Journal of Social Sciences Review (JSSR) DOI: https://doi.org/10.54183/jssr.v3i1.125

How to Cite This Article: Deeba, F., Raza, M. A., Gillani, I. G., & Yousaf, S. (2023). An Investigation of Role of Portfolio Assessment on Students' Achievement. *Journal of Social Sciences Review*, 3(1), 149-161. https://doi.org/10.54183/jssr.v3i1.125

An Investigation of Role of Portfolio Assessment on Students' Achievement

Farah Deeba	Assistant Professor, Department of Education, Bahauddin Zakariya University, Multan, Punjab, Pakistan.
Muhammad Aqeel Raza	Assistant Professor, Department of Education, National College of Business Administration & Economics, Multan Campus, Punjab, Pakistan.
Iram Gul Gillani	Assistant Professor, Department of Education, Bahauddin Zakariya University, Multan, Punjab, Pakistan.
Muhammad Yousaf	Ex. M.Phil. Research Scholar, Directorate of Distance Education, Bahauddin Zakariya University, Multan, Punjab, Pakistan.

Vol. 3, **No.** 1 (Winter 2023)

Pages: 149 – 161

ISSN (Print): 2789-441X

ISSN (Online): 2789-4428

Key Words

Role, Portfolio, Achievement, Assessment

Corresponding Author:

Farah Deeba

Email: farahgillani@bzu.edu.pk

Abstract: *Portfolio assessment has emerged as an alternative technique of assessment of students due to its noteworthy role in enhancing students' achievement. Therefore, the present study was an attempt to develop a portfolio and further investigate the role of portfolio assessment on students' achievement at the secondary school level students. Pupils of the ninth class were considered as the population of the research study. Two groups of ninth-class students (Control Group and Experimental Group) from a public school located in Multan were treated as a sample of the study. The targeted population consisted of 73 students. The control group students (N=42) were assessed through traditional assessment techniques, whereas the experimental group (N=31) received treatment (portfolio assessment strategy). Data were collected through the results of the first-term examination, second-term examination, third-term examination and monthly tests from September to December. All tests and results were saved in their portfolios, and later on, their achievement was assessed on the basis of recorded information in a portfolio. Test scores and self-reporting questionnaire scores were used as measures of students' academic achievements and mean The percentage of the experimental group was 67.3%, while the control group got 52.3%. There was no significant difference between the experimental and control groups for the first term and a significant difference for the third term.*

Introduction

Students' assessment is no more dependent on using sole standardized measures like teacher-made tests. Across the world, in various academic fields to include alternative assessment and other indicators, along with widely used standardized measures to assess the student's progress and learning efficiency, have come forward as an emerging trend. These alternative assessments and indicators that are not conventional assessments are now being used simultaneously with standardized assessment techniques. Alternative assessment is an umbrella term for anything other than standardized, paper-pencil tests and teacher-made tests. This unconventional alternative assessment provides a platform for assessing the abilities of students by showcasing students' selective work, aptitudes, interests and capabilities that are very effective in obtaining valued pieces of evidence and information about the performance of students regarding their academic backgrounds. These alternative assessments may include

reflection through observation and portfolios. Information collected through standardized assessments and portfolios provides a comprehensive picture to teachers, parents and other stakeholders to make prudent decisions on students' enhanced performance (Aysu, 2021).

In the academic milieu, educational portfolios present consolidated tasks of learners collected by them and also by their teachers. Through a portfolio, students are able to exhibit their finest work in assignments and tests. It is a display platform for their understanding of the subject and its practices conducted in a classroom (Pitri, 2021). One class-based assessment that rates students' progress holistically over time by accumulating their work is termed a portfolio. To improve students' learning activities and level of understanding and for the accomplishment of intended outcomes, a portfolio can be used as a diagnostic and remedial tool. Even students can be motivated enough to explore their own knowledge and understanding in the teaching-learning process (Pangkey, Syahrial & Solihatin., 2018).

The reason behind using alternative assessments, especially portfolios, is the deficiency and limitation present in conventional and traditional assessment techniques, as their administration is not frequent throughout the session. Results are usually based on summative assessment rather than focusing on students' throughout change and progress in their attitude, listening, speaking, reading and writing skills. Stereotyped assessment procedures are affected by internal or external factors also at the time of administration. Therefore, they are unable to depict a true level of assessment. These traditional assessment techniques emphasize product, and they measure recall of the taught content and do not bother what actually happened throughout the session in the classroom. Contrary to it, alternative assessments, including portfolios, measure the effectiveness of the teaching process along with the change in students' learning as they switch over from lower-order skills to higher-order skills. Therefore, portfolio assessment continues in the classroom throughout to compile and sum up all the developments that came in students' work (Shirvan & Golparvar, 2016). Pitri (2021) also agrees that the cause of the inception of using portfolios is strong objections raised by educators who critiqued the limitations of traditional assessment.

