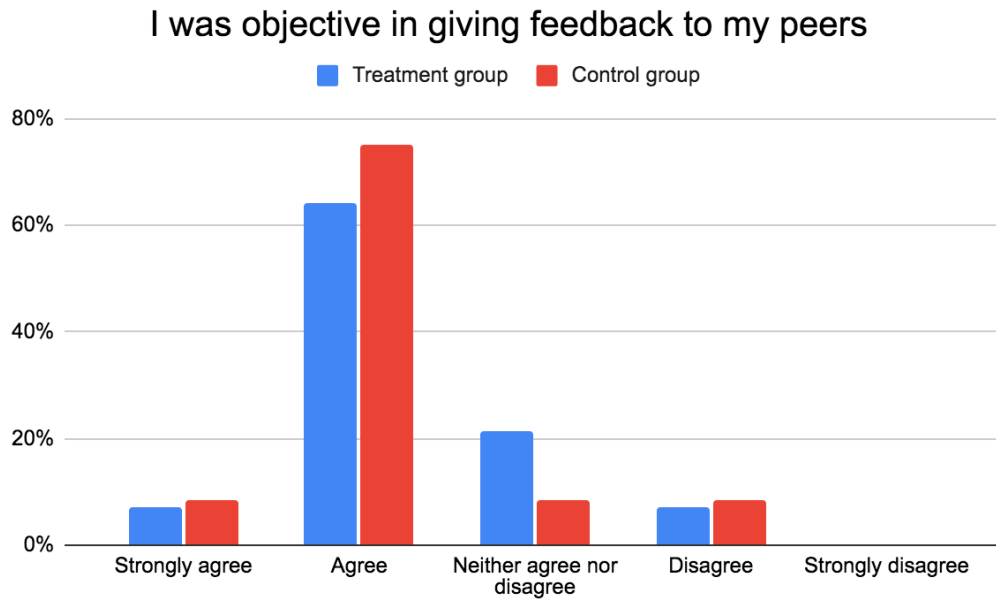
To the question of whether the students trusted the feedback they were provided with by their peers, most of them gave a positive response which can be found in Figure 4. However, some students from the two groups were neutral and one student from each group disagreed with the statement.

Figure 4

I trust peer feedback

Treatment group ■ Control group

```
50%

40%

30%

20%

10%

0%
     Strongly agree    Agree    Neither agree nor    Disagree    Strongly disagree
                                    disagree
```

During the interview with the two teachers, they were asked a question in order to understand what might the reasons for some students not incorporating their peers' suggestions into their revised versions of essays. According to the responses of the treatment and control group teachers', one reason could be, not receiving a type of feedback that would require the students to make necessary changes to their second drafts. Another reason is "simply not viewing peers' comments as valid or worth enough to make changes to their initial writings." Viewing, the teacher as the person who is in charge of giving feedback to their written works is another possible reason mentioned by the teachers that could affect the students' decision on making changes to their first drafts. This last reason has also been confirmed by the students' responses to the following statement: the teacher should give feedback on my writing, not my peers. As figure 5 shows, the majority of the participants in the control group agreed that teachers should give feedback on their essays, not their peers.

Figure 5

The teacher should give feedback to my writing not my peers
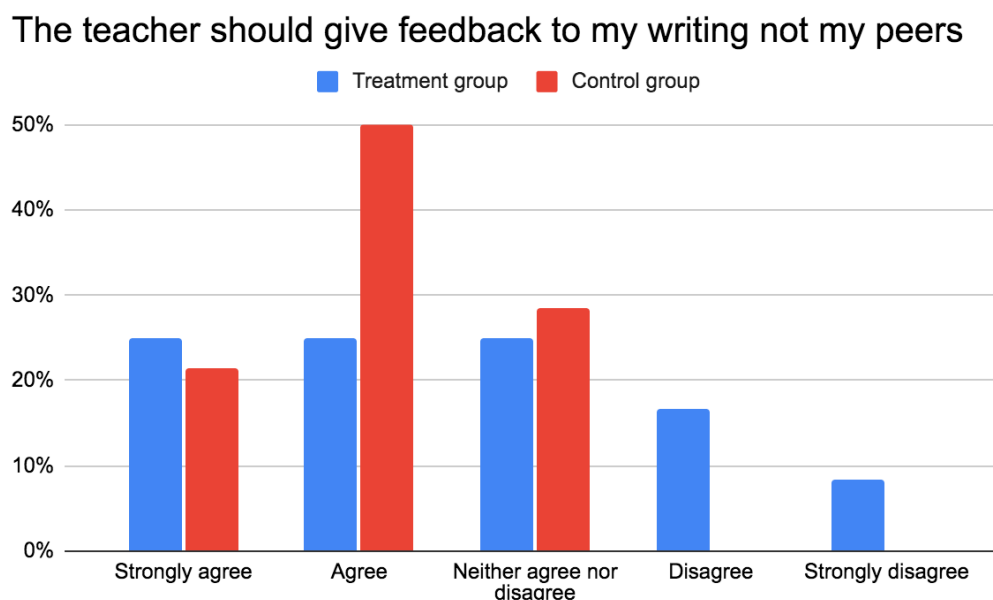
Next, the teachers were asked about the students' engagement in the process. They mentioned that the students eagerly participate in any activity they are assigned, and peer

