

THE EFFECTIVENESS OF OBJECTIVE TYPE ASSESSMENT AND REQUIRED MEASURES FOR IMPROVEMENT: A STUDY AT UNIVERSITY LEVEL IN PUNJAB, PAKISTAN

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ABSTRACT:

Assessment played a significant role in the evaluation process which plays a vital role in the accomplishment of the program's learning products. A well-designed assessment program provides a comprehensive insight into learning achievement and competencies of the achievements of students rather than the cognitive gains. The objective type assessment is a non-conventional method often used and helps in rapid and easy marking, reliable results, and test wiseness. The current study was designed to examine the current state of objective type assessment and its effects on learning at the university level. The data were collected from 400 teachers of ten universities of southern Punjab. Data were collected through the self-prepared questionnaire and analyzed through the computer application for analysis, SPSS. Frequencies, percentages, mean score, standard deviation, independent sample t-test, and ANOVA were applied. The result indicates that the teachers prepared assessment tests according to the purpose of assessment and the objective type assessment was found effective for students. The recommendation of this study was to articulate that the teacher needs proper training for the preparation of objective type assessment and enhancing the professional skill of teachers in the field of assessment.

Key Words: Assessment, Objective, Teaching, Effectiveness, Required, Improvement

Introduction

The assessment determines the various products that teachers mostly use to check the student's strengths and weaknesses, learning progress, and student's needs (Beacker, Cummons, Davis Fereeman, Hall, & Anarayann, 2017). Assessment is the wide term that consists of all tools that are used to collect information about child skill, knowledge, thinking level, and motivation. It is the systematic and step-by-step process of teaching which is used to improve students' learning. The data of assessment can directly be collected from the students to assess the student's process in every aspect of teaching and learning. Assessment focuses on the learner and the individual process of the learner (Tondeur, Van Braak, Erter, & Ottenbreit-Leftwich, 2017). Assessment plays a very important role in the educational process. This is an ongoing process. Assessment is used not only to assess students' knowledge and activities, but also to test students' motivation and attitudes (Meijer, Hoekstra, Brouwer, & Strijbos, 2020). Assessments have many techniques and every teacher uses their techniques in their own ways. It is helpful to achieve learning outcomes. Evaluation is the main element of the education process. The evaluations play a significant role in students' performance. Moreover, it is a necessary part of the learning and teaching process (Popham, 2002, Trice, 2000; National Council for Curriculum and Assessment, 2011). The information gain from evaluation and assessment is flexible.

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It is a highly comprehensive and ongoing activity. Assessment is a difficult process it requires more time. There are many forms of assessment for example formative and summative assessment. The test held at the end of the semester to check the students' performance is called summative assessment (Pereira, Flores, & Niklasson, 2016). Furthermore, during the session, the assessment used to take test place at the end of the year known as a summative assessment. The assessment which helps teachers to identify concepts that students are struggling to understand is called formative assessment. Assessment is very significant because it helps the teacher during the lesson. Assessments help students to get good and remarkable marks in the semester (Hussain, 2017).

There are different types of assessments, such as formative and summative assessments (Smagorinsky, 2014). At the end of the instruction or semester, summation to measure student learning is provided in the form of a summative assessment to develop students' learning during the assessment and to help the instructor apply the results based on student-related instructor assessment. Academic victory in the form of increased learning outcomes (Hussain, 2017). Classroom assessment is a systematic approach to assess that teachers use to determine that how much students have learned. The practice of classroom assessment takes up a good portion of teachers' teaching time, and this shows its importance in the teaching process (Husseini, 2017). These assessment practices are used by teachers for many purposes and many assessment methods (tools). Linn (2008) offers objective type, subjective, and pure assessment tools to measure students' learning levels. Assessment plays a very important role in education. Assessment is defined as the collection, synthesis, and interpretation of data to help the teacher make decisions (Tozoglu, Tozoglu, Gurses, & Dogar, 2004). It refers to a series of related measures used to define a complex attribute of an individual or a group of persons (Tozoglu, et al., 2004). Assessment is needed to determine if students are achieving their learning objectives and achieving the learning outcomes they want. Any assessment should measure the learning outcomes given for a course, section, or day. Students are preparing themselves according to the requirements (Scouller, 2006). Evaluation research shows the importance of the evaluation method. Examinations traditionally favor students' assessment procedures, and the vast majority of existing undergraduate courses assess the students' learning based on end-of-course examinations (often combined with other forms of assessment) (Gibbs, 2010).

