

A Review of the Pedagogical Implications of Examination

Washback

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Abstract

Tests are the primary source of change in the centralized educational systems. ‘Washback’ is the term used to express the effects of examination or testing on the process of teaching and learning. Till now, much has been said about the pedagogical influences of tests. However, the washback phenomenon is complex in its kind and the researchers have reported a gap between the hypothetical impact of washback and the empirical evidences collected from the ongoing research in this field. This was a review study with the focus to explore the pedagogical implications of washback on the stakeholders. For this purpose, different definitions of the term ‘washback’ and the like terminologies were elaborated. Secondly it drew on the empirical research taken in this direction. In the end, it suggested to the English language teachers some remedies to avoid negative influences of testing in the light of empirical findings from the previous research.

Key Words: Examination, washback effect, teaching and learning

1. Introduction

Testing is crucial to see the effectiveness of teaching and learning. Consequently, the teachers, students, testers, curriculum designers, policy makers, institutions and administration, all are affected by testing. In other words, society as a whole is influenced by testing in some way. High stakes test results are used as an engine to introduce desirable changes in teaching and learning around the world. Davies (1990:24) asserted that, ‘Testing is always used in teaching, in the sense that much teaching is related to the testing which is demanded of the students’. Hence, tests become an integral part of teaching and learning. Focusing on the importance of testing, Cheng, L. (1997) wrote that, ‘Traditionally, tests come at the end of teaching and learning process. However, with the advent of high stakes public examinations testing nowadays, the direction seems to be reversed. Testing usually comes before the teaching and learning processes’. Madaus (1988:84, as cited by Spratt, 2005:05) asserted that, ‘It is testing not the official stated curriculum that is increasingly determining what is taught, how is taught, what is learnt, and how it is learnt’. The teachers and students have been reported to change their teaching and learning strategies according to the demands of tests. Buck (1988:17 as quoted in Bailey, 1996:257) wrote that,

There is a natural tendency for both teachers and students to tailor their classroom activities to the demands of the test, especially when the test is very important to the future of the students, the pass rates are used as a measure of teacher success. This influence of the test on the classroom is, of course, very important, which is termed as washback.

Though it looks like a paradox, yet its significance in shaping the lives of the people cannot be neglected. This study attempts to give a brief review of literature available on washback effect. For a clear understanding of the related issues, it will focus on the following research objectives:

- i. To analyze various definitions on washback effect and the like terminology given by different scholars.
- ii. To analyze the hypothetical influences of the washback effect on teaching and learning.

- iii. To explore the implications of washback effect and give suggestions to the English language teachers on how to foster positive washback effect.

2. Definitions of the Term ‘washback’

2.1 The Term ‘washback’

Although most of the educationists and scholars are agreed on the basic definition that ‘washback’ is the influence of test on the classroom practices which can be either beneficial or harmful, yet there is found a variety of definitions indicating slight differences in meaning. Hughes (1989:01) wrote that the effect of testing on teaching and learning is washback. Spolsky (1994:02, as mentioned in Pan, Y 2009:257) asserted that washback deals with the side effects of examinations. Biggs (1995:03) stated that washback controls teaching methods and the students learning strategy besides curriculum. Messick (1996) also affirmed the verdict given earlier by Alderson and Wall (1993) that tests influence teachers and learners to do things which they would not otherwise necessarily do. He adds further (as quoted by Bailey, 1996:259) that, ‘the evidence of teaching and learning effect should be interpreted as washback...only if that evidence can be linked to the introduction and use of the test. These definitions clearly indicate that washback denotes influence that a test or exam can exert on teaching, learning and all stake holders involved in this process. Bailey (1996: 259, as cited in Spratt, 2005) wrote that washback is known as the ‘influence of testing on teaching and learning’. Pearson (1988:07) asserted that,

Public examinations influence the attitudes, behaviors and motivation of teachers, learners and parents, and because examinations often come at the end of a course, this influence is seen working in a backward direction, hence the term ‘washback (as quoted by Pan, Y. 2009).