A research study by Farooq (2013) regarding portfolios found portfolios as an advanced assessment tool for assessing the achievement of students. He asserted portfolio is a very effective and impressive document for assessing students' learning. Research studies found that different factors regarding portfolio development and assessment have a positive impact on the achievement of the students, especially in language classes (Atadil-kuzucu & Kartal, 2020; Evans & Tragant, 2020). Aysu (2021) worked on studying the role of portfolio assessment on the attendance of students in class and found an increase in attendance and more increase in attendance of female than the attendance of male students.

Many factors may influence students' achievement in secondary schools. Effective assessment of the academic achievement of students is not an easy task. A traditional and conventional method of assessment has limitations and only emphasizes the product. It is very crucial to opt for some advanced alternative assessment techniques along with conventional assessment like portfolio assessment to check effectiveness or to ensure process efficacy. Through portfolio development and assessment, in which students are active learners and be a part of the assessment may increase the effectiveness of the process and their academic achievement. Researchers found a study gap, as well as very few studies have been conducted with reference to Pakistan on portfolio assessment. Therefore, it was thought

appropriate to conduct a study in the context of students studying in Pakistan to highlight the impact of portfolio assessment on their achievement. This research study is based on the development of portfolios at the secondary level to examine their effect on the achievement of students. The main purpose of the study was portfolio development for the students at the secondary level and further assessment of the achievements of students by using portfolios.

Research Objectives

The objectives of the study were

- To assess students' achievement on the basis of portfolio
- To compare the achievement of the experimental and control group

Literature Review

The concept of using a portfolio as an advanced and alternate form of assessment emerged in education by different disciplines like arts and humanities, construction, architecture, filmmaking, photography or other artistic, innovative and creative fields like stylish graphic designers, performers, entertainers, artists, and models. The practitioners belonging to such fields use portfolios for organizing and record keeping of their best work to further showcase their work and achievements in both academic fields and their world of jobs. Portfolios assess and appraise the progress of achievement in life as well as at job place (Hudori, Tasnim, & Fardhani, 2020).

Portfolio assessment is defined by Douglas (2000) as the purposeful selective collection of learners' work which is reflective of self-assessment and is used to document progress and achievement over time with regard to specific criteria. Other than an academic field portfolio is a collection of works by the individual that may be an artist like a painter, actor, singer, scriptwriter, poet, architect, writer or student in these fields. However, students' achievement is assessed through their portfolios as alternative assessment techniques along with traditional techniques of assessment.

Davis & Ponnamperuma (2005a) postulate portfolio as a tool that displays the evidence of achievement of learning outcomes. It is a collection of various forms of selective and distinctive works. A portfolio is a persistent and purposeful album of students' achievements that reflects the student's performance, advancement and innovation regarding their accomplishment of learning outcomes. Students' portfolio is assumed by Venn (2000) as a systematic compilation of students' work that depicts a student's activities, accomplishments, and achievements in one or more school subjects,

Students' assessments should be both product and process oriented by the teachers, and the portfolio fulfils this requirement very well. While using portfolios, the teachers are expected to describe the ongoing progress of students by representing overall changes found in students from the beginning of the c.mpilation of their work till the end of a session. However, it is desirable to scrutinize their work with the suitability of intended outcomes. A portfolio must ensure the proper reflection of changes in students' intellectual abilities emerge from time to time (Pangkey et al., 2018).

Portfolio has been categorized under developmental portfolio and showcase portfolio. A developmental portfolio is an assemblage of students' tasks which only presents their learning progress. On the other hand, a showcase portfolio presents a sample of students' best work. This type of portfolio is considered an effective measure to collect data on the reliable improvement of the student. However, Pitri (2021) prefers a developmental portfolio as a thematic collection is possible in a developmental portfolio, and each and every skill of a student is focused. In this way, a teacher has a deep understanding of accomplished proficiencies and remedies for unmet skills and capabilities (Venn,

2000). Still, portfolio setting, whether in the form of a developmental portfolio or showcase, a portfolio is a neglected and avoided task by teachers as they prefer to use stereotyped exams, quizzes and presentations. The reason behind this avoidance may be teachers' lack of training in the field of alternative assessment procedures and lack of time, as indeed portfolio development is a time taking and tedious task for teachers (Pitri, 2021).

Process and product portfolios represent the other two major forms of portfolios. A process portfolio is a collection of work during the process involving the student's work in portfolio development for self-evaluation and self-development. At the same time, a product portfolio is a collection of work throughout an activity or program and is used for assessment at the end of a specific program (Birgin & Baki, 2007).