assessment was not an exception. The teacher of the treatment group mentioned that "*at first they were very excited but their excitement lowered a bit because they have some sort of anxiety when it comes to writing. Thus, it was a good idea not to ask them to write the essays during the class but at home where they would not feel stressed.*" The teacher mentioned that they like speaking development activities more and sometimes are reluctant to do writing because it requires more effort and time from them. However, she noted that it did not affect their attitude, and "*they really liked doing peer assessment and enjoyed the process of giving and receiving feedback from each other.*" From the control group's teacher's perspective, most of the students in the group are very hard-working and like having new experiences. Since assessing their peers' written works was a new experience the students were eagerly involved in the process of reading their peers' essays and giving feedback on the checklists. To the question of what could be the reason they were concentrated on filling the checklists more, the teacher responded "*first because PA was done in class not at home, second because they were not provided with training and they were not introduced to the checklists.*"

Figure 6 summarizes the students' responses to the feedback they provided to their friends. It can be concluded from their reactions that 64.3 % of the students in the treatment group believed that the feedback they gave to their peers' was of good quality, while 28.6% were not sure. Almost the same pattern can be noticed in the control group's responses, with 75% agreeing that they gave good-quality feedback to their peers and 16.7% neutral. Moreover, the two teachers mentioned that the researcher's willingness to assist the learners outside the class regarding the essay structures or organization increased the learners' willingness and motivation to participate in the study.

Figure 6

I believe the feedback I gave to my peers was of good quality

■ Treatment group ■ Control group

During the interview with the two teachers, they were asked a question in order to understand what might the reasons for some students not incorporating their peers' suggestions into their revised versions of essays. According to the responses of the treatment and control group teachers, one reason could be, not receiving a type of feedback that would require the students to make necessary changes to their second drafts. Another reason is "simply not viewing peers' comments as valid or worth enough to make changes to their initial writings." Viewing, the teacher as the person who is in charge of giving feedback to their written works is another possible reason mentioned by the teachers that could affect the students' decision on making changes to their first drafts. This last reason has also been supported by one of the student's responses to the survey who indicated "*I liked peer-assessment, I felt like a teacher and I was trying hard to help my peers improve their essays and my peers were helping me improve my essays but still teacher should give feedback to make the essays really good. Because we are not 100% sure about the feedback we give.*"

Table 4.2.1 and 4.2.2 demonstrate the quantitative analysis of the survey with treatment and control groups with frequent answers and percentages that have not been stated above.

The following variables are presented in the table: *(Agree+Strongly Agree=A+SA, Disagree+Strongly Disagree=D+SD) The tables summarize the responses of the two groups mentioned above.*

Based on the treatment group students' responses, they think that peer assessment helped them find weaknesses and strengths in their own writings with 92.8% agreeing. Whereas 58.1% of the participants in the control group agreed with the statement and 41.5% were neutral. The majority of the students in the treatment group (78.6%) agreed that they made changes to the initial version of their essays after peer assessment which the statistical analysis of the grades has confirmed.

Whereas half of the students (49.8) of the control group agreed that they made changes to the first drafts after peer assessment. This perhaps is the reason why the mean ranks of the students in the control group were not as high as that of the treatment group even though the improvements they made were statistically significant. Nevertheless, the majority of the students of the two groups (71.4% in the treatment and 66.7% in the control group) agreed that they got ideas about their own essays reading their peers' written products. Additionally, all of the students in the treatment group (100%) and ten students from the control group (83.4%) disagreed that peer assessment was a waste of time. Thus, the majority of the students in the two groups would suggest applying PA activities more in their English classes with 78.5% and 75% respectively.

