

## The Effect of Training on Teachers' Attitude Toward Assessment as Learning

<sup>1</sup>Hamdan Said, <sup>2</sup>Iqbal Ahmad, <sup>3</sup>Faisal Khan, <sup>4</sup>Zubaidah Awang,  
<sup>4</sup>M. Al-Muzzammil Yasin and <sup>4</sup>Bambang Summintono

<sup>1</sup>Faculty of Education, Universiti Teknologi Malaysia (UTM), Malaysia

<sup>2</sup>Faculty of Education, Universiti Teknologi Malaysia (UTM), Malaysia

<sup>3</sup>Faculty of Management (FM), Universiti Teknologi Malaysia (UTM), Malaysia

<sup>4</sup>Faculty of Education, Universiti Teknologi Malaysia (UTM), Malaysia

**Submitted:** Aug 14, 2013; **Accepted:** Sep 20, 2013; **Published:** Sep 24, 2013

**Abstract:** The main purpose of this study was to examine the relationship between training, assessment as learning and reflection. The study also assessed the moderating effect of reflection on training and assessment as learning. 250 teachers of Pakistani rural high schools were randomly selected as sample in this study. The obtained data were analyzed by using SPSS (Statistical Package for Social Science) version 18. Both the descriptive and inferential measures were employed to answer the objectives and hypotheses of the study. The study revealed that training was significantly correlated with assessment as learning. Secondly this study further examined that reflection is significantly moderates the relationship between training and assessment as learning.

**Key words:** Training • Reflection • Assessment as learning

### INTRODUCTION

Assessment is an essential component of teaching and learning. It is a systematic process of collecting data about student's achievements [1]. According to Linn and Miller [2] assessment is a systematic process of collecting information regarding the progress and attainments of students' educational goals. Assessment deeply impacts student's learning. The way teachers assess their students depends their application of the assessment tools in classroom situation [3]. Recent studies indicate that assessment affects student's learning, therefore, assessment in the present times emphasize upon teachers to use variety of classroom methods rather than relying on more traditional tools such as test only [4]. Application of different assessment tools helps teachers to enhance student's learning, to provide feedback [5], to build student's self esteem and to develop their self-confidence [6].

Learning as a process of education is characterized by teachers' and students' beliefs, ideals and practices. Teacher's knowledge and beliefs greatly influence their classroom assessment practices [7]. Richard and Gonzales

[8] argue that teacher's beliefs and practices shape their teaching styles and skills of learning assessment. Crooks [9] explained that assessment is a tool through which quality of learning can be ensured and maximized. It is a vital tool in the hands of teachers that generates necessary conditions for enhancing the quality of education at all levels. According to Gipps [10] despite of the important role of assessment in teaching and learning process, teachers have a narrow understanding of assessment. There is a lack of understanding on the part of teachers reading the identification and application of different assessment techniques in the learning process. This development has negatively impacted the learning of students and professional development of teachers themselves. They do not realize that application of different assessment practices enhances the quality of students' learning and teachers own teaching skills [3, 4, 11].

Black and William [12] advocate that to improve student learning the teachers should use different classroom assessment tools and methods. Because, Stiggins [13] thinks that assessment provides a sound basis for successful learning. However, Campbell and

Evans [14] advice that assessment needs to be well thought out, planned, organized and designed keeping in view student's mental level, interests and aimed at developing student's higher level thinking abilities rather merely checking rote memorization. However, Sutton [15] has found that teachers are accused of using classroom assessment practices that emphasize on lower levels of cognition and assessment is used to test memory of students or taught knowledge only which is a narrow view of classroom assessment [6, 16].

Assessment is an integral part of teaching and learning. In Pakistan, assessment is understood by teachers to be a time consuming process [17]. Seeing in this perspective, over the years, teachers in Malakand, Pakistan have observed to use assessment only for feedback to students. It is observed with great concern that teachers do not use assessment for personal learning, rather, they use it to give feedback to students after evaluation only. This situation needed a prompt investigation. For this purpose this study was designed to find out the causes and to put forward suggestions to improve the situation.

**Literature Review:** In today's schools teachers tend to use only paper pencil tests for classroom assessment. They prefer to use readymade test without any modification to it [16]. According to McMillan [18] there are three reasons behind this situation. Firstly, that few teachers have limited knowledge of designing classroom assessment tools. Secondly, in many cases especially with regard to private schools teachers have less time to form different classroom assessment tools due to burden of work. Hence, the teachers content with the available methods of testing and assessments. Thirdly, teachers usually do not have necessary guidance or support from school side which results in lack of confidence in teachers to try out other forms of assessments. Mertler [19] has reported that in many schools teachers do not go for different types of assessment techniques. This apathy has affected the academic growth of students in terms of knowledge development and learning skills, assessment is taken as merely test, examination or grading. Satterly [20] further adds that there is a strong belief among teachers that assessment cannot be done without assigning grades to students.

