

THE EFFECT OF WASHBACK ON TEACHING METHODOLOGY IN DISTANCE EDUCATION EFL

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Abstract

The notion of washback is a prominent concept in language teaching and testing. Examinations are considered to be powerful determiners of what goes on in classrooms and their results can play a significant role in setting educational standards of an institution. The connection between testing, teaching and learning is addressed by a number of terms. Washback is one that refers to the influence of tests on teaching and learning. The aim of this study was to investigate whether the centralized final examinations at Payame Noor University (PNU), Iran's distance education university, had any washback effect on teaching methodology and if so what kind of washback it might take. After conducting the pilot study, data collection was conducted by using two questionnaires for both PNU students and professors. Data were analyzed through descriptive statistics, Chi-square test, independent t-test, and one-way ANOVA. The results indicated that PNU EFL final examinations have washback effect on teaching methodology and this washback effect is more positive than negative.

Key words: Final Examinations, Negative Washback, Positive Washback, Teaching Methodology, Washback Effect

INTRODUCTION

Testing has always been a crucial aspect of education. According to Alderson and Wall (1993), it is a common belief that testing affects teaching and learning. Some writers use the term "washback", whereas others prefer "backwash" to describe the effects and influences of tests or examinations (Pan, 2009).

Scholars have approached the washback issues from different perspectives (Luxia, 2005). Study based on Cheng and Curis (2004) and Luxia (2005), has shown that washback may have a positive or a negative or no influence on teaching and learning. According to Bachman (1990), positive washback occurs when the assessment used reflects the skills and content taught in the classroom. Positive washback refers to expected test effects. For example, a test may

encourage students to study more or may promote a connection between standards and instruction. Negative washback refers to the unexpected, harmful consequences of a test. For example, instruction may focus too heavily on test preparation at the expense of other activities. If there are no conflicts in the aims and activities of testing and teaching, testing supports teaching and then positive washback is assumed to happen. Conversely, if a test objectives and activities are at variance with the objectives of the course, then there is likely to be negative washback. Wall (2005) suggested that if the textbook and the examination had different content or aims, they might pull in different directions and negative washback might be created.

Some researchers imply that teachers' and students' attitudes towards the exams can create positive or negative washback. For example, Alderson and Hamp-Lyons (1996) mention how teacher attitudes towards the exams affect if and how teachers prepare their lessons and materials.

Murchan (1989) concludes that the format of testing can also have a great impact on how and what teachers teach, and students learn. It means that the format of the test can make positive or negative washback effect. It is often asserted as by Hughes (2003) that direct, constructed response item formats will yield more positive washback than multiple-choice items.

Little attention was given to examination impact in language education until the early 1990s. Before then there were only a few references to the power of tests in different educational settings. Several test-development projects had been set up with the intention of creating positive impact on learning and teaching (e.g. Swain 1985 and Pearson 1988), yet there was little analysis of the results of such endeavors, and also innovators had little evidence to refer to when making decisions about the role of examinations in their own reform programs.

If an examination is to have the impact intended, educators and measurement specialists need to consider a range of factors that affect how the change succeeds or fails and how it influences teachers' and students' attitudes and behaviors. Alderson and Wall (1993) have pointed out that language testers should pay more attention to the washback effect of their tests, but they should also guard against oversimplified beliefs that "good" tests will automatically have a "good" impact.

Most teachers plan and conduct their teaching methodologies based on the requirement of the final exams in their subjects. Assessment is used by and has an impact on schools, universities and employers and it is also expected to have an impact on what and how teachers teach. But the review of existing literature indicates that the number of washback studies on learner, teachers and learning process is limited.

Although final examinations dominate the educational system of Iran, few washback studies have been conducted in this area. This study is one of the few washback studies that has employed both quantitative and qualitative data especially classroom data to investigate the

effect of washback. It explores why and how washback influences aspects of teaching and learning within the educational system of distance education.