Table 4.2.1

Frequency of students' answers in the treatment group to the post-study survey with

percentage (%)

Source/Question	Neutral		A+SA		D+SD	
	n	%	n	%	n	%
1.PA helped me find my weaknesses and mistakes in my drafts	-	-	13	92.8	1	7.1
2. I made changes to the draft version of the essays after PA	2	14.3	11	78.6	1	7.1
3. My revised version of the essay is better than the first one because of peer feedback	4	28.6	10	71.4	-	-
4. I got ideas about my own essay, reading my peers' essays.	2	14.3	10	71.4	2	14.3
5. I do not trust my peer's corrections and suggestions	3	21.4	2	14.3	9	64.3
6. I think teacher should give feedback to my writing not my peers	-	-	3	21.4	11	28.6
7. I think peer assessment should be applied in English class	3	21.4	11	78.6	-	-
8. I believe the written feedback I received from my peers was of good quality	4	28.6	8	56.96	2	14.3
9. I believe the written feedback I gave to my peers was of good quality	5	35.65	9	64.3	-	-
10. I believe I have improved my writing skills after the peer assessment	1	7.1	13	92.69	-	-

	n	%	n	%	n	%
11. I liked discussing ideas about my essay with my peer	2	14.3	11	78.6	1	7.1
12. I believe my peers tried their best to help me improve my writings	2	14.3	10	71.4	2	14.3
13. I tried my best to help my peer improve his/her writings	-	-	14	100	-	-
14. Peer assessment was a waste of time.	-	-	-	64.3%	14	100

-

Table 4.2.2

Frequency of students' answers in the control group to the post-study survey with percentage

(%)

Source/Question	Neutral		A+SA		D+SD	
	n	%	n	%	n	%
1.PA helped me find my weaknesses and mistakes in my drafts	5	41.5	7	58.1	-	-
2. I made changes to the draft version of the essays after PA	4	33.2	6	49.8	2	16.6
3. My revised version of the essay is better than the first one because of peer feedback	2	16.7	9	75	1	8.3
4. I got ideas about my own essay, reading my peers' essays.	2	16.7	8	66.7	2	16.7
5. I do not trust my peer's corrections and suggestions	1	8.3	5	41.7	6	50
6. I think teacher should give feedback to my writing not my peers	3	24.9	6	50	3	24.9

7. I think peer assessment should be applied in English class	1	8.3	9	74.7	2	16.7
8. I believe the written feedback I received from my peers was of good quality	2	16.7	9	74.4	1	8.3
9. I believe the written feedback I gave to my peers was of good quality	4	33.2	7	58.1	1	8.3
10. I believe I have improved my writing skills after the peer assessment	-	-	-	-	12	100
11. I liked discussing ideas about my essay with my peer	1	8.3	9	75	2	16.7
12. I believe my peers tried their best to help me improve my writings	2	16.7	10	83.3	-	-
13. I tried my best to help my peer improve his/her writings	1	14.3	11	91.3	-	-
14. Peer assessment was a waste of time.	-	-	2	16.7	10	83,4

-

CHAPTER FIVE: DISCUSSION AND CONCLUSION

5.1 Discussion

This study aimed to explore the impact of peer assessment on intermediate-level EFL students' writing. Furthermore, it sought to elicit the students' attitudes towards the practice of peer assessment. In this chapter, the analyzed data results are highlighted and discussed in light of the previous research (chapter 3) to explicate the new understanding that arose from this research.

RQ1. What is the influence of peer assessment on intermediate-level students writing in the Armenian EFL context?

The instruments developed for data collection methods contributed to the data that helped answer the research questions. Data were collected through pre-test and post-test essays from the students in the treatment and control groups. The results of the two groups were compared with the help of the Mann-Whitney U test. The mean of the students in the treatment group was greater than the control group's mean score. However, the test results showed that improvements made by the students of the treatment and control groups were statistically significant as the p-value for the treatment group was 0.001 and 0.007 for the control group, which is lower than 0.05. This finding of the treatment group is in line with the previous research where it indicated that after the intervention, the treatment group students outdid the control group students. Meanwhile, the control group result is not in line with the previous research (Meletiadou, 2021; Kuyyogsuy, 2019; Brusa & Harutyunyan; 2019; Mendonca & Johnson, 1994; Tsui & Ng, 2000). This might have several reasons: the students in the control group were very motivated to improve their writing skills because they were future university applicants, and they wanted to score higher on international tests such as IELTS and TOEFL. The second reason was that the groups had different teachers who might have different teaching

styles, and the third reason might be the duration of the training in the treatment group which was short.

