

# The Comparison of Learning and Memorization Rate of English Among Sari Male Students in Secondary Schools (2010-2011)

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## ABSTRACT

**Background:** The aim of present study was to investigate the learning and memorization rate of English based on authentic and traditional assessment approaches in Sari secondary schools. **Methods:** It was performed in semi-experimental method. The sample included 60 first year high school male students, selected randomly. Then it has been divided in two groups as experimental and control groups. Assessment devices used in this research included: academic achievement pre-test of English, academic achievement post-test revised questionnaire of attitude toward tests (SAAS-R), and English performance test. Before carrying the authentic and traditional assessment approaches into execution, two groups had been taken the scholar academic achievement pre-test in order to assure not to be any significant differences between two groups. After the execution of above mentioned method (about 14 weeks), the academic achievement post-test, and performance test and attitude toward tests (SAAS-R) were performed. Moreover, 2 months after post-test, it was repeated to measure the rate of memorization. In order to analyze data the statistical method, the dependent and independent T-tests were used to determine mean differences of two groups and K2 test was applied to assign the differences of two groups' attitude toward tests. **Results:** The results implied that: The rate of students' performance learning in authentic assessments is more than the traditional ones. **Conclusion:** There was no significant difference between two groups' post-test scores. The rate of memorization in authentic methods is more than the traditional ones. The attitude toward tests in authentic methods is more positive than the traditional ones. **Keywords:** learning, memorization, authentic and traditional assessment, performance learning, attitude, Sari, Mazandaran, Iran.

## 1. INTRODUCTION

Education is reforming an experience. People would be able to expand the meaning of their experiences also to conduct and control the next ones by it. Learning based on memorization is cancelled because it emphasized on loading learner's accumulator minds and interrogating in tests. As Jean Piaget said the main goal of education must be training of innovators who could think not to repeat. The other goal is training of critical thinking. It is training of investigators and researchers not those who adopt whatever is said (1). Obviously, it is not possible to train new generation for the living in a changeable society for present and next days without new planning to change functions and works of education system including goals, contents, teaching and learning methods also evaluation and assessment methods (2). Contemporary, in domain of training science, evaluation has received such an importance that identified as an independent

and specialized scientific field. Because of the importance of evaluation some specialists in domain of curriculum development like Tiler presented it as a center of education process (3). Evaluation indicated as the last link for the "teaching-learning" process which is used in the end of educational period to separate students with different learning process. Recently, evaluation cannot be separated from "teaching-learning" process. If it could present suitable information permanently through feedbacks to students, it would be more effective to improve learning. It is found that the educational and evaluation method could not be able to meet the needs of learning in many times during the process of English learning as a foreign language.

Most of the approaches in secondary schools are theoretical ones, while using the teaching application and performance method many of the English concepts are more tangible and likable and English learning would be more profound and stable

permanent (4). Language educational specialists suggest that the best method in language learning is creating desired possibilities and training through different practices so that there would be a satisfied learning experience (5). While the traditional evaluation method frequently aiming the lower classes of cognitive domain, the achievement evaluation of the student should be composing of the test's results and the teacher's distinguishing of the student's educational state (6). To achieve English learning goals, the authentic assessments could be a suitable alternative for usual and traditional assessments which are still using in these classes. In authentic assessments methods there are often real and natural situations to evaluate the performance of the learners assessed directly (7).

There is not any research in our country related to the title of this study at the level of the university but similar studies have been done at the level of education. Khoramabadi (2008) in his doctoral on the subject of "The effect of applying traditional and alternative methods on achievement motivation, attitude and academic achievement of the students" observed the results including: students who their performance have been tested using alternative methods in comparison with those who are assessed by traditional ones, encounter more achievement motivation. They have position attitude to school and get higher educational achievement in psychomotor and cognitive domain (8).

Kowsari (2000) in a study entitled "survey of acquaintance amount and application of assessment methods through the student's learning by teachers of secondary schools" obtained the following results : the selection of aware and specialized persons in assessment as instructor in teacher training center and in-service periods – acquaintance of students with the topic of assessments, considering two types of scores that is theatrical, pragmatic and performing in assessment of student learning – appropriate more class hours and decrease the content of lesson books (9).