Considering the main focus of the present study, it is necessary to mention that Payame Noor University (PNU) is the only distance education university of Iran which has a large number of students. It is worth mentioning that PNU's final examinations are achievement tests. These tests are constructed and administered at the end of each semester by the central organization of the university. The classes are not obligatory to attend, and the number of classes is approximately one third or even one fourth the number of classes in normal universities.

Studying the washback effect of PNU (distance education) final examinations on students and their learning process can have implications for the educational context of distance education universities.

Research Questions

Based on the aforementioned issues this study addressed the following research questions:

1- Do Payame Noor University Translation Major final examinations have any washback effect on the teaching methodology in this university?

2- Do Payame Noor University Translation Major final examinations have more positive washback effect on teaching methodology in this university?

Research Hypotheses

The hypotheses that the researcher was to investigate in this study were as follows:

H₀: PNU Translation Major final examinations have no washback effect on teaching methodology in this university.

H₁: PNU Translation Major final examinations have more positive washback effect on teaching methodology in this university.

METHODOLOGY

Payame Noor University is a distance education university in Iran that has many branches all over the country. The classes are not obligatory to attend, and they are mainly evening classes. Also the numbers of classes are limited. Regardless of the branches the students attend, PNU students have the same textbooks and they receive the same final exams at the end of the semester. Most of final exams are in a multiple-choice format and after being administered, they are corrected by the specific headquarters not the teachers. In addition, there are some courses which are in essay format and would be corrected by teachers themselves.

In Iran, EFL is divided into three majors: a) English Literature b) English Teaching c) English translation. This study was conducted among PNU English Translation major students.

The purposes of this research were to map the field and to obtain an in-depth understanding of the washback process integrated with a language assessment component. To conduct this study, the researcher used quantitative measure.

The instruments used in the survey study were two questionnaires, one for PNU professors and the other for PNU students. Both questionnaires explored the washback effect on aspects of teaching and learning through students' and professors' perceptions and attitudes. The first part of the questionnaires was specified for the demographic data. All of the items of the two questionnaires were designed on a five-point Likert scale of agreement where one=strongly disagree, two=disagree, three=undecided, four=agree and five=strongly agree.

To develop the items of the questionnaires, the researcher developed a questionnaire depending mostly on a similar questionnaire derived from a related study conducted by Cheng (2005) entitled: "Changing language teaching through language testing". The items were adopted and adapted from the questionnaires of this book and the researcher modified some parts of the questionnaire in light of the objectives of the present study.

The participants of this study were English Translation Major Students and Professors of Payame Noor Universities of Mashhad and Tehran. Two hundred students ($n=200$), 50 males and 150 females were selected using availability sampling to participate in this study. They were junior and senior students of their field of study. The other participants of this study were 35 male and female English Translation Major professors of PNU that were selected based on availability sampling.

Having finished writing of the two questionnaires as a preliminary step; the researcher conducted a pilot study in order to validate both of students' and professors' questionnaires which were going to be utilized in the main study. The computed Alpha Cronbach coefficients reliability for professors' and students' questionnaires were estimated to be .87 and .83 respectively. Since the two questionnaires were borrowed from the same work on washback in Korea, test validity was confirmed. Moreover, the researcher consulted with three EFL experts to validate both of the questionnaires. They were asked to state their views about the instruments with regard to: item suitability, item relevance, clarity, and language diction. As a result, the researcher made use of their suggestions to modify some items of the questionnaires considering the special context of the research. The researcher also removed some probable ambiguities and irrelevant items such as those items that had ambiguities in their structures or those items that were not appropriate for the specific context of PNU.

RESULTS AND DISCUSSION

Descriptive Statistics of Professors' Questionnaire:

*Table 1:
The Effects of Payame Noor Final Examinations on Teaching*

Mean	SD	Chi-Square	P-Value
3.31	1.38	.257	.612
3.57	1.06	6.429	.011*
3.74	.70	10.314	.001
3.65	1.13	3.457	.063
3.11	.96	1.400	.237
3.17	1.29	.029	.866
3.68	.96	3.457	.063
3.20	1.25	.257	.612
3.71	1.17	6.429	.011*
2.74	1.14	2.314	.128

The results indicated that most of the PNU professors try to promote students' test taking skills and they adapt new teaching methods based on the final examinations. In addition, they are likely to cover every section of their textbooks.