Also, the pre and post-tests of the treatment group were compared to see how improvement spread across the four categories in the analytic rubric the teachers were provided with. However, researchers such as Choi (2013) reported that the students are mostly focused on giving surface-level issues such as spelling and grammar mistakes. The current study's findings revealed a significant difference between the mean value of the organization and the content compared to the pretest and post-test writing scores of the treatment group. In the current study, the impact of peer feedback was detected more on deep and semantic level issues such as the organization and the content rather than surface-level issues, possibly because the participants of the treatment group received training prior to the implementation of the peer assessment activities.

Nevertheless, the treatment group participants were able to refine grammar and language use/mechanics skills less than the content and the organization possibly because they have doubted their language abilities to give feedback on grammar. Even though the learners looked at their works again, they have repeated the same grammatical mistakes possibly because more effort, time, and knowledge are required to improve this aspect of writing. Other researchers have also reported that trained students are able to provide deep, specific, and relevant feedback on global features of writing as, after training, they focus more on paragraph organization and idea development (Kim 2009; Min 2005; 2006).

RQ2. What is the students' attitude towards peer assessment?

The data obtained from the students' responses during the whole group discussion, the survey they filled out, and the teachers' interviews revealed that the students had a high positive attitude toward giving and receiving feedback. This was supported by the student's responses

to open-ended questions on the survey. It noted that peer feedback was beneficial as it assisted them in enhancing their writing skills. This means that the learners revised their initial drafts based on the feedback from their peers and scored higher on their post-tests. As most of the students in the treatment and control groups noted, PA was a new, exciting, and at the same time challenging experience for them, which made them find their strengths and weaknesses in their writings and made them feel more confident in their writing practices. Moreover, the students of the treatment group scored higher, and the key element assisting them in improving their written compositions was influenced by peer assessment training. These findings align with the previous research in which the participants reported positive experiences with peer assessment activities (Alsehibany, 2021; Kuyyogsuy, 2019). Additionally, the previous research has also asserted that peer feedback training positively impacted learners' writing improvements (Kim 2009; Min 2005; 2006).

Moreover, the teachers mentioned that peer assessment promoted autonomy which is confirmed by a study done by Ashraf & Mahdinezhad (2015), which demonstrated that peer assessment had a significant effect in promoting autonomy among language learners. The teachers also found the activities novel, exciting, and challenging for the learners, and they mentioned that they would like to implement PA activities with checklists in their classroom after the study.

Another interesting finding was related to students' objectivity and incorporating feer feedback into the initially written works. Based on the two groups' teachers' observations, the students of the two groups were objective in giving feedback, and they were able to give profound and detailed feedback to each other. However, some students were not objective in giving feedback knowing the initial responses of their peers. Therefore, one student from the treatment group has suggested conducting peer assessment activities anonymously to increase

the students' objectivity. The previous research has also proved the effectiveness of anonymous peer assessment (Sriani, 2012; Utami, 2012).

5.2 Pedagogical Implications

Based on the findings and the treatment procedure, the study has implications regarding the implementation of peer assessment in EFL classes. First, PA is an effectual pedagogical tool that can be adopted in EFL classes to support a student-centered approach and empower self-reliant students to allow the learners to study together and develop intellectual and social (Mendonca & Johnson, 1994; Liu and Carless, 2006). Therefore, the teachers can encourage the learners to work independently by developing appropriate materials such as checklists relevant to the learners' language abilities. Second, PA strongly recommends conducting well-organized training on peer feedback before conducting the studies since it influences the students' motivation to give and receive detailed feedback. (Kim, 2009). Third, the quality of students' writing would increase if the learners adopted their peers' comments into the final product. Finally, the study results were beneficial for testing the learners' writing abilities; thus, systematic PA activities can be applied in EFL classes to improve students' written products.

5.3 Limitations and Delimitations

The study encountered several limitations as well as delimitations. Perhaps the first limitation is the duration of the training the treatment group students were provided with which was short. Also, the time the students of the two groups were given to read their peers' essays and give written feedback on the checklists. Thus, the students in the treatment group needed more time to be trained and the students in the two groups needed more time to fill in the checklists.