A student portfolio is documentation and records of a student's achievement and work regarding learning progress. It shows and reflects pieces of evidence about a student's intellectual ability, emotional stability, critical thinking, techniques of questioning, power of analysis, creation and synthesis for a specific student that is compiled over a long period of time. It also identifies the purpose and methods for collecting these records and pieces of evidence for the portfolio (Koraneekid, 2007). Documentation and records for portfolios and assessment using these documents provide verification about data, talent, achievement and personality of a student. So, this is a sequential long-term process for the collection, analysis and evaluation of data and records to assess and for making a decision about a student later on. Cumulative series of portfolios and collection of all portfolio record development reflect the ability, achievement and competencies of the student in a valid way (Simon & Forgette-Giroux, 2000).

However, to develop a folder for the purpose of a portfolio without objectives is just making a folder. Students' portfolio development is infused in assessment practices as a purposeful activity that may be used to assess the progress of the student. Therefore, it is desirable for an effective portfolio to include maximum participation by the student in a collection of his work, content selection, content selection criteria, and criteria to judge his own work and ultimately enable him for enduring participation in self-reflection (Hudori et al., 2020).

View to Aysu (2021), in traditional classrooms, most of the time, stereotypical techniques of assessment are used, such as quizzes and tests and students are assessed on the basis of right or wrong answers. However, this type of assessment does not involve students with the tasks and enables them to work collectively. Therefore, the use of alternative forms of assessment emerged in the form of authentic assessment, including performance-based assessment, portfolio assessment, and coursework assessment. Portfolio assessment works as a direct measure which apprehends the constructive nature of learning because it assimilates teaching, learning and assessment

The philosophy behind using a portfolio along with other techniques of assessment is to obtain a robust reflection of students' work, encourage critical thinking and self-evaluation among students, assessment of students' performance through genuine work by the students. Portfolio provides a true picture of accomplished learning goals involving educators and students for setting and establishing learning goals and evaluation of the progress of these goals. Portfolio development and assessment encourage learning through cooperative activities and a systematic process of learning (Marianne & Denise, 2010). A portfolio assessment is a source of self-reflection for both teachers and students. However, it raises questions for students as to what extent they are progressing and what still is needed to be improved ahead in terms of skills, knowledge and use of knowledge (Aysu, 2021).

Portfolio assessment makes the learners active in the learning process, and they improve their high-order skills, such as critical thinking skills (Farahian, Avarzamani, & Rajabi, 2021). Portfolios familiarize the students with presenting various types of more authentic tasks. This demand gives them an impulse to be more innovative. Besides this, portfolio assessment gives the learners more freedom and helps them develop and improve higher-order thinking skills while opting for meta-cognitive strategies. Portfolios provide the students with the opportunity to see themselves not only as readers or writers but also as individuals with special interests and needs and provide students with unique opportunities to advance their learning. Portfolios contain the assets like dream power, reflection, variety and individualism, which cannot be found in standardized and norm-based assessments (Yurdabakan & Erdogan, 2009).

A portfolio provides all the needed information necessary for the goal accomplishment of the teaching-learning process (Efendi, Usman, & Muslim, 2017). A portfolio can be used as a vital component of a learning process to report students and their teachers, the rate and quality of progress of students and deficiencies which still are needed to be improved or removed. Hence, a portfolio is indicative of students' silhouettes of their evolving expertise, mastery and adaptability. Ultimately, a portfolio enables students to a self-governed and self-regulated learners (Barootchi and Keshavarz, 2002).

Portfolio assessments always welcome students' participation so that they may have a judgment of their own strengths and weaknesses during the teaching and learning process. Hamp-Lyons and Condon (2000 as cited in Sulistyo, 2020) suggest three phases in steering portfolio such as collection, in which students compile their final draft in their portfolio, and the other one has selected in which students keep their finest two or three final drafts which are considered for further grading and the last one is the reflection in which students have to provide feedback on their first and final draft that how much difference they have found in both drafts and which deficiencies have been explored.

A portfolio is a shared and active type of assessment. Therefore, it always needed a strategy that would be in line with its this philosophy and conferencing fulfilled this purpose as it welcomes face-to-face conversation between students and teachers to highlight students' work that meets future goals. Such conferences make teachers aware of all the tactics, approaches and strategies used by the students to improve their performance over time. On the next level, conferences give students a feeling of ownership of their work. In this way, they are more inclined to be involved in this assessment with zeal (Shirvan & Golparvar, 2016).On the other hand, setting portfolio conferences schedules is also extensive as the teacher has to schedule meetings with parents and students on the basis of progress in a portfolio and no doubt this activity overburdened a teacher who has to complete his other instructional activities also. In this way, it interrupts his instructional activities (Weigle, 2007).