Most of the PNU professors teach whatever they think is important and they don't spend less time on certain sections of the textbooks because their students are less interested in them.

*Table 2:
Ways of Motivating PNU Students in the Context of Final Exams*

Mean	SD	Chi-Square	P-Value
3.20	1.05	.257	.612
3.88	.67	15.114	.000*
4.34	.53	31.114	.000*
4.48	.61	27.457	.000*
4.31	.63	24.029	.000*

There were five items under this category that ask PNU professors in what ways they would like to motivate their students to learn. The results of this table showed that the great majority of the PNU professors incline to create positive attitude toward learning in order to motivate their students and they are less interested in reviewing previous final exams in class for motivating their students to study more.

Table 3:
The Basic Functions of Payame Noor Final Examinations

Mean	SD	Chi-Square	P-Value
1.97	1.12	20.829	.000*
2.14	.94	20.829	.000*
2.45	1.19	8.257	.004*
2.80	1.13	3.457	.063
2.62	1.03	10.314	.001*

Nearly all PNU professors have negative attitude towards the function of the final examinations. Among these items, item one got the lowest mean score and it indicated that PNU final examinations have given very little feedback to the professors.

Table 4:
Learning Strategies Recommended by PNU Professors in the Context of Final Examinations

Mean	SD	Chi-Square	P-Value
3.54	.85	1.400	.237
3.94	.83	12.600	.000*
4.05	.87	20.829	.000*
4.45	.56	31.114	.000*
3.82	1.15	6.429	.011*
4.40	.55	31.114	.000*
4.22	.68	17.857	.000*
4.45	.65	24.029	.000*
4.28	.78	12.600	.000*

Nine strategies were listed to explore PNU professors' attitudes towards the learning strategy they would recommend to their students in the context of PNU final examinations. The priority that PNU professors gave to strategies they regarded as important was revealed from the results. The results also showed that these strategies are highly recommended by PNU professors as all mean scores are high.

"To study materials at home" and "To organize and to evaluate their learning" got the highest mean scores among all the other items and this indicated that these two strategies are recommended to PNU students more than the other strategies.

*Table 5:
Teaching Materials and Teaching Arrangement at PNU*

Mean	SD	Chi- Square	P-Value
4.71	.458		
2.97	1.12	4.829	.028*
2.00	1.26	15.114	.000*
4.42	.65	24.029	.000*
4.34	.63	24.029	.000*
3.60	1.14	.714	.398

PNU professors were asked to express how often they used these three teaching and learning resources in their teaching. "Textbooks" was rated the most frequently used resource in teaching at PNU. This means that the majority of PNU professors use textbooks as the primary source of teaching content and they are less likely to use supplementary and exam-related materials in class. Also, PNU professors were asked to show how they arranged their teaching at PNU. The results showed most of the PNU professors are teaching according to textbooks based on the contents and materials to be taught.

Descriptive Statistics of Students' Questionnaire:

*Table 6:
Students' Perceptions of Their Professors' Activities in Class*

Mean	SD	Chi-Square	P-Value
2.43	1.05	92.480	.000*
2.68	1.09	52.020	.000*
3.04	.96	26.182	.000*
1.97	.92	158.420	.000*
2.37	.99	114.578	.000*

PNU students' perceptions of their professors' teaching activities in their classes were investigated and they were asked to grade the frequency with which their professors organized the following activities in the class. Among the obtained mean scores, item three got the highest mean score and this indicated that most of the PNU professors explain objectives of the lessons for their students and they are not fond of explaining previous final examinations for students to prepare them for the final exams.

PNU professors seemed to talk to the whole class the most, followed respectively by talking to groups of students, individual students and keeping silent. This indicated that the PNU professors dominate and control the classroom talk for most of the time.