Although there is a strong culture of testing and assessment in schools yet there is a difference among teachers and school authorities on the concept of assessment. In this regard a study by Stepanek [21] shows that there exists a wide interpretation of

assessment among teachers. For example, McMillan [18] has found that application of traditional methods of assessments has resulted in poor student's performance, understating of the subject matter and low ability level. Therefore, Wiggins [22] has suggested that teachers must be provided specific training on development, application and evaluation of different modern assessment tools so that teachers are able to help and guide student's learning and academic growth. The available training programs do not have the potential to enhance teacher's professional knowledge and skills regarding assessment and using it for student's development as well as for their own professional growth. And most of the training programs skim over classroom assessment techniques. This gap of knowledge and practice has given birth to the belief among teachers that assessment is only paper pencil test and grading of students [17].

The present day teachers, thus, assess their students in the same way as they were assessed in their own schools by their own teachers. Furthermore, Crook's [9] after evaluation of pre-service trained teachers in educational assessment has found that after joining teaching service, the trained teachers did not implement the learned ideas from their training courses in their classroom practices. Terenzini and Patrick [23] suggested that due to the fact that teachers dislike test and assessment. They believe that assessment is a time consuming activity and there is a great fatigue involved in it to the teachers as well as to the students. Hence, according to Carr [24], teachers consider using variety of assessment tools as an embarrassing task which causes stress for both students and teachers. Consequently, the teachers usually content with using only paper pencil test which is easy to develop and apply. Therefore, to grapple with this alarming situation, Light [25] recommends that both in-service and pre-service should be trained in designing and application of different modern assessment methods and schools must provide incentives for teachers who work differently than those teachers who work in traditional ways. This will motivate the teachers. The teachers will be aware of the importance of assessment in teaching and learning. In another study Ewell [26] has found that due to the lack of knowledge on the part of teachers about different assessments methods, they fail to understand the student's learning difficulties.

To remedy this situation, Ellwein [27] recommends that teachers must be trained how to design and apply assessment tools. Teacher must devote time and effort to explore the benefits of assessment for teachers and students, because, according to these writers, in

classrooms where teachers do not assess students using multifarious assessment methods, students only memorize the subject content to pass examination. Furthermore, in such situations, students tend to use short term methods to get marks in the examination. Their motivation is diverted to getting of marks rather than learning. Mertler [19] stated that the direct result of the beliefs of the teachers about assessment and teaching of the subject matter deeply affect students' performance in the classroom and the way learning is assessed later on. This encourages rote memorization and discourages development of critical thinking and knowledge construction among students. The reason is that the assessment procedures used by teachers ignore many aspects of classroom life that could help the students in successful learning. Therefore, Stiggins [28] believes that teachers should know that students' active participation in the learning process is ensured as well as their freedom to exploration of knowledge and its reconstruction. For this purpose, Robert and John [29] suggest that teachers should adopt different classroom assessment methods such as, reflective journal, learning logs, probing questions, observations, clinical interviews and alternative assessment like portfolio and so on. Stepanek [21] suggested that continual training on assessment and its application in classroom learning will help teachers to know deeply the various aspects of students' educational growth and their inclinations towards learning. Student will gain new insights, experiences, knowledge and perspectives to learn more effectively. This will also enable the teacher to know better ways of teaching and learning as teachers' learning is connected with student learning.

This research study is based on the following framework.

### Research Objectives

#### Following Were the Objectives of this Study:

- To examine the relationship between training and assessment as learning.
- To assess the moderating effect of reflection between training and assessment as learning.

**Research Questions:** Following Were the Questions of this Study:

- Is there any relationship between training and assessment as learning?

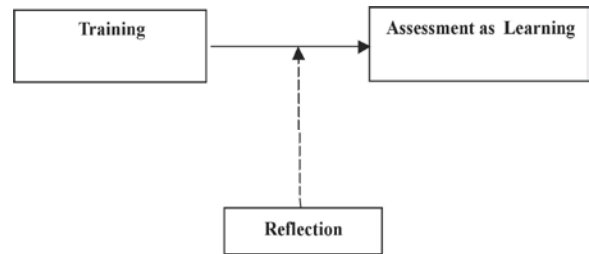


Fig. 1: Research Framework

- Does reflection moderate between reflection on the relationship between training and assessment as learning?