Purpose of the Study

Targeted assessment is a general term for tests where the mark is objective because of the clear and correct answers. Objective assessments can be formative (Sumakative) in which signs are used to calculate the final grade for a student and, are greeted with feedback on the student's performance that does not directly contribute to the final grade (Tavakol & Dennick, 2011). Sometimes, objective assessments can be made to examine a wide range of topics, albeit superficially. For larger classes, these tests a large number of students quickly, efficiently and especially when computers are used to help with branding. As with all forms of assessment, the assessment must be aligned with the learning outcomes desired for the course. Writing relevant questions (also called items) and answering options, including 'distractions', can be a complex exercise (Milner, Myers, & O'Byrne, 2020). This guide describes the different types of objective assessments and examines the level of understanding that students test and their use of the

required graduate quality learning outcomes. It also offers recommendations and additional resources for writing and evaluating objective assessments designed to ensure fair and accurate measurements of students' comprehension levels. The current research aimed to analyze the assessment strategies. The research aims to analyze the effect of objective type assessment at university levels. The study aimed to explore the effect of objective type assessment on students' study.

Objectives of the Study

The purpose of the study was to analyze the effects of objective type assessment. Assessment influences all aspects of student's education change in learning. The objectives of the study were

1. To explore the state of the effectiveness of objective type assessment at university level,
2. To find out the required measures to improve the objective type assessment at university level.

Research Methodology

The research study was descriptive in nature. Quantitative data designed for the collection of data for the current study. Two questionnaires were designed to collect data from the teachers and students of the universities of southern Punjab. The main focus of the study to analyze the effectiveness of objective type assessment and its effects on student's learning. A total, 400 teachers were selected for the study through a random sampling technique from the public sector universities of southern Punjab.

Research Instrument

Assessment is part of the daily behavior of teaching and learning inseparable from observation. Objective type assessments are good for testing recall of fact and can be automated. Objective tests assume that there are true answers and assume that all students should learn the same things. So, the research aimed to analyze the effects of objective type assessment at the university level. Moreover, the researcher developed two questionnaires for teachers and students.

Results and Discussion

Data were collected from teachers of southern Punjab and were analyzed by using SPSS. The data were analyzed and frequency, percentages, mean scores, and standard deviation values were calculated for results. Independent Samples t-test and ANOVA were applied to draw results for more than two variables. Demographic data depicts the gender of the respondents and according to the data, 70% were male teachers, while 30% female. The entire population was divided into four different categories: less than 5 years, 6 to 10 years, 11 to 15 years, and more than 15 years of teaching experience. The first category included 100 participants, of which 26.3% out of 380. The second category included 63 teachers or 6.6% of the total population. In the third category, 30.0% of 114 respondents answered, while 103 members fall in the last category, which was 27.1% of the total sample.

Table 1. *Opinions of Teachers about the Effectiveness of Objective Type Assessment*

Statement		SA	A	UD	DA	SDA	M	SD
Objective type assessment is easy to score	<i>f</i>	233	99	12	20	16		
	<i>%</i>	61.3	26.1	3.2	5.3	4.2	4.35	1.05