Another limitation of the study was that the teachers of the treatment and control groups were different which means the teaching styles and methods might have had an impact on essay grades and research results. The results would be more reliable if the two groups had the same instructors. The sample size of the study was another limitation due to the small number of participants. Thus, the results of the study cannot be generalized. Lastly, the lack of previous practice in writing essays was another limitation of the study.

5.4 Recommendations

Further research on this topic could benefit from testing the effects of peer assessment activities on Armenian EFL students over a more extended period and with a larger sample size. It would also be interesting to conduct a similar study while including participants of different levels in the research. The third recommendation is to conduct an anonymous peer assessment if there are best friends in the groups that would affect the participants' objectivity in giving feedback or if some learners do not provide objective feedback knowing the initial response of their peer. Fourth is combining peer assessment with teacher assessment since there were students who responded that they favor teacher feedback more as, according to them, the feedback provided by their teachers is more valid. Thus teacher's assessment with peer assessment can be combined to see if it enhances the quality of students' written products more than only peer assessment. Another interesting study would be investigating the impact of gender in giving feedback to their peers' essays.

5.5 Conclusions

The current study investigated the impact of peer assessment on intermediate-level students' writing as well as their attitude towards the peer feedback practice. This study was followed by a similar study done by Kuyyogsuy (2019) and Meletiadou (2021), which aimed to demonstrate the influence of PA on students' writing performance. Based on the findings

(chapter 3) and discussion (chapter 4) presented in the previous chapters, it can be concluded that peer assessment significantly enhances intermediate-level student writing. The descriptive analysis showed that the mean score of students' writing in the experimental group that received both training and peer assessment was higher than the control group's mean score that experienced only peer assessment activities. The comparison between the mean scores of the pre-test and post-test in the experimental group was 14.8 and 17.2. In contrast, the comparison of the pre and post-test of the control group was 15 and 16. Even though the mean scores of the treatment group's post-tests were higher, the statistical analysis of the two groups showed that the improvements made by the students of the two groups were statistically significant. In addition, the students had a positive attitude towards the practice, which was novel, engaging, and challenging for them, and it resulted in making the revised versions of essays better than the initial ones. Lastly, the study concluded that peer assessment activities could promote autonomy among the students, as were noted by the teachers of the treatment and control groups and the previous research (Ashraf & Mahdinezhad, 2015; Little, 2009).

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Appendix A

An analytic rubric

Analytic Rubric

Category	5 Excellent	4 Good	3 Satisfactory	2 Unsatisfactory	1 Not much to evaluate	Points Earned
Content	The essay fulfills the assignment well and treats the topic with sophistication. The main idea is clear; statements are relevant, and well supported.	The essay addresses the assignment and is mostly well-developed. The main idea is clear, the statements are relevant and mostly well-supported.	The essay addresses the topic, but contains some weaknesses in development; OR the essay only addresses part of the topic, but that part is developed sufficiently. Statements are generally supported and related to the main idea but may contain some weaknesses.	The essay contains serious weakness in addressing the topic and in development. Some statements are not supported or are unrelated to the main idea.	The essay does not address the topic OR the main idea is not evident. Most of the statements are unsupported or irrelevant to the topic.	
Organization (Form)	The essay is very well-organized; with a clear progression of well-linked and coherent ideas. Paragraphs are clear and well-connected.	The essay is well-organized. Ideas are linked, paragraphs are organized but contain some weaknesses.	There is some lack of organization; ideas may be clear but not well-connected and may mostly lack coherence.	The essay lacks proper organization. Ideas maybe clear but there may be no connection between them.	Communication is seriously impaired due to severe lack of organization.	