However, a few demerits cannot be ignored in portfolio development and assessment as additional time is required to develop a portfolio, selecting the best work out of a sample of a lot of work is a tough and time taking task for a teacher, and if students are involved then a teacher has to train them for all the criteria of content selection that is again time taking process (Rees, Shepherd, & Chamberlain, 2005). The development of a portfolio assessment system is a tedious task for some teachers, especially those who are not well-trained for portfolio assessment. Therefore, the expertise of the teacher is required for this activity. Furthermore, scrutinizing and scoring a portfolio is hard to deal with, which requires subjective evaluation.

Therefore, Pitri (2021) suggests the following criteria for designing a quality portfolio assessment;

1. Goals related to instructional process and objective of portfolio assessment be focused
2. The sample must be according to international instructional goals
3. Sample of work should be criterion-referenced and be collected during instruction
4. Regular Pre-test and Post-test be ensured, and there should be no typical format of test for portfolio.
5. Rubric be developed for assessment comprised of students' responses and be properly scored for highlighting deficiencies

A portfolio assessment is the most common and popular type of alternative in the field of assessment (Brown, 2000). It is one of the unique types of assessment to evaluate the learning of students through a series of documents set and selected by both teachers and students (Singh & Samad, 2013). Wyatt and Looper (2004) assert that a portfolio is the best alternative way of assessment to assess the achievement of students that is documented through the involvement of students with teachers (Nunes, 2004). Khan and Begum (2012) worked on a portfolio tool for teachers' development and found its positive impact on the professional development of teachers.

Material and Methods

The design of the study was experimental in nature. The population of the study was comprised of all the students in 9th grade. For the sample, there was a process of grouping, i.e. control group and an experimental group of students in 9th grade. The experimentation station was a public sector High School for boys situated in the city of Multan.

A test (including all subjects, and each subject had a weightage of 10 marks) consisting of MCQs was developed with the help of experts in relevant subjects. This test was developed from the syllabus taught in class from April (the start of the session) to July. Test experts available were requested to review the test for validation, and changes were made on the recommendation of the experts. To conduct a pilot study, this test as the tool was conducted on hundred students that were not included in the sample. On the basis of responses, the item difficulty index was calculated, and the format of the test was finalized while including easy to difficult items.

This final format of the test was administered on a sample for grouping into the experimental group as well as the control group. There was a total of 73 students studying in class 9. On the basis of the results of this test, experimental and control groups were framed, and it was made sure of equal weightage of qualification. There were 31 students in the experimental group and 42 students in the control group. After this, the students of the experimental group were involved in the development of their portfolios.

A sheet was developed to record all activities and achievements of a student regarding academic achievement that was recommended by Goerss (1993). This sheet was used as a cover page of a document portfolio that includes the record of tests and examinations and observations of co-curricular activities. Students of both groups were informed about the syllabus of the First Term Examination (August), Second Term Examination (November), Third Term Examination (January), as well as Monthly Tests (September, October, and December).

Tests based on the given syllabus were developed consisting of MCQs for terms as well monthly examinations. Test experts available were requested to review these tests for validation, and changes were made on the recommendation of the experts.

A questionnaire based on the model given by Newbery (2012) was developed to comprehend the students' points of view about portfolios. A questionnaire was based on a Likert scale. At the

start, twenty-four statements in the questionnaire were included. After consulting available experts, the final format of the questionnaire was restricted to nineteen statements. The changes were made recommended by experts that increased the validity of the questionnaire, and the reliability calculated through Cronbach's Alpha was 0.71. Percentage, Mean score and Pearson's correlation were used for data analysis.

Results

Table 1

Overall Percentages of Experimental Group of all Subjects in all Terms and Examinations

S#	Examinations	English	Urdu	Isl. Stud.	Pak. Stud.	Phy	Che	Bio	Math	Total
1.	First Term Exam (Aug)	37%	49%	53%	49%	32%	31%	32%	32%	39.3%
2.	Monthly Test Exam (Sep)	59%	57%	56%	57%	58%	53%	55%	60%	56.9%
3.	Monthly Test Exam (Oct)	79%	68%	75%	78%	69%	68%	73%	80%	73.8%
4.	Second Term Exam (Nov)	74%	77%	74%	76%	73%	72%	73%	75%	74.3%
5.	Monthly Test Exam (Dec)	80%	80%	80%	79%	77%	73%	76%	76%	77.6%
6.	Third Term Exam (Jan)	82%	83%	86%	84%	80%	81%	81%	82%	82.4%
7.	Overall Percentages	68.5%	69.0%	70.7%	70.5%	64.8%	63.0%	65.0%	67.5%	67.3%

Table 01 presents the overall % age in different subjects of the experimental group in all terms and examinations. In all subjects (Overall), the Experimental group got 39.3% marks in the first term examination (August), 56.9% marks on the monthly test (September), 73.8% marks on a monthly test (October), 74.3% marks in second term examination (November), 77.6% marks in monthly test (December) and 82.4% marks in third term examination (January) and so on. The overall percentage of the experimental group of all subjects in all terms and examinations was 67.3%.