Objective type assessment is time-saving	<i>f</i>	167	155	10	23	25		
	%	43.9	40.8	2.6	6.1	6.6	4.09	1.13
Objective type assessment helps to avoid biases	<i>f</i>	172	144	15	25	24		
	%	45.3	37.9	3.9	6.6	6.3	4.09	1.14
Objective type assessment is a reliable	<i>f</i>	178	142	13	28	19		
	%	46.8	37.4	3.4	7.4	5.0	4.14	1.11
The fair exam is possible by objective type assessment	<i>f</i>	174	135	14	31	8.2		
	%	45.8	35.5	3.7	8.2	6.8	4.05	1.19
Slow learners attempt objective type assessment easily	<i>f</i>	156	142	22	28	32		
	%	41.1	37.4	5.8	7.4	8.4	3.95	1.23
Objective type assessments easy to develop	<i>f</i>	172	130	20	27	31		
	%	45.3	34.2	5.3	7.1	8.2	4.01	1.23
Objective type assessments develop regular study habit among students	<i>f</i>	181	140	13	25	21		
	%	47.6	36.8	3.4	6.6	5.5	4.14	1.12
Objective type assessment is appropriate for continuous evaluation of students	<i>f</i>	163	150	20	18	29		
	%	42.9	39.5	5.3	4.7	7.6	4.05	1.16
More knowledge is checked in less time by objective type assessment	<i>f</i>	172	153	13	19	23		
	%	45.3	40.3	3.4	5.0	6.1	4.14	1.10
Objective type assessment helps to find weaknesses in student's performance	<i>f</i>	172	45.3	17	26	26		
	%	45.3	36.6	4.5	6.8	6.8	4.07	1.17
All objectives of the course are achieved by objective type assessment	<i>f</i>	48	38	14	143	137		
	%	12.6	10.0	3.7	37.6	36.1	2.26	1.36
Average		43.6	34.4	4.01	9.1	8.9	3.94	14.05

Table 1 explores the opinions of the teachers about the effectiveness of an objective type of assessment. The data indicates that 87.4% of teachers agreed and 9.5% of teachers disagreed with the statement that objective type assessment was easy to score. Mean value 4.35 and standard deviation 1.056 shows agreement to the statement. The majority of 84.7% of teachers agreed and 12.7% of teachers disagreed with the statement that objective type assessment was time-saving. Mean value 4.09 and standard deviation 1.138 shows agreement to the statement. The majority 83.2% of teachers agreed and 12.9% of teachers disagreed with the statement that

objective type assessment helps to avoid biases. Mean value 4.09 and standard deviation 1.148 shows agreement to the statement. The majority 84.2% of teachers agreed and 12.4% of teachers disagreed with the statement that objective type assessment is reliable. Mean value 4.14 and standard deviation 1.110 shows agreement to the statement. The majority 81.3% of teachers agreed and 15% of teachers disagreed with the statement that fair exam is possible by objective type assessment. Mean value 4.05 and standard deviation 1.199 shows agreement to the statement. The majority of 78.5% of teachers agreed 15.8% of teachers disagreed with the statement that slows learners' attempts objective type assessment easily. Mean 3.95 and standard deviation 1.234 shows agreement to the statement. The majority of 79.5% of teachers agreed 15.3% of teachers disagreed with the statement that objective type assessment is easy to develop. Mean value 4.01 and standard deviation 1.236 shows agreement to the statement. The majority of 84.4% of teachers agreed 12.1% of teachers disagreed with the statement that objective type assessments develop regular study habits among students. Mean value 4.14 and standard deviation 1.120 shows agreement. The majority of 82.4% of teachers agreed and 12.3% of teachers disagreed with the statement that objective type assessment is appropriate for continuous evaluation of students. Mean value 4.05 and standard deviation 1.166 shows agreement to the statement. The majority 85.6% of teachers agreed and of teachers, 11.1% disagreed with the statement that more knowledge is checked in less time by objective type assessment. Mean value 4.14 and standard deviation 1.103 shows agreement to the statement. The majority 81.9% of teachers agreed and 13.6% of teachers disagreed with the statement that objective type assessment helps to find weaknesses in student's performance. Mean value 4.07 and standard deviation 1.177 shows agreement to the statement. The majority of 73.7% of teachers disagreed and 22.6% of teachers agreed with the statement that all objectives of the course are achieved by objective type assessment. Mean value 2.26 and standard deviation 1.369 shows agreement to the statement. Overall results indicate that 78% of teachers are agreed and 18% of teachers disagreed with the statement that the effectiveness of objective type assessment at the university level. Mean value 3.94 and standard deviation 14.05 shows agreement to the statement significant at 0.000 shows this inclination towards an agreement is statistically significant.