**Hypotheses:** In order to find out answers for the aforesaid questions, this study developed the following hypotheses;

**H<sub>1</sub>:** Training is significantly related with assessment as learning.

**H<sub>2</sub>:** Reflection moderates the relationship between training and assessment as learning.

## MATERIALS AND METHODOS

This study, using correlation method examined the effects of training on the attitudes of teachers toward assessment as learning. The study also assessed the moderating effects of reflection on the relationship between training and assessment as learning. The study was conducted in a rural setting in Malakand, Pakistan, where 250 secondary school teachers who had participated in one month long training session on 'assessment as learning'. After laps of one month of the training, the teachers were accessed through a self-administered questionnaire to find out their perceptions about the effects of training on their attitudes toward assessment as learning.

Statistical software SPSS was used to analyze the data. The data items consisted of three variables such as training (independent variable), assessment as learning (dependent variable) and reflection (moderating variable). To measure these variables, the researchers used the following scales such as Reflection scale developed by Lambight and Lu [30] was used for measuring the moderating effects of reflection. To see the relationship between the variables, ANOVA was applied along with Linear Regression Analysis.

Table 1:

Variables	Training	Reflection	Assessment as learning
Training	1		
Reflection	0.683*	1	
Assessment as learning	0.77*	0.941*	1

\*Correlation is significant at the 0.01 level (2-tailed).

Table 2:

Variable	R square	t-value	Coefficient	F-value	P value
Training	0.692	16.31	0.88	289.0	0.00

Table 3:

S. No	Variables	Services		Service Learning
		Learning	Reflection	x Reflection
1	Training	1		
2	Reflection	0.38*	1	
3	Training x Reflection	0.73*	0.52*	1

**Correlation Analysis:** Correlation analysis was conducted to examine the relationship between independent variable (training) and the dependent variables (attitude of teachers toward assessment as learning).

Table 1 show that training is significantly correlated with Reflection and significant at p value of 0.01. Reflection has also a significant relationship with attitudes of teachers toward assessment as learning as well as training is also correlated with attitudes of teachers toward assessment as learning through Pearson correlation values and significant at p value of 0.01.

**Regression Analysis:** Regression analysis was measured by testing the research hypotheses. The results for each variable are discussed as under.

**H<sub>1</sub>:** Training is significantly correlated with assessment as learning

Table 2 shows that the value of co-efficient beta is calculated as 0.78 which show a significant relationship between the variables. The value of R-square is 0.692 which show 69.2% variation in the dependant variable (attitude of teachers toward assessment as learning) is explained by independent variable (training). The model's goodness of fit is shown by F-value that is 289.0. Therefore, H<sub>3</sub> is accepted and it is confirmed that training is significantly correlated with assessment as learning.

**H<sub>2</sub>:** Reflection moderates the relationship between training and assessment as learning.

To test the moderating effects of reflection on the relationship between training and assessment as learning, we first created interaction terms by multiplying each form of training with assessment as learning. The Table 3 shows that the interaction of training with reflection was significantly associated with assessment as learning.

## CONCLUSIONS

The main purpose of this study was to examine the relationship between training and assessment as learning. Additionally, the study assessed the moderating effect of reflection on training and assessment as learning. The findings of the study revealed that training is significantly correlated with assessment as learning. Secondly, the study showed that reflection significantly moderates the relationship between training and assessment as learning. The study results showed that training can bring about a positive change in the attitude of teachers [31] regarding the academic development of students. Furthermore, this study informed that if teachers adopt more than one type of assessment, it will provide wider opportunities to teachers to understand the learning modes of students and their capabilities. Teachers, by using assessment may also enhance their own professional skills. This has already been identified by previous studies as mentioned in the above literature review. However, the findings of this study also support by the previous findings.

**Future Recommendations:** This study examined the relationship between training, assessment as learning. The study also assessed the role of reflection as a moderator between training and assessment as learning. This study used a small sample size from a rural site. It is suggested that future research should be conducted in an urban site so that more reliable results are achieved. Furthermore, this study used only one data collection tool, that is, a questionnaire to survey the perceptions of only teachers. Future research could explore the perceptions of students as well so that more comprehensive results are collected, because, students are the real people who get affected as results of the training of their teachers.

This research was collected data only from male teachers. This was one of the limitations of this research study. It is suggested that future researchers should attempt to explore the perceptions of female teachers as well so that gender balance is maintained which is very necessary for successful generalizations of the results of a research study.