Firozfar and Gholam Nattaj (2006) in a research entitled: "how could we improve the teaching-learning process by using the new assessment approach (process –center and formative )" presented the following results : it represents a real , stable and profound learning new assessment approach- this plan gets more interest of students cooperation in teaching process and changes the traditional atmosphere of the class -it decrease the stress and agitation of the final test using different tools of new assessment approach and increase noticeable confidence of student in learning (10).

Hopkins (1987) showed in a study that the more improvement and disputable matter in assessment is differences in level of instructor skills in using tools and methods. Lack of acquaintance of instructors, effective tools and methods in formative assessment are the example of their weakness in evaluation (11). Lee (1994) surveyed research named "the effect of assessment approach on reported study strategy use" and found that the students tend to use different study strategies according to the type of given exam. The deep process strategies in his studies while surface strategies were correlated to paper- pencil test (12). Brokhart and Durkin (2003), in a research named "classroom Assessment, student motivation and achievement in high school", showed that the type of assessment causes different perception of presented homework and different efficiency in students. Meanwhile, the performance assessment scores were significantly correlated to interior control perception. It was not

correlated to concrete test scores (13). Baker and et al (1993) in the research named "policy and Validity prospect for performance- based assessment" showed that performance assessments encourage the divergent thinking and concentration on high level or complex skills, besides the knowledge application in concrete situations these methods provide the proper background to involve them with subjects individually or in group by encouraging students to find different solutions and consider special value for educational goals. The general goal of present research is "the comparison of learning and memorization rate of English, based on authentic and traditional assessment". The main hypothesis: Using authentic assessment approach is more effective than traditional assessment on the rate of students' English learning and memorization (14).

- Hypothesis 1: the rate of performance learning in authentic assessment is more than the traditional ones.
- Hypothesis 2: the rate of memorization in authentic methods is more than the traditional ones.
- Hypothesis 3: the rate of post-test scores is more in authentic assessment in comparison with traditional one.
- Hypothesis 4: the attitude toward test in authentic methods is more positive than the traditional ones.

## 2. MATERIALS AND METHODS

The research method is semi-experimental and the sample includes 60 students selected by simple random sampling. They were divided in control and experimental groups. Assessment devices used in the research were: 1-academic achievement pre-test of English. 2-academic achievement post-test 3-revised questionnaire of attitude toward tests (SAAS-R) .4-English performance test

Before carrying the authentic and traditional assessment approaches into execution, two groups had been taken the scholar academic achievement pre-test in order to assure not to be any significant differences between two groups. After the execution of above mentioned method (about 14 weeks), the academic achievement post-test, and performance test and attitude toward tests (SAAS-R) were performed. Moreover, 2 months after post-test, it was replicated to measure the rate of memorization. In order to analyze data the statistical method, the dependent and independent T- tests were used to determine mean differences of two groups and K2 test was applied to assign the differences of two groups' attitude toward tests.

## 3. RESULTS

Hypothesis 1: The rate of students' performance learning in authentic assessments is more than the traditional ones. As the calculated ( $t=4/527$ ) in confidence level of 99% ( $\alpha=0/01$ ) and ( $DF=29$ ) is more than  $Tc_{(=2/756)}$ , the null hypothesis is rejected and the research hypothesis is approved. It means that there is significant difference between the rate of students' performance learning in authentic assessment and traditional assessment. The mean of authentic assessment is bigger, so the rate of students' performance learning in authentic assessment is more.

Performance learning variables	N	T	ct	Df	$\alpha$
Authentic & traditional assessment	30	4.527	2.756	29	0.000

Table 1. t-test statistics to determine the discrepancy of performance learning in authentic & traditional assessment.

Hypothesis 2: the rate of post-test scores is more in authentic assessment in comparison with traditional one... As the calculated ( $t=1.29$ ) in confidence level of %95 ( $\alpha=0.05$ ) and ( $DF=58$ ) is less than  $T_c (=2)$ , the null hypothesis is approved and alternative one is rejected. It implies that there was no significant difference between two groups' post-test scores.

Post-test variables	N	T	c t	Df	$\alpha$
Authentic & Traditional assessment	60	1.29	2	58	0.203

Table 2. *t*-test statistics to determine the discrepancy of post-scores in authentic & traditional assessment.