Objective type of assessment on learning is an aspect of effectiveness. The first objective of the research study was to explore the effectiveness of objective type assessment at the university level. Results of the study indicate that objective type assessment was easy to score, time-saving, helps to avoid biases; reliable, the fair exam is possible and slow learners attempt objective type assessment easily. Rahim, Venville, and Chapman's (2009) objective type assessment are easy to develop, develop regular study habits among students, appropriate for continuous evaluation of students more knowledge is checked in less time by objective type assessment. The majority of the teachers agreed with the statement that objective type assessment helps to find weaknesses in student's performance (Brown, 2003; Brown & Hirschfeld, 2007; Harris & Brown, 2009).

All objectives of the course are achieved by objective type assessment, promotes understanding of content, and can get good marks in objective type assessment. Self-prepared notes were helpful to solve objective type assessment. Objective type assessment helps to develop vocabulary, slow learners have a great chance of success, helping to show creativity, stimulates the student to read the pretest material, improve study habits, force them to prepare notes, helps

them in self-assessment, and helps them to identify areas of misconception. It was found from the present research that objective type assessment practice was mostly used by teachers as this practice had already proved from various researches in different countries conducted by Bol, et al. (1998); Mertler (1998); Trepanier-Street, McNair, and Donegan (2001); Zhang and Burry-Stock (2003) with similar findings.

Table 2. *Required Measures to Improve the Objective Type Assessment*

Statement		SA	A	UD	DA	SDA	M	SD
Strict check and balance is necessary for objective type assessment	<i>f</i>	176	142	13	23	26	4.10	1.16
	%	46.3	37.4	3.4	6.1	6.8		
Training to develop objective type tool is necessary	<i>f</i>	194	134	13	24	15	4.23	1.05
	%	51.1	35.3	3.4	6.3	3.9		
Multiple test formats in objective type assessment are necessary	<i>f</i>	179	150	19	20	12	4.22	1.06
	%	47.1	39.5	5.0	5.3	3.2		
Change of order in items (shuffling) in objective type assessment is necessary	<i>f</i>	188	139	19	13	21	4.21	1.06
	%	49.5	36.6	5.0	3.4	5.5		
Meetings regarding improvement in objective type assessment are necessary	<i>f</i>	188	146	15	14	17	4.25	1.01
	%	49.5	38.4	3.9	3.7	4.5		
The validity of the test in objective type assessment is necessary	<i>f</i>	168	164	15	17	16	4.19	1.00
	%	44.2	43.2	3.9	4.5	4.2		
Reliability of test in objective type assessment is necessary	<i>f</i>	178	168	13	10	11	4.29	.88
	%	46.8	44.2	3.4	2.6	2.9		
Table of specification is an essential part of objective type assessment is necessary	<i>f</i>	176	169	7	12	16	4.26	.96
	%	46.3	44.5	1.8	3.2	4.2		
Standardize test is necessary for objective type assessment	<i>f</i>	182	161	15	11	11	4.29	.90
	%	47.9	42.4	3.9	2.9	2.9		
Average		47.6	40.3	3.7	4.2	4.2	4.22	1.01

Table 2 explores the opinions of the teachers about the required measures to improve the objective type of assessment. The data indicates that 54.7% of teachers agreed and 41% of teachers disagreed with the statement that strict check and balance is necessary for objective type assessment. Mean value 4.10 and standard deviation 1.161 shows agreement. The majority 86.4% of teachers agreed and 10.2% of teachers disagreed with the statement that training to develop an objective type tool, is necessary. Mean value 4.23 and standard deviation 1.050 shows agreement to the statement. The majority of 86.6% of teachers agreed and 8.5% of teachers disagreed with the statement that multiple test formats in objective type assessment are necessary. Mean value 4.22 and standard deviation 1.679 shows agreement to the statement. The majority 86.1% of teachers agreed and 8.9% of teachers disagreed with the statement that change of order in items (shuffling) in objective type assessment is necessary. Mean value 4.21 and standard deviation 1.067 shows agreement to the statement. The majority of 87.9% of teachers agreed and 8.2% of teachers disagreed with the statement that meetings regarding improvement in objective type assessment are necessary. Mean value 4.25 and standard deviation 1.013 shows agreement to the statement. The majority of 87.4% of teachers agreed and 8.7% of teachers