Table 2

Overall Percentages of Control Group of all Subjects in all Terms and Examinations

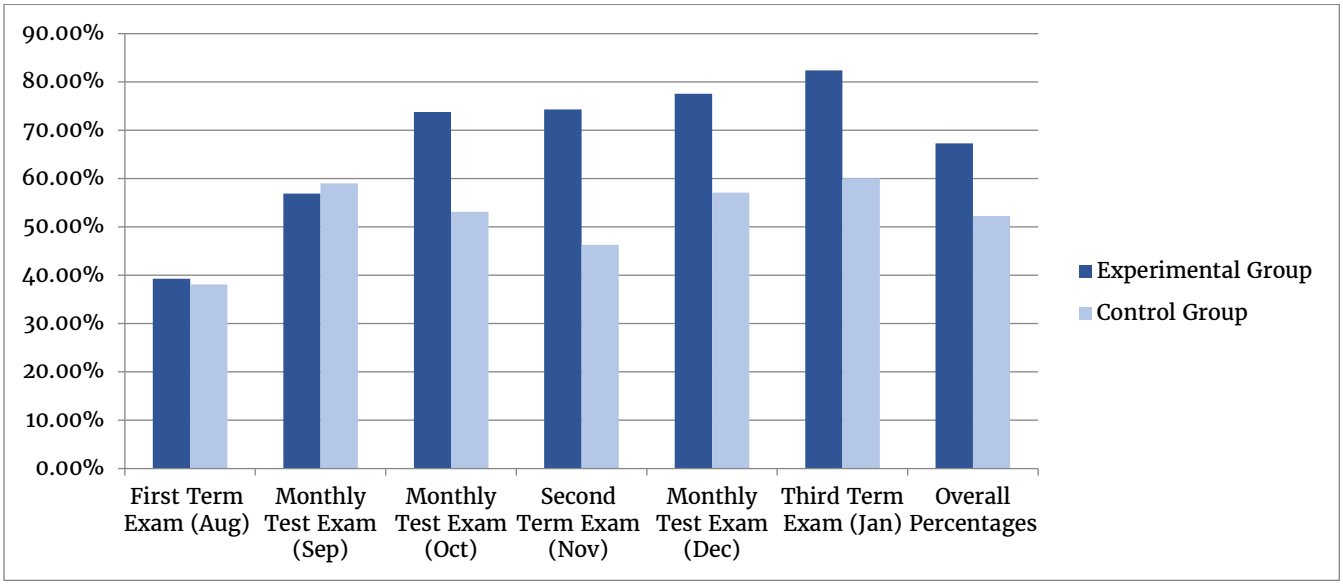
S#	Examinations	English	Urdu	Isl. Stud.	Pak. Stud.	Phy	Che	Bio	Math	Total
1.	First Term Exam (Aug)	43%	44%	59%	46%	28%	26%	27%	32%	38.1%
2.	Monthly Test Exam (Sep)	46%	57%	61%	59%	59%	67%	60%	63%	59.0%
3.	Monthly Test Exam (Oct)	49%	78%	48%	49%	50%	58%	47%	46%	53.1%
4.	Second Term Exam (Nov)	39%	38%	64%	51%	44%	55%	41%	38%	46.3%

5.	Monthly Test Exam (Dec)	50%	63%	64%	62%	55%	50%	54%	59%	57.1%
6.	Third Term Exam (Jan)	57%	58%	72%	71%	59%	54%	53%	57%	60.1%
7.	Overall Percentages	47.3%	56.3%	61.3%	65.3%	49.2%	63.0%	51.7 %	47.0%	52.3%

Table 02 depicts the overall percentages of an experimental group of all subjects in all terms and examinations. In all subjects, the Experimental group got 38.1% marks in the first-term examination (August), 59.1% marks in the monthly test (September), 53.1% marks in the monthly test (October), 46.3% marks in second term examination (November), 57.1% marks in monthly test (December) and 60.1% marks in third term examination (January) and so on. The overall percentage of an experimental group of all subjects in all terms and examinations was 52.3%.