*Table 7:
Students' Perceptions of Their Classroom Activities*

Mean	SD	Chi- Square	P-Value
1.59	.88	165.620	.000*
2.95	.96	48.020	.000*
3.20	.88	21.780	.000*
3.19	.94	19.220	.000*
3.09	.98	17.670	.000*

According to students' views, PNU final exams have impact on class activities and they lead students mostly to argue for correct answers, correct translations and to express their ideas in the class. Items one with the lowest mean score displayed that PNU students rarely did previous final examinations in class.

*Table 8:
Students' Preferred Strategies Regarding Their Final Exams*

Mean	SD	Chi-Square	P-Value
3.21	1.17	1.620	.203
3.57	1.13	27.380	.000*
3.51	1.11	13.520	.000*
3.83	.89	44.180	.000*
3.87	.91	52.020	.000*
3.89	.84	54.080	.000*
3.56	1.24	6.480	.011*
4.22	.91	106.580	.000*

There were eight items within this category to understand whether or not PNU final examinations have any influence on students' learning strategies. The priority that students gave to strategies they regarded as important was revealed from the results. The most preferred strategy that PNU students use greatly is "listening to audio programs and watching videos in English" and the least preferred strategy is "memorizing materials".

*Table 9:
Students' Attitudes towards the Influence of Aspects of the Final Exams*

Mean	SD	Chi-Square	P-Value
3.36	1.19	5.780	.016*
3.40	1.09	1.280	.258
3.47	1.12	6.480	.011 *
3.34	1.09	.500	.480

This category explored those aspects of students' lives that were affected by their final examination scores. The result from this category demonstrated that PNU students' scores have strong impact on these four items. It can be seen that exam scores of PNU students mostly create anxiety and emotional tension. On the other hand, PNU students believe that their final exam scores have strong impact on their motivation to learn.

*Table 10:
Students' Attitudes towards the Quality and Format of Their Final Exams*

Mean	SD	Chi-Square	P-Value
3.45	1.14	9.68	.002*
3.08	1.05	1.280	.258
3.61	.95	30.420	.000*
2.69	1.22	21.780	.000*
3.89	1.07	46.080	.000*
2.57	1.14	30.420	.000*
3.57	1.14	21.780	.000*

The aim of this table was to explore PNU students' attitudes towards the quality and format of their final exams. As the findings indicated, item five with the highest mean score indicate that most of the PNU students are satisfied with the examinations in the multiple-choice format and item six with the lowest mean score displayed that PNU students are dissatisfied with the examinations in essay format. PNU students believed that there is conformity between their final examinations and the content of the textbooks.

*Table 11:
Students' Attitudes towards the Effect of Exams on Themselves and on the Process of Learning*

Mean	SD	Chi-Square	P-Value
3.86	1.05	54.080	.000*
3.74	.93	43.462	.000*
3.88	1.03	64.980	.000*
2.87	1.21	14.580	.000*
3.43	1.01	2.880	.090
3.90	.98	57.533	.000*
3.89	.96	69.620	.000*

This category was designed to explore the PNU students' attitudes towards their final examinations in relation to teaching and learning at PNU. The results showed that PNU final examinations have strong impacts on students' attitudes towards themselves and their learning process. Item four got the lowest mean score and it showed that according to PNU students' views, examination scores are not good indications of how students have learned the materials and students don't consider the examinations as an accurate reflection of all aspects of their

study. Conversely, item six got the highest mean score and it indicated that according to the PNU students' perception, examinations shouldn't be used as a sole determiner of student grades.

Question one inquired if PNU Translation Major final examinations have any impact on teaching methodology in this university. To answer this question, the researcher made use of a Chi-square index for each of the items of the questionnaires, and t-test for total items of the two questionnaires. A probability of less than 0.05 was taken as statistically significant for both the Chi-square test and t-test. The obtained results were arranged in the following tables:

*Table 12:
The T- test for Total Items of the Students and Professors Questionnaires*

	N	Mean	SD	T-Value	Df	P-Value
Total students' responses	192	3.229	.289	10.998	191	.000*
Total professors' responses	35	3.659	.225	17.342	34	.000*

The above results showed that the estimated mean scores are significantly different. Since the obtained P-values are much smaller than the significance level. ($P\text{-value}=.000 < \alpha=0.05$), it can be concluded that according to both students and professors, PNU final examinations have a significant washback effect on teaching methodology in this university, and the null hypothesis of this study is rejected.