## REFERENCES

1. Dhindsa, H., K. Omar and B. Waldrip, 2007. Upper Secondary Brunean science students perception of assessment. *International Journal of Science Education*, 29(10): 1280-1282.
2. Linn, R.L. and M.D. Miller, 2005. *Measurement and assessment in teaching (9<sup>th</sup> ed.)* Upper Saddle River, NJ: Prentice Hall.
3. Struyven, K., F. Dochy and S. Janssens, 2005. Students perception about evaluation and assessment in higher education. A review. *Assessment and Evaluation in Higher Education*, 30 (4): 325-331.
4. Gulikers, J., T. Bastiaens, P. Kirschner and L. Kester, 2006. Relations between students' perception of assessment authenticity, study approaches and learning outcomes. *Studies in Educational Evaluation*, 32(4): 381-40.
5. Gudrum, D., M. Hackling and L. Rennie, 2001. *The status and quality of teaching and learning of science in Australian schools.* Canberra: Department of education, Training and youth affairs.
6. Vaezi, Zand-Vakili, Mohammadkhani and Kashani, 2013. Emotional Intelligence and Beneficial Utilization of Teachers' Corrective Feedback (Recast and Elicitation): Investigating Possible Relations. *World Applied Sciences Journal*, 24(1): 64-75.
7. Ainscow, M., 1988. Beyond the eyes of the monster: Analysis of recent trends in assessment and recording. *Support for Learning*, 3(3).
8. Richard and Gonzales, 2010. Exploring the Conceptual and Psychometric Properties of classroom practices: Findings from Three Countries. Retrieved from [www.ssrn.com/abstract=1691783](http://www.ssrn.com/abstract=1691783) on dated 12/5/ 2012.
9. Crooks, T.J., 1988. The impact of classroom evaluation on students. *Review of Educational Research*, 58(4): 433-481.
10. Gipps, C., 1990. *Assessment: A teachers' guide to the issues*, London: Hodder and Stoughton.
11. Palmetier, Laurie and J. Ballantine, 1994. *Formative Self-Assessment Techniques: The Kudos Approach.* Lilly Conference. Ratcliff, James L. (editor) (1992) .
12. Black, P. and D. Wiliam, 1998. *Inside the black box: Raising standards through classroom assessment*, Phi Delta Kappan.
13. Stiggins, R.J., 2001. *Student-involved classroom assessment (3<sup>rd</sup> ed.)*. NJ: Merrill Prentice Hall.
14. Campbell, C. and J.A. Evans, 2000. Investigation of pre-service teachers' classroom assessment practices during students teaching. *Journal of Educational Research*, 93(6): 350-355.
15. Sutton, R., 1995. *Assessment for learning.* Salford, England: Ruth Sutton Publications.
16. Marshall, J.M., 2005. *Mapping the Road to Success A White Paper Prepared for the Princeton Review. Formative Assessment: Mapping the Road to Achievement (The Princeton Review* Retrieved on 13/ 6/12 from [www.20 Assessment \\_ White\\_Paper.pdf](http://www.20 Assessment _ White_Paper.pdf)
17. Stiggins, R.J., 2002. *Where is our assessment future and how can we get there from here?* Washington: National Education Association
18. McMillan, J.H., 2001. *Secondary teachers' classroom assessment and grading practices.* *Educational Measurement Issues and Practice*, 20(1): 20-32.
19. Mertler, C.A., 1998. *Classroom assessment practices of Ohio teachers.* Conference paper: EDRS
20. Satterly, D., 1981. *Assessment in schools.* Oxford: Basil Blackwell.
21. Stepanek, J., 2002. Classroom assessment and the pursuit of illuminating feedback. *Northwest Teacher*, 3(2): 2-3.
22. Wiggins, G.P., 1993. *Assessing student performance: Exploring the purpose and limits of testing.* San Francisco: Jossey-Bass.
23. Terenzini, Patrick, T., 1989. Assessment with Open Eyes: Pitfalls in Studying Student Outcomes. *Journal of Higher Education* 60: 644-664, November/ December, 1989.
24. Carr, S.C., 2002. Assessing learning processes: Useful information for teachers and students. *Intervention in School and Clinic*, 37(3): 156-162.
25. Light, R., 1990. *The Harvard Assessment Seminars: Explorations with Students and Faculty about Teaching, Learning and Student Life.* Graduate School of Education and the Kennedy School of Government.
26. Ewell, P., 1985. *Assessing Educational Outcomes.* *New Directions for Institutional Research* No. 47. San Francisco: Jossey-Bass.
27. Ellwein, M.C., 1992. *Research on Classroom Assessment Meanings and Practices.* *Commonwealth Center News* 5, 1 (Fall/Winter 1992), 2 passim.

28. Stiggins, 1998. Classroom assessment for student success. Washington: National Education Association.
29. Robert M. and E.S. John, 1993. Assessment Planning: Measuring Improvement in Teaching. The National Teaching and Learning Forum. 2: 7-8.
30. Lambright, K.T. and Y. Lu, 2009. What impacts the learning in service learning? An examination of project structure and student characteristics. Journal of Public Affairs Education, 15(4): 425-444
- Angelo, T.A. and K.P. Cross, 1993. Classroom Assessment Techniques. San Francisco: Jossey-Bass.
31. Noh, Ludin and Suhid, 2013. Teaching Competency among Islamic Educators in Malaysia. World Applied Sciences Journal, 24(2): 267-269.