Cheng (2008:08) claimed that washback is ‘an intended or intended direction and function of curriculum change on aspects of teaching and learning by means of a change in public examinations’. This definition covers more aspect than merely teaching and learning as advocated by most of the researchers. It focuses on the change of curriculum in the wake of teaching and learning styles.

2.2 The Other Similar Concepts

A review of the related literature reveals that there are found other similar concepts to explain this phenomenon. The term washback (as used by Buck 1988, Wall and Alderson 1993, Messick 1996, Bailey 1996, Pearson 1988, Cheng 2005) has been referred to as ‘**backwash**’ by Hughes 1989, Spolsky 1994, and Biggs 1995. Some scholars termed it as ‘**test impact**’, like Bachman and Palmer 1996, Wall 1997, McNamara 2000 and, Andrews 2004. Wall (1997:11, as cited in Pan, 2009) wrote that , ‘Test impact can refer to any of the effects that a test may have on individuals, policies or practices within the classroom, the school, the educational system or society as a whole’. Similarly, McNamara (2004:10) also asserted on the significance of test impact beyond the classroom settings. ‘**Systemic Validity**’ is the term used by Frederickson and Colling, 1989. They used to examine systemic validity influencing education system and curricular changes in fostering cognitive skill which a test intends to measure. Messick, 1989 termed the same phenomenon as the ‘**Consequential Validity**’ which encompasses concepts ranging from the uses of tests, the impact of testing on test takers and teachers, the examination of results by decision makers, and the potential misuse, abuse and unintended usage of tests (Pan, Y. 2009). Marrow (1986) referred to this phenomenon as the ‘**washback validity**’. He asserted that, ‘In essence, an examination of washback validity would take testing researchers into the classroom in order to observe the effect of test in action’.

The study shows that the same phenomenon has been explained using different terminology. The difference is that of the impact of washback on micro and macro levels. At micro level, the influences of test can be seen within the classroom; to the extent a test influences teaching methodology by the teacher and learning strategy by the learners. At macro level, the influence of test can be gauged from the point of view of program,

curriculum, institutions, administration, test developers, counselors and parents. In a nut shell, washback effect refers to the influences of a test has on all individual stake holders, like students and teachers and, society as a whole. All of the above mentioned definitions focus classroom settings involving teacher, learner, attitudes, learning, curriculum, teaching methodology and materials. These definitions tell little about whether washback effect is positive or negative.

3. The Hypothetical Influence of Washback

Alderson and Wall's (1993) hypothesis on washback effect, indeed, laid the foundation for the currently ongoing discussion in this field. To specify the phenomenon, they posed 15 possible hypothesis:

- 1) A test will influence teaching.
- 2) A test will influence learning.
- 3) A test will influence what teachers teach; and
- 4) A test will influence how teachers teach; and therefore by extension from (2) above:
- 5) A test will influence what learners learn; and
- 6) A test will influence how learners learn.
- 7) A test will influence the rate and sequence of teaching; and
- 8) A test will influence the rate and sequence of learning.
- 9) A test will influence the degree and depth of teaching; and
- 10) A test will influence the degree and depth of learning.
- 11) A test will influence attitudes to the content, method, etc., of teaching and learning.
- 12) Tests that have important consequences will have washback; and conversely
- 13) Tests that do not have important consequences will have no washback.
- 14) Tests will have washback on all learners and teachers.
- 15) Tests will have washback effects for some learners and some teachers, but not for others.

A number of empirical studies on washback effect verify these hypotheses fully or partially. Alderson and Wall (1993) have insisted on the necessity of more research on washback effect. According to them, an ethnographic investigation with, at the least, classroom observation should be incorporated with other methodologies employed for research and, the areas of motivation and performance should be explored with others.