LANGUAGE AND MECHANICS (Vocabulary, spelling, punctuation)	The use of the words and phrases is accurate and effective. The essay contains almost no errors in spelling and/or punctuation and is exceptionally easy to read.	The use of the words and phrases is correct, but occasionally the words are used inaccurately or the text seems to be overloaded with vocabulary. The essay contains few (1-2) errors in spelling and/or punctuation, but the essay is still easy to read.	The words and phrases are frequently used inaccurately. The writing lacks variety. The essay contains a few errors in spelling and/or punctuation that interrupt the flow.	There is no proper use of vocabulary. The essay contains several errors in spelling and/or punctuation that interrupt the flow.	There is a poor use of vocabulary; frequent errors in spelling and/or punctuation OR insufficient product.	
GRAMMAR	The essay includes almost no grammar mistakes.	The essay includes few (1-2) grammar mistakes that still do not obscure the meaning of the ideas.	The essay includes several grammar mistakes (3-4) that to some extent obscure the meaning of the content.	The essay includes several grammar mistakes(more than 4) that obscure the meaning of the content.	The essay contains frequent errors that obscure the meaning of the content; OR the writer has produced an insufficient product.	
Total points						___/ 10

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Appendix B

Your name:
Author:
Date:

<mark>5 (excellent or very good)</mark>
<mark>4 (good, with few errors or inaccuracies)</mark>
<mark>3 (satisfactory, with many errors and inaccuracies)</mark>

Introduction	5	4	3	Comments
Does the introduction engage the reader? If "yes" then how, if "no" then suggest how to improve it				
Does the first paragraph provide a general overview of the essay's topic? Please explain how				
Does the first paragraph include a thesis statement that strongly and clearly states the writer's point of view? If the thesis statement is week, explain how to improve it.				
Copy the thesis statement of the essay.				
Does the thesis clue readers in as to what the essay is going to be about?				
What side is the writer on? Is he/she objective?				
Paragraph one (Argument for)				
Does the paragraph start with a topic sentence that provides the overview of the paragraph?				
Copy paste the topic sentence				

Does the writer have at least one peace convincing evidence or example that supports the argument?				
Are the reasons supporting the topic sentences strong or weak? Suggest ways of improvements				
Paragraph two (Argument against)				
Does the paragraph start with topic sentence?				
Copy paste the topic sentence				
Does the writer have at least one peace convincing evidence or example that supports the argument?				
Are the reasons supporting the topic sentences strong or weak?				
Conclusion				
Effectively restated the arguments				
Is the conclusion free of new information?				
Does the final sentence leave with a strong final impression?				

General Comments

Cohesion	5	4	3	**Comments**
Does one idea flow smoothly into the next?				
Is it easy to understand the writing?				
Style				
Do the sentence structures and lengths of paragraphs vary?				

Are the sentences correctly formulated?				
Vocabulary				
Does the essay use linking words? Is the choice of words appropriate?				
Did the writer avoid repetition of words?				
Mechanics				
Are the grammar, punctuation, and spelling correct?				

Appendix C

Post-study Survey

Survey for the control and treatment groups.
1. What is your age?
   12-14
   15-17
   18-20

2. What is your gender?
   Male   female

3. Have you ever assessed your peers? If the answer is "No," please skip question #4
   Yes
   No

4. How did you assess your peers? You can choose more than one answer
   In pairs (2 people)
   In groups of three or more
   The whole group gave oral feedback to one student
   The whole group gave written feedback to one student
   I graded my peers' works

Other (Please specify)

5. What did you give feedback on?

Presentations

Essays

Other (Please specify)

6. Have you assessed your peers' ESSAYS BEFORE? If the answer is "NO," please skip question #7

Yes   No

7. How did you assess the essay of your peer?

Through oral feedback

Through written feedback

Other (Please specify)

Students' attitude towards peer feedback.

8. To what extent do you agree with the following statement "I was objective while assessing the essays of my peer."

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

9. If you were not objective, please specify what could affect your objectivity

10. To what extent do you agree with the following statement "I liked assessing the essay of my peer."

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

11. I trust peer feedback

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

12. Peer feedback has helped me improve the content and the organization of my writing

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

13. Peer feedback helped me to find my weakness and grammar mistakes in my draft

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

14. I have made changes to the draft version of the essay after peer assessment

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

15. My revised version of the essay is better than the first one because of peer feedback

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

16. Peer feedback helped me get new ideas

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

17. I don't trust my peers' suggestions and corrections

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

18. I think the teacher should give feedback to my writing, not my peers

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

19. I think peer assessment activity should be applied in English classes

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

20. I believe the written feedback I received from my peers was of good quality

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

21. I believe the written feedback I gave to my peers was of good quality

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

22. I believe I have improved my writing skills after the peer assessment

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

Peers' relationships

23. I liked discussing ideas about my essay with my peer

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

24. I believe my peers tried their best to help me improve my writings

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

25. I tried my best to help my peer improve their writings

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

The Checklist

26. Have you ever used checklists BEFORE to assess your peers?
    Yes   No

27. Do you consider using the checklist easy or challenging?
    Easy   Challenging   Neither easy nor challenging

28. If using the checklist was challenging, please, mention what were the challenges?

29. To what extent do you agree with the following statement "The checklists helped assess the essays of my peers."

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

30. Do you think the time you were given was enough to complete the checklist?

Yes   No

31. Do you think you needed training to fill in the checklist?

Yes   No

32. To what extent do you agree with the statement: The checklists helped me to improve my own writing.

Strongly agree,   Agree,   Neither agree nor disagree,   Disagree,   Strongly disagree