Graph 01

Overall Percentage of Study Groups in all Terms of all Subjects



The above graph shows the comparison of the performances of the students of experimental and control groups of all exams as well as all performances. In first-term exams, the percentage of the experimental group is 39.3%, and the percentage of the control group is 38.1%.

Table 3

Comparison of performances of experimental and control groups (Z test)

S#	Variables with Exams	Mean	Standard Deviation	C. V.
1	Experimental Group (First Term Exams)	212.1	41.1	0.68
	Control Group(First Term Exams)	204.4	51.6	
2	Experimental Group (Third Term Exams)	450.7	24.5	5.41
	Control Group (Third Term Exams)	319.0	49.1	

The above table shows a comparison of the performance of experimental and control groups. The value of the z-test between an experimental group and the control group for first-term exams is 0.68, and for third-term exams is 5.41.

Table 04

Coefficients of Correlation

S#	Variables with Exams	r
1	Experimental Group (First Term Exams) Experimental Group (Third Term Exams)	0.43
2	Control Group (First Term Exams) Control Group (Third Term Exams)	0.16

The above table shows the value of the coefficient of correlation between the first and third terms of the experimental group is 0.43, while the value of the coefficient of correlation between the first and term of a control group is 0.16.

Table 05

Questionnaire about Portfolio Assessment

S#	My Portfolio	SD	D	U	A	SA	Mean
1.	Keep my work organized	-	-	2	16	13	4.35
2.	Take care of my work	1	1	-	15	14	4.29
3.	Be creative in completing my work	1	-	3	15	12	4.29
4.	Remain interested in my work	1	1	2	15	12	4.25
5.	Share my work to others	7	2	6	4	12	3.38
6.	Identifying areas needing improvement	2	1	1	18	9	4.00
7.	Demonstrate my strengths	2	4	-	17	8	3.74
8.	Set some personal learning goals	2	2	4	14	9	3.96
9.	Use feedback to improve my work	1	4	2	13	11	3.93
10.	Make changes to my work	2	2	3	17	7	3.67
11.	Work with other students	4	4	3	12	8	3.61
12.	Motivates me to learn	1	1	3	11	15	4.35
13.	Improve my ability to use technology	2	4	8	9	8	3.54
14.	Think more about my own learning	-	-	3	14	14	4.96
15.	Has been easy to use	2	2	4	15	8	3.80
16.	Taken up too much time in class	1	4	4	13	9	3.80
17.	Given me the space I need to store all my work	-	-	1	14	16	4.48
18.	Has been a useful tool for supporting my learning	-	2	1	11	17	4.38
19.	Is a tool that I will continue to use in other classes	2	-	4	18	7	3.90

Table 4.68 reflects the opinions of students about the effectiveness of portfolios as an assessment tool. The table explains the responses based on the Likert scale and values of mean for all nineteen statements. Statement 14 shows a maximum value that is 4.96, and statement 05 shows a minimum value that is 3.38. The mean scores of all statements were greater than 3.00,

reflecting that the development of a portfolio is organized creative work that identifies the strengths and weaknesses of the student to improve the performance student. Students showed their interest in the development of the portfolio.

Discussion and Conclusion

The main purpose of the present study was to investigate the role of portfolio assessment in students' achievement. The overall comparison of study groups in all subjects, terms and examinations with respect to percentages is that the experimental group got 69% marks while the control group got 52% marks. This conclusion shows the significant difference between the study groups. The values of z calculations show that there is no significant difference between an experimental group and a control group in first-term exams, but there is a significant difference between both groups in third-term exams that strengthen the concept that portfolio development has a positive impact on the achievement of the students. Furthermore, the value of correlation emphasizes consistency in the performances of the students of an experimental group than in a control group. Positive thinking of the maximum number of students reflects the effectiveness of making portfolios and the interest of the students in developing portfolios.

Various research studies have asserted that the development of portfolios for students at the secondary level has a positive impact on the academic achievement of the students, as the study results from this study (Gunay & Ogan-Bekiroglu, 2014). More importantly, it is found in the present study that the development of a portfolio or assessment through a portfolio was found effective for students learning as an achievement, as proven by (Güven, 2014; Komarudin, 2017). It involves students in the development of work that is the reason for self-reflection, critical thinking and innovation among students through their own learning (Hamp-Lyons & Condon, 2000). Moreover, keeping a portfolio has several benefits in terms of overcoming writing anxiety; and the experience with portfolios may affect the participants' future teaching practices positively (Ersin, 2005; Johnson, Mims-Cox, & Doyle-Nichols, 2006; Ozturk & Cecen, 2007; Chang & Chou, 2008; Atadil-kuzucu & Kartal, 2020; Evans & Tragant, 2020)

Self-assessment and reflection increase critical thinking among students, and it is necessary for students to involve in the development of portfolios for assessment (Ghoorchaei, Tavakoli, & Ansari, 2010), and it empowers students to learn to revise mistakes (Berry & Lewkowicz, 2000). They are judged on their best performances at the same time (Stiggins, 2005). This assessment for learning is to provide students with a clear vision of the learning target from the beginning of the learning (Yurdabakan & Erdogan, 2009; Ellsworth, 2012; Aysu., 2021).