disagreed with the statement that the validity of the test in objective type assessment is necessary. Mean value 4.19 and standard deviation 1.004 shows agreement to the statement. The majority 48.7% of teachers agreed and 47.9% of teachers disagreed with the statement that the reliability of the test in objective type assessment is necessary. Mean value 4.29 and standard deviation .885 shows agreement to the statement. The majority of 90.8% of teachers agreed and 7.4% of teachers disagreed with the statement that the table of specification is an essential part of objective type assessment is necessary. Mean value 4.26 and standard deviation .961 shows agreement to the statement. The majority 90.3% of teachers agreed 5.8% of teachers agreed with the statement that standardizes test is necessary for objective type assessment. Mean value 4.29 and standard deviation .900 shows agreement to the statement. Overall results indicate that 87.6% of teachers are agreed and 8.4% of teachers disagreed with the statement that required measures to improve strengthen the objective type assessment. Mean value 4.22 and standard deviation 1.01 shows agreement to the statement significant at 0.000 shows this inclination towards an agreement is statistically significant.

The second objective of the research study was to find out the required measures to improve strengthen the objective type assessment at the university level. Strict check and balance is necessary for objective type assessment, training to develop objective type tool is necessary, multiple test formats in objective type assessment are necessary. Change of order in items (shuffling) in objective type assessment is necessary. Meetings regarding improvement in objective type assessment are necessary. Validity and reliability of the test in objective type assessment are necessary.

It was further found that objective type assessment practices were perceived by teachers as useful for learning as it was also revealed from Bol, et al. (1998); Mertler (1998), Trepanier-Street, McNair, and Donegan (2001); Zhang and Burry-Stock (2003) that the primary teachers' focus was on formative objective type assessment practices. It was found from the present study that a table of specification is an essential part of objective type assessment is necessary and standardize test is necessary for objective type assessment. It is indicated by the data that more than one-third of the students agreed with the statement that teachers prepare questions from the material they taught. Teachers prepare questions from the material they taught. Teachers need appropriate training for objective type assessment. Previous research requires only one attempt for students to be able to guess the correct answer. When confronted with an item answer, any examiner either knows the correct answers, or has partial knowledge that allows for the elimination of incredible distractions between the remaining options, or simply guesses when no information is available (Haladyna, 2004). Suah and Ong (2012) found that British teachers used traditional practice as a second priority because they found that teachers in Malaysia applied the traditional assessment practice.

Table 3. *Comparison of Teachers' Views about Effects of Objective Type Assessment on Learning*

Variables	Gender	N	M	SD	t	p
Effectiveness Of Objective Type test	Male	266	59.55	13.502	.340	.001
	Female	114	60.64	12.386		
Impact Of Objective Type test On Learn	Male	266	24.12	6.421	.440	.000
	Female	114	23.21	5.423		

In the above Table 3, the mean and standard deviation of female teachers (Mean= 60.64, SD=59.55) is greater than male teachers. Moreover, the statistically significant difference is identified as the p-value .001 was greater than .05. The results show that female teachers perceived their effectiveness of objective type assessment more positive as compared to male teachers. The mean and standard deviation of male teachers (Mean= 24.12, SD= 6.421) is greater than female teachers. Moreover, the statistically significant difference is identified as the p-value .000 was greater than .05. The results show that male teachers perceived their required measures to improve strengthen the objective type assessment more positively as compared to the female teachers.

Table 4: *Effects of Teaching Experience about Effects of Objective Type Assessment on Learning*

Variables	Experience	N	Mean	SD	F	P-value
Effectiveness	Less than 5 Years	100	60.86	14.64	.675	.000
	6-10 Years	63	57.92	13.09		
	11-15 Years	114	60.21	12.03		
	More than 15 Years	103	59.76	12.96		
Required Improvements	Less than 5 Years	100	24.93	7.45	1.372	.002
	6-10 Years	63	24.81	7.44		
	11-15 Years	114	26.78	7.80		
	More than 15 Years	103	25.75	7.78		