Findings Related to the Second Question of the Study:

The second question of this study inquired about the type of washback (positive or negative) that PNU Translation Major final examinations might take. To answer this question, some of the items of the two questionnaires were regarded as positive and some of them as negative. Also, the washback effects of some items of these two questionnaires were unknown because no researcher could discover the exact type of their washback effect. For this reason, the researcher of this study didn't consider any washback effect for such items.

*Table 13:
Professors' Perception of Positive and Negative Washback Items*

Group	N	Mean	SD	T-Value	Df	P-Value
Response Positive	35	3.692	.288	4.735	34	.000
Negative	35	3.213	.525			

*Table 14:
Students' Perception of Positive and Negative Washback Items*

Group	N	Mean	SD	T-Value	Df	P-Value
Response Positive	195	3.329	.335	7.422	194	.000
Negative	199	3.031	.450			

The above results indicated that based on the professors' and students' perceptions, the mean score of the items with a positive washback effect is larger than the mean score of the items with a negative washback effect. Thus, it can be concluded that according to both students' and professors' views, the washback effect of PNU final examinations is more positive than negative. Thus, the second hypothesis of this study can be accepted.

CONCLUSION

As pointed out by Glaser and Silver (1994:28), "there is good reason for the optimism that the oft-postponed wedding of assessment and instruction will occur." Teachers should be empowered to integrate assessment into efforts to improve teaching and learning and instruction. Washback tends to be a challenging phenomenon to research and measure. Washback needs to be planned, observed and studied. The review of recent washback studies shows that the number of such studies remains relatively small and they have been carried out in a restricted number of learning contexts and have employed a variety of research methods. The results of this study confirm the results of many other studies (e.g., Shohamy, et al. (1996), Alderson and Hamp-Lyons (1996), Cheng (1999), Shih (2007).

Shohamy, et al. (1996) investigated how the status of tests influence teaching and learning by examining the impacts of two national tests (ESL test and an Israeli ASL test) in and beyond classroom settings. The instrument utilized in their study consisted of a student questionnaire and interview with teachers. The result of their study showed that the mentioned national tests had washback on teaching and learning and one of them (ESL test) created more positive washback and the other (ASL test) created more negative washback. As is evident, the current study supports the results of the study done by Shohamy, et al. in the sense that both of them prove this fact that washback exists and exams certainly have impacts on teaching and learning that it may be either positive or negative.

Alderson and Hamp-Lyons (1996) investigated the influence of TOEFL on teaching through interviews with teachers and students and classroom observations. As it is apparent, the current study confirms the findings of Alderson and Hamp-Lyons because both of these studies revealed that exams affect both what and how teachers teach.

In washback study was done by Cheng (1999), she compared the old and new versions of HKCEE. The instruments utilized in that study included teacher/student questionnaires,

structured interviews with teachers and classroom observations. The results of the current study are in accord with the results of the washback study done by Cheng (1999) because both of these studies came to this conclusion that examinations have impacts on teaching content, methodology and activities done in class.

Shih (2007) investigated the effect of washback on the learning process through interviews and classroom observations. The results of the study done by Shih are in accordance with those in the current study as they both come to this conclusion that tests have washback effects on the students' learning process. But, they are different in the sense that each of these studies investigated washback from various perspectives. For example, in her study, Shih found out the effect of test content on students' learning, while the aim of the current study was not to investigate the impact of test content on learning; rather it aimed at investigating washback from several perspectives.

This study investigated the washback effect of distance education final examinations from various aspects such as educational factors including the behaviors of the PNU professors, and students in class and their attitudes towards the tests; available resources and learning materials; test factors including content, structure and quality of tests; the effect of tests on students' learning and their psychology including learning strategies, learning motivation and test anxiety.