Hypothesis 3: the rate of memorization in authentic methods is more than the traditional ones. .Because the calculated ( $t=3.908$ ) in confidence level of %99 ( $\alpha=0.01$ ) and ( $DF=29$ ) is more than  $T_c (=2.756)$ , the null hypothesis is rejected and alternative one is approved .It means that there is significant difference between the rate of English memorization in authentic and traditional methods. The mean of authentic assessment is bigger, so the memorization rate of it is more.

Memorization variables	N	DF	t	c t	$\alpha$
Authentic & Traditional assessment	30	29	3.908	2.756	0.000

Table 3. *t*-test statistics to determine the discrepancy of memorization in authentic & traditional assessment.

Hypothesis 4: the attitude toward test in authentic methods is more positive than the traditional ones.  $K^2$  is used to inferential analysis of this hypothesis. As calculated  $K^2 (566.66)$  in confidence level of 99% ( $\alpha=0.01$ ) and ( $DF=3$ ) is bigger than  $K^2$  of table ( $=11.345$ ), it implies that there is significant difference among the observed and expected frequencies statistically and the null hypothesis is rejected and research hypothesis is approved. It means that the students' attitude toward test in authentic methods is more positive than the traditional ones.

Sum	Disagreed	No idea	Agreed	Quite agreed	Observed	Expected
928	0	269	588	71	Observed	Authentic
928	230.5	346.5	315.5	35.5	Expected	assessment
928	461	424	43	0	Observed	Traditional
928	230.5	346.5	315.5	35.5	Expected	assessment
928	461	693	631	71	Observed	Sum
1856	461	693	631	71	Expected	

Table 4. Observed & expected frequencies in students' response to attitude test.

Attitude toward test	$K^2$	Df
	56.666	3

Table 5.  $K^2$  statistics of Attitude toward test.

#### 4. DISCUSSION AND CONCLUSION

Hypothesis 1: In order to determine this effect the rate of gained scores from students' performance learning test were surveyed among two groups (control and experimental groups). The results imply that the rate of students' performance learning in authentic methods are more in comparison to traditional assessments performance statistically. These results are associated with the results of other researcher as Lee (7, 12-15)

Hypothesis 2: to determine this effect the student academic

achievements in authentic groups were surveyed in comparison to traditional groups. The gained results show that there isn't significant difference between the scores of two group in academic achievement test in cognitive domain. These results are similar to other researchers findings as: (1, 7, 13, 15).

Hypothesis 3: in the case of this hypothesis, the results imply that there is significant difference between the scores of two groups. The memorization rate is more in authentic assessment group. The results are associated with other researcher findings: (8, 16).

Hypothesis 4: The mean of attitude scores of students included in authentic assessment group was surveyed in comparison to traditional assessment one. The results imply that there is significant difference between the scores of two groups. It means that the authentic assessment group has more positive attitude toward the tests and has higher perception of self-academic. They evaluate the school goals more internalized and meet more self-regulation and motivation. The results are similar to the findings of (13, 14, 17, 18).

#### 5. SUGGESTIONS

Considering the results of this research, some suggestions are as follow:

- \* Most teachers are familiar with traditional assessments methods but they don't have systematic and enough knowledge with authentic and new assessment methods .So it is suggested to be presented the teachers necessary awareness and knowledge about these kinds of assessments through the co-service courses.

- \* It is suggested that the writers of English class books should concentrate on the materials that, firstly they are needed for real life and secondly they should be commensurable and able to evaluate directly though performance tests and other alternative methods.

- \* Noticing that assessment methods follow the assessments goals it is suggested to curriculum planners and teachers consider the assessments goals, the evaluated subject, the features of learners and other related consideration before using any assessment method.

- \* As the teaching based on performance assessments is time-consuming, it is suggested to be considered more time during the course.

- \* It is suggested to the teachers to use different kinds of assessment methods until the students can show their abilities better according to their personal features (for example: cognitive styles ).

- \* It is suggested to curriculum planners and teachers not to consider the authentic assessments in contrast to traditional ones, and not to limit their choices just to one of these methods. It would be better they consider the methods complementary that assess different educational goals.

CONFLICT OF INTEREST: NONE DECLARED.

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