Recommendations

Some recommendations based on present study are:

1. All secondary school teachers should develop their portfolios regarding students' activities.
2. Students' portfolios should be developed at secondary level to reflect students' work.
3. Teachers should be trained for portfolio development and using portfolios for enhancing learning process.
4. Teachers should be sensitized that assessment is for learning not for memorization.
5. For future researchers, impact of portfolios on achievement should be studied at different levels of education.
6. Future researchers should develop portfolio assessment mechanism at different level of education.

References

Atadil-kuzucu, E. & Kartal, G. (2020). Technology and content integration for English language learners in vocational high school, *Journal of Computer and Education Research*, 8(15), 114-135. https://doi.org/10.18009/jcer.656133

Aysu, S. (2021). The role of portfolio assessment and quizzes on class attendance and language achievement. *International e-Journal of Educational Studies*, 1-10. https://doi.org/10.31458/iejes.955176

Barootchi, N., & Keshavarz, M. H. (2002). Assessment of achievement through portfolios and teacher-made tests. *Educational Research*, 44(3), 279-288. https://doi.org/10.1080/00131880210135313

Berry, V., & Lewkowicz, J. (2000). Special Issue: Assessment in Chinese Contexts: *Hong Kong Journal of Applied Linguistics*,5(1),19-49.

Birgin, O., & Baki, A. (2007). The use of portfolio to assess student's performance. *Journal of Turkish Science Education* 4(2), 75–91.

Brown, H. D. (2000). *Principles of Language Teaching and Learning*. New Jersey: Prentice Hall.

Chang, C. C., & Chou, P.N. (2008). Effect of Reflection Category and Reflection Quality on Learning Outcomes During Web-Based Portfolio Assessment Process: A case study of High School Students in Computer Application Course. *The Turkish Online Journal of Educational Technology*, 10(3), *101-114*.

Davis, M. H., & Ponnamperuma, G. G. (2005a). *Portfolio Assessment*. Dundee: University of Dundee.

Douglas, D. (2000). *Assessment language for specific purposes*. Cambridge: Cambridge University Press.

Efendi, Z., Usman, B., & Muslem, A. (2017). Implementation of portfolio assessment in teaching English. *English Education Journal (EEJ)*, *8*(2), 187–198

Ellsworth, J. Z. (2012). Using student portfolios to increase reflective practice among elementary teachers. *Journal of Teacher Education*, *53*(4), 342-355. https://doi.org/10.1177/0022487102053004006

Ersin, P. (2005). *The effects of a research-based portfolio study on the EFL learners' reading and writing proficiency, vocabulary development, and attitudes towards research,* (Unpublished master's thesis). Marmara: Marmara University.

Evans, M., & Tragant, E. (2020). Demotivation and dropout in adult ELF learners, *The Electronic Journal of English as Second Language*, 23(4).

Farahian, M., Avarzamani, F., & Rajabi, Y. (2021). Reflective thinking in an EFL writing course: To what level do portfolios improve reflection in writing? *System, 39(100759).* https://doi.org/10.1016/j.tsc.2020.100759

Farooq, M. (2013). *The use of portfolio in assessing students' English writing skills*, (Unpublished master's thesis). Karachi: Aga Khan University.

Ghoorchaei, B., Tavakoli, M., & Ansari, D. N. (2010). The Impact Of Portfolio Assessment On Iranian EFL Students' Essay Writing: A Process-Oriented Approach, *Gema Online Journal of Language Studies* 10(3), 35-51.

Goerss, K. V. (1993). Portfolio assessment: A work in process. *Middle School Journal*, *25*(2), 20-24. https://doi.org/10.1080/00940771.1993.11495200

Gunay, A., & Ogan-Bekiroglu, F. (2014). Impact of Portfolio Assessment on Physics Students' Outcomes: Examination of Learning and Attitude. *Eurasia Journal of Mathematics, Science & Technology Education*, 10(6), 667-680. https://doi.org/10.12973/eurasia.2014.1227a

Güven, E. (2014). Effect of the portfolio on the students' removal of failure causes. *Procedia - Social and Behavioral Sciences*, *116*, 3886-3890. https://doi.org/10.1016/j.sbspro.2014.01.860

Hamp-Lyons, L., & Condon, W. (2000). *Assessing the portfolio: Principles for Practice, Theory, and Research*. New Jersey: Hampton Press.