The results obtained from this study based on professors' and students' questionnaires were as following:

In terms of the effect of washback on teaching at distance education, it was clear that the EFL final examinations have certainly positive and negative washback effects on teaching at distance education. Findings showed that negative washback emerges because distance education professors try to teach according to test format and they adapt new teaching methods based on the final exams. Moreover, they like to promote students' test-taking skills and strategies, and sometimes they try to give previous final exams to students in order to make them familiar with the exams. On the other hand, positive washback emerges because distance education professors base their classroom activities on objectives of the courses rather than on objectives of the final exams, which can increase positive washback. In terms of washback on aspects of learning, it became evident that distance education final examinations have a great impact on learning strategies recommended by PNU professors to distance learners. It was apparent that in the context of distance education EFL final examinations, PNU professors strongly recommend useful strategies to enrich their students' learning. As the results of the study showed, in order to motivate students in the context of final examinations, PNU professors prefer to create positive attitude towards learning; give students more encouragement to learn; provide students with effective language learning strategies; and use more authentic materials in class.

As the findings indicated, PNU professors are less likely to review previous final examinations in class when trying to motivate students to learn.

Investigating the effect of washback on teaching arrangement and materials used in classrooms revealed that PNU professors teach according to the textbooks and content and materials to be taught. They are less likely to teach according to what will be tested in the final examinations. As for teaching materials used at distance education classrooms, it was quite evident that PNU professors use textbooks mainly, and that they rarely use supplementary materials related to objectives of the courses and also they are less likely to use exam-related materials in class.

In the same way, in terms of students' perceptions of their professors' activities in class, it was clear that PNU professors' class activities create both positive and negative washback effects. As the results showed, positive washback is created because PNU professors explain objectives of the lessons for the students, they don't explain previous final examinations in class, and they don't emphasize those parts of the book that are likely to be tested in the final exams. These final exams have positive effects on learning process too and they lead students to arguments for correct answers and translations in class, asking for clarification, and expressing ideas. On the other hand, negative washback emerges because students believe that their professors don't make them familiar with the purpose of the final examinations and they don't try to teach all parts of the textbooks.

Summarizing the findings of washback on learning, it can be seen that distance education EFL final examinations have impacts on learning strategies used by distance learners. It was quite evident that in the context of final examinations, PNU students use some useful learning strategies to enrich their learning. Additionally, the results showed that PNU students have positive attitudes towards their final examinations in the sense that they believe their final exams motivate them to learn and to have a better relationship with their professors.

Regarding students' attitudes towards the quality and format of the exams, it appears that PNU Translation Major final examinations are fair because there is conformity between the number of questions on the exams, and their determined time as well as between content and objectives of the textbooks and the final exams. Also, EFL distance learners have positive attitudes towards the exams in the sense that they believe their final exams motivate them and force them to study harder and learn better. They regard taking exams as a valuable learning experience and believe students perform better in an exam situation than in a normal teaching situation. On the other hand, findings indicated that some PNU students have negative attitudes towards the exams because they don't consider exams as a sole determiner of grades and also, they believe that the score on an exam is not a good indication of how well a student learned the material.

On the whole, based on the findings of the professors' and students' questionnaires, it can be concluded that distance education EFL final examinations have washback effects on teaching methodology , and it is revealed that the created washback is more positive than negative. *Although distance education EFL final examinations have significant effects on teaching*

methodology , factors such as limited number of sessions and students' engagements like employment and family have great impacts on teaching methodology in this university.

Implications of the Study

Actually, Washback tends to be a challenging phenomenon to research and measure. Below are some possible implications whose application can promote positive washback in distance education EFL final examinations.

1. Distance education authorities should provide professors and students with detailed information in terms of general format of tests and the purpose of them.
2. There should be a constant collaboration among distance education professors, course designers and material providers. They can collaboratively interpret results and decide on every needed change such as renewed emphasis on certain language aspects, new instructional strategies, revisions in the curricula, modified textbooks, professors' retraining, etc.
3. Professors' training is imperative. distance education professors need back-up support and resources to function well in their field. Also, in-service training is essential so that professors can make decisions about what they should take from the examinations and what they should do in the classroom situations.

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