Table 4 shows that the teachers with teaching experience of fewer than 5 years (Mean= 60.86, SD = 14.447) are perceiving their effectiveness of objective type assessment more positive as compared to all other groups because the mean and standard deviation of this group is comparatively high. Moreover, the p-value .000 was less than .05 which indicates a statistically significant difference in the views of teachers possessing different teaching experiences. The teachers with teaching experience of 11-15 years (Mean= 26.78, SD = 7.804) are perceiving their required measure to improve strength the objective type assessment more positive as compared to all other groups because the mean and standard deviation of this group is comparatively high. Moreover, the p-value .002 was less than .05 which indicates a statistically significant difference in the views of teachers possessing different teaching experiences.

It is also important that assumptions are not blind, and that they may not be random: Assumptions will be less blind if poorly structured test items contain bad expressions (e.g., grammatical or syntactic hints) or unwanted clues that are not convincing distractors (Burton, 2005). therefore, we have carefully written questions and alternatives so that there are no clues to correct the alternatives or to mark up the probable alternatives. However, perhaps the most useful way to stimulate reasoning instead of guessing is what Bush (2001) suggested, that is, to reward examiners who have only partial knowledge compared to guessers (Bush, 2001).

Conclusion and Recommendations

As part of the overall assessment, an objective assessment is recommended if it can be designed in such a way that the students' group will address the desired learning outcomes and contribute to the development of Graduate Qualities. Timing is often balanced by the potential automation of the marking process. Designing and maintaining objective assessments can be a labor-

intensive task. As a formative assessment tool, objective assessments with included feedback are potentially extremely valuable student-centered learning tools.

The study was carried out to assess the effectiveness of objective type assessment. The majority of teachers agreed that objectives type assessment was easy to score, time-saving, helps to avoid biases, reliable, fair exams are possible and slow learners attempt objective type assessment. Objective type assessment is easy to develop a regular study habit among students. Objective type assessment is appropriate for continuous evaluation of students more knowledge is checked in less time. Objective type assessment helps to find out weaknesses in the students' performance and help them to find suitable solutions.

Objective type assessment forces them to prepare notes helps them in the self-assessment. Objective type assessment helps them to identify areas of misconception and provides quick feedback that helps to think critically. They improve their problem solving skill by objective type assessment promote online studies. The majority of the result of the study indicates that teachers were agreed that strict check and balance. They found it necessary in objective type assessment, that pieces of training should be organized to develop objective type tool. Multiple The validity measures in objective type assessment are necessary. The majority of the teachers agreed that change of order in a standardized objective type assessment is necessary. Meetings regarding improvement in objective type assessment are necessary. Validity of test in objective type assessment is necessary to increase the reliability of test in objective type assessment. Standardize test is necessary for objective type assessment. The following recommendations are given Besides improvement in this research area:

1. In future research, many data collection methods can be used to validate their reporting requests, including teacher lesson and assessment plans, classroom observations, and meetings with students and teachers. In addition, surveys may need to be conducted on a more representative sample selected from different geographical regions of the country. Future research should also be conducted in various research areas and at the classroom level to validate the findings of this research.
2. Curriculum standards should be aligned with enhanced learning standards that set national goals for students' learning so that assessments can support teachers to develop teaching skills that will enable them to achieve national learning goals.

REFERENCES

- Becker, S. A., Cummins, M., Davis, A., Freeman, A., Hall, C. G., & Ananthanarayanan, V. (2017). *NMC horizon report: 2017 higher education edition* (pp. 1-60). New York: The New Media Consortium.
- Bol, L., Stephenson, P. L., O'connell, A. A., & Nunnery, J. A. (1998). Influence of experience, grade level, and subject area on teachers' assessment practices. *The Journal of Educational Research*, 91(6), 323-330.
- Brown, G. T. (2003). Teachers' instructional conceptions: Assessment's relationship to learning, teaching, curriculum, and teacher efficacy. In *the joint conference of the Australian and New Zealand Associations for Research in Education (AARE/NZARE)*, Auckland, 28, 1190-1201.