Hudori, R. F. A., Tasnim, Z., Fardhani, A. E. & Sari, D. P. (2020). The use of portfolio assessment in English writing class. IOP Con. Ser.: Earth Environ. Sci. 485 012093.

Johnson, R. S., Mims-Cox, J. S. & Doyle-Nichols, A. (2006). *Developing portfoliosin education: A guide to reflection, inquiry, and assessment*. California: Sage Publications.

Khan, B., & Begum, S. (2012). Portfolio: A Professional development and learning tool for teachers. *International Journal of Social Sciences and Education*, 2(2), 363-377.

Komarudin, K. (2017). Portfolio assessment to enhance students' achievement in learning physical education. *Proceedings of the 3rd International Conference on Education and Training (ICET 2017)*. https://doi.org/10.2991/icet-17.2017.16

Koraneekid, P. (2007). *Development of electronic portfolio model using self-assessment to enhance student teachers' critical thinking.* (Unpublished doctoral dissertation). Bangkok; Chulalongkorn University.

Marianne, T., Denise, P. 2010. Learning portfolio models in health regulatory colleges of Ontario, Canada. Journal of Continuing Education in the Health Professions, 30 (1), 57-64. https://doi.org/10.1002/chp.20057

Newbery, M. (2012). *Electronic portfolios: Tools for supporting the teacher's need for assessment and the student's need for deep learning*. Columbia: University of Northern British Columbia.

Nunes, A. (2004). Portfolios in the EFL classroom: Disclosing an informed practice. *ELT Journal*, *58*(4), 327-335. https://doi.org/10.1093/elt/58.4.327

Ozturk, H., & Cecen, S. (2007). The effect of portfolio keeping on writing anxiety of EFL students. *Journal of Language and Linguistic Studies, 3(2), 18-23.*

Pangkey, R. D. H., Syahrial, Z., & Solihatin, E. (2018). The Effect of Portfolio Assessments on Student Learning Outcomes in Learning for Civic Education in Primary School. *Advances in Social Science, Education and Humanities Research, volume*, 303, 248-251.

Pitri, A. W. (2021).The Correlation between Portfolio Assessment and Students' Motivation in Learning English. *IOSR Journal of Research & Method in Education,* 11(4), 56-59.

Rees, C. E., Shepherd, M., & Chamberlain, S. (2005). The utility of reflective portfolios as a method of assessing first year medical students' personal and professional development. *Reflective Practice*, *6*(1), 3-14. https://doi.org/10.1080/14623940420003 26770

Shirvan, M. E., & Golparvar, S. E. (2016). The effect of portfolio assessment on general English learners' locus of control and achievement. *Khazar Journal of Humanities and Social Sciences*, *19*(1), 70-87. https://doi.org/10.5782/2223-2621.2016.19.1.70

Simon, M., & Forgette-Giroux, R. (2000). Impact of a content selection framework on portfolio assessment at the classroom level. *Assessment in Education: Principles, Policy & Practice*, 7(1), 83-100. https://doi.org/10.1080/713613325

Singh, C. K. S., & Samad, A. A. (2013). Portfolio as an Assessment Tool and Its Implementation in Malaysian ESL Classrooms: A Study in Two Secondary Schools. *Pertanika Journal Social Science and Hum. 21(4), 1255 – 1273.*

Stiggins, R. J. (2005). *Student involved assessment for learning*. Columbus: Merrill Prentice Hall.

Sulistyo, T., Eltris, K. P., Mafulah, S., Budianto, S., Saiful, S., & Heriyawati, D. F. (2020). Portfolio assessment: Learning outcomes and students' attitudes. *Studies in English Language and Education*, 7(1), 141-153. https://doi.org/10.24815/siele.v7i1.15169

Venn, J. J. (2000). *Assessing students with special needs (2nd ed.)*. Upper Saddle River, New Jersey: Merrill.

Weigle, S. C. (2007). Teaching writing teachers about assessment. *Journal of Second Language Writing*, *16*(3), 194-209. https://doi.org/10.1016/j.jslw.2007.07.004

Wyatt, R. L., & Looper, S. (2004). *So you have to have a portfolio: A teacher's guide to preparation and presentation*. California: Corwin Press.

Yurdabakan, I., & Erdogan, T. (2009). The effect of portfolio assessment on reading, listening, and writing skills of secondary school prep class students. *The Journal of International Social Research, 9(2)*, 526-538.