Open-ended questions about the students' performance and PA

Please, reflect on your overall performance. Do you think peer assessment was effective?

Were the essay structures, thesis statements, and topic sentences explained effectively by the researcher?

In your opinion, what worked well and what did not in the process of doing Peer Assessmen

Appendix D

Questions to the students in the treatment and control groups for whole group

discussion

What worked well in the process of PA?

What did not work well in the process of PA?

What would you suggest in other ways?

Do you see any positive changes in your writing skills?

Do you think the checklists were of any help?

Appendix E

Post-study interview with the teachers.

Do you think the students were engaged in the process of peer assessment?

What do you think was the students' overall attitude toward peer assessment? Was it positive or negative? What namely did they think was good or bad?

Do you think the training was practical, or do the Ss need more assistance in giving and receiving feedback?

Do you think the students were objective in providing feedback to their peers?

Do you think the researcher effectively explained the essay structures, thesis statements, and topic sentences to the students before assigning them to write a particular essay?

Have you noticed any positive or negative changes in students' writing skills after the peer assessment? If "yes," please explain what they have improved. E.g., did they improve their thesis statements, did they change the organization, or have they improved their grammar or spelling, etc.

How useful do you find the checklists prepared by the researcher?

How reliable do you find the checklists?

As you were observing the process of filling the checklist, do you think the students are comfortable with using them?

Was it challenging for the students to use the checklists?

Do you think the analytic rubric you used to grade the students' essays was helpful?

Do you think the students' were objective in assessing their peers' works?

Do you think the time spent on PA was enough?

Did you take your students' peer feedback into account while grading their works?

Would you like to implement peer assessment in your class again?

What do you think worked well in the process?

What do you think should be done in another way?

Appendix F

Proofreading activities

Name _____ Paragraph Correction

A Balanced Diet

DIRECTIONS: Read the passage below. Underline the error in each numbered sentence. Then answer the questions about how to correct the errors.

(1) Follow these tree tips to ensure you are eating a healthy, balanced diet. (2) first, your diet should be colorful – naturally colorful, not full of artificial dyes. (3) Eating plenty of fresh fruits and vegetables will ensures you get plenty of color in your diet. (4) And if you are getting color, then you are getting vitamins, minerals, and fytonutrients. (5) Second, shop around the perimeter of the supermarket; thats where the real food is: the meats, dairy, fruits and vegetables. (6) Third, don't eat anything out of a box that contains more than five ingredient. (7) Eating good couldn't be simpler!

1. (a) there   (b) three   (c) free
2. (a) first your   (b) first diet   (c) First, your
3. (a) ensure   (b) ensured   (c) ensuring
4. (a) fightonutrients (b) nutrients (c) phytonutrients
5. (a) that   (b) that's   (c) there's
6. (a) ingredients (b) greedy   (c) ingradient
7. (a) Eating Good (b) eating good   (c) Eating well

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Appendix G

Name _____ Paragraph Correction

The Dreaded Book Report

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Appendix H

Name _____ Paragraph Correction

Bad Blood

DIRECTIONS: There are six errors in the paragraph below. Underline the errors. Then rewrite the paragraph correctly.

The two women were well known to be enemy.

Neither of them could ever really point to what

was wrong, or to what the other had did to get on

their bad side, but there is a feeling of uneasiness

and animosity between them that seemed to

swell up all of its own accord just by virtue of the

two of them being in the same room together.

Oh, they tried to pin down reasons; things that

could be observed, or heard, or pointed to; but

the truth of it were that those two beings just

couldn't occupy the same room without one or

the other of their blood starting to boil, and when

that's the place you start from, well . . . they soon

decided, as did everyone else that had had to ded

with them, that it was best to keep as much

space between them as possible.

_____

_____

_____

_____

_____

_____

_____