- Brown, G. T., & Hirschfield, G. H. (2007). Students' conceptions of assessment and mathematics: Self-regulation raises achievement. *Australian Journal of Educational and Developmental Psychology*, 7, 63-74.
- Burton, R. F. (2005). Multiple-choice and true/false tests: myths and misapprehensions. *Assessment & Evaluation in Higher Education*, 30(1), 65-72.
- Bush, R. K. (2001). Assessment and treatment of laboratory animal allergy. *ILAR Journal*, 42(1), 55-64.
- Gibbs, G. (2010). *Using assessment to support student learning*. Leeds Met Press.
- Haladyna, T. M. (2004). *Developing and validating multiple-choice test items* (3rd ed.). New York: Lawrence Erlbaum Associates Publishers.
- Harris, L. R., & Brown, G. T. (2009). The complexity of teachers' conceptions of assessment: Tensions between the needs of schools and students. *Assessment in Education: Principles, Policy, and Practice*, 16(3), 365-381.
- Hussain, S. (2017). *Relationship of Teacher Educators' Assessment Literacy and Classroom Assessment Practices with their Students' Academic Achievement*. International Islamic University, Islamabad.
- Linn, R. L. (2008). *Measurement and assessment in teaching*. New Delhi, India: Pearson Education.
- Meijer, H., Hoekstra, R., Brouwer, J., & Strijbos, J. W. (2020). Unfolding collaborative learning assessment literacy: a reflection on current assessment methods in higher education. *Assessment & Evaluation in Higher Education*, 1-19.
- Mertler, C. A. (1998). *Classroom Assessment Practices of Ohio Teachers*. London: Cleveland, OH.
- Milner, J., Myers, J. S., & O'Byrne, P. (2020). *Assessment in social work*. New York: Red Globe Press.
- National Council for Curriculum and Assessment (2011) Towards Framework for Junior Cycle. Available online at <http://ncca.ie/framework/home.htm>.
- Pereira, D., Flores, M. A., & Niklasson, L. (2016). Assessment revisited: a review of research in Assessment and Evaluation in Higher Education. *Assessment & Evaluation in Higher Education*, 41(7), 1008-1032.
- Popham, W. J. (1999). *Classroom assessment: What teachers need to know*. Allyn & Bacon, A Viacom Company, 160 Gould St., Needham Heights, MA 02194; World Wide Web: <http://www.abacon.com>.
- Rahim, S. S. A., Venville, G., & Chapman, A. (2009). Classroom assessment: Juxtaposing teachers' beliefs with classroom practices. In *Australian Association For Research In Education: International Education Research Conference*. 29th-3rd December.
- Scouller, K. (2006). The influence of assessment method on students' learning approaches: Multiple choice question examination versus assignment essay. *Higher Education*, 35(4), 453-472.
- Smagorinsky, P. (2014). Authentic teacher evaluation: A two-tiered proposal for formative and summative assessment. *English Education*, 46(2), 165-185.
- Suah, S. L., & Ong, S. L. (2012). Investigating Assessment Practices of In-service Teachers. *International Online Journal of Educational Sciences*, 4(1), 170-185.



ISSN Online : 2709-4030
ISSN Print : 2709-4022

Vol 5 No.3 2021

- Tavakol, M., & Dennick, R. (2011). Post-examination analysis of objective tests. *Medical Teacher*, 33(6), 447-458.
- Tondeur, J., Van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2017). Understanding the relationship between teachers' pedagogical beliefs and technology use in education: a systematic review of qualitative evidence. *Educational Technology Research and Development*, 65(3), 555-575.
- Tozoglu, D., Tozoglu, M. D., Gurses, A., & Dogar, C. (2004). The students' perceptions: Essay versus multiple-choice type exams. *Journal of Baltic Science Education*, 2(6), 52-59.
- Trepanier-Street, M. L., McNair, S., & Donegan, M. M. (2001). The views of teachers on assessment: A comparison of lower and upper elementary teachers. *Journal of Research in Childhood Education*, 15(2), 234-241.
- Trice, A. D. (2000). *A handbook of classroom assessment*. New York: Longman Publications.
- Zhang, Z., & Burry-Stock, J. A. (2003). Classroom assessment practices and teachers' self-perceived assessment skills. *Applied Measurement in Education*, 16(4), 323-342.