Hughes' (1993) framework (Appendix 1) on washback is, however, somewhat different from the above mentioned 15 hypothesis on washback. He asserted on the changes washback effect can bring on the *participants, process* and *products* of teaching and learning. He said that:

The tracheotomy into participants, process and product allows us to construct a basic model of backwash (washback). The nature of a test may first affect the perceptions and attitudes of the participants towards their teaching and learning tasks. The perceptions and attitudes in turn may affect what the participants do in carrying out their work (process), including practicing the kind of items that are to be found in the test, which will affect the learning outcomes, the product of the work.

Mostly, the empirical researches on washback effect have encompassed the participants, process and product tracheotomy of Hughes' framework. The *participants* to be influenced by washback effect are recognized as language testers, teacher trainers, teachers, learners, parents, counselors, administrators, material developers, curriculum designers sponsors and funding bodies, government bodies, the public, various national and international examination authorities, 'all of whose perceptions and attitudes towards their work may be affected by a test'. The *process* includes 'any action taken by the participants which may contribute to the process of learning'. And, the *product* includes 'what is learnt (facts, skills etc.) and the quality of learning (fluency, etc.).

Washback affects differently to its stakeholders. The major impact receivers however, are recognized as teacher and learners. Whereas, teaching and learning change with the thought of testing. Shohamey (1993) reported in her study different changes taking place in classroom instructions as the exams drew nearer. The teacher started reviewing the text instead of teaching new text. The textbook was replaced with the worksheets of the previous year. The classroom atmosphere was all 'test-like'. Some extra sessions were added to the class instructions hours to review thoroughly the material already covered. The students were motivated by the teacher to have mastery on the exam material.

The learners' strategy is also reported to change with the idea of examination. Eckstein and Noah (1993) wrote that, 'They (the students) have had little incentive to study anything that will not be on examination paper. There is no time in their classes to explore questions that are unlikely to come up in the test'. Bailey (1996) wrote that confronted with an important examination, the students may be involved in one or all the following practices (but not limited to them, of course):

- Practising items similar in format to those on the test.
- Studying vocabulary and grammar rules.
- Participating in interactive language practice (e.g., target language conversations).
- Reading widely in the target language.
- Listening to non-interactive language (radio, television, etc.).
- Applying test-taking strategies.
- Enrolling in test-preparation courses.
- Requesting guidance in their studying and feedback on their performance.
- Enrolling in, requesting or demanding additional (unscheduled) test-preparation classes or tutorials (in addition to or in lieu of other language classes).
- Skipping language classes to study for the test.

All of the above mentioned changes in teaching and learning process affect either positively or negatively to the participants, processes and products of teaching and learning. The following is a brief detail of these two types of washback effect.

3.1 Positive and Negative Washback Effect

Wash back operates differently in different situations. In itself, washback is a neutral term which can infer positively or negatively on the stakeholders (Buck, 1988 and Shohamy, et al, 1996). Bailey (1996:269) said, 'Washback can either be positive or negative to the extent that it either promotes or impedes the accomplishment of educational goals held by learners and/or program personnel (as quoted by Spratt, 2005). Most of the prevalent research, however, seems to be done to trace the so called negative washback effect of testing. Tests have their effects on the stakeholders, there is no doubt in it, yet what is the direction of these effects and how much influential these effects are, is still hard to trace. More research is needed in this direction to decide clearly the intensity and direction of it. Some researchers, however, have set a rough criterion and demonstrated some apparent symptoms to decide whether the test influence is positive or negative. Alderson and Wall (1993, as cited in Djuric, 2008:17) indicated that if teachers use tests to make their students pay more attention to learning, it is positive influence of testing. If the teachers narrow curriculum to make their students more sharp on the exams, it will be a negative influence of testing on the students learning. And normally, these will be a result of the teachers' fear of their students' poor results. Alderson and Wall (1993) asserted that,

If there were no conflicts in the aims, activities, or the marking criteria of the textbook and the exam, and if teachers accepted these and worked towards them, then a positive washback could be assumed to have occurred. Teachers would be teaching the textbook because they would realize that any of the text types or tasks therein might appear in the final exam.

Pan (2009) however, summarized the positive washback effect in the following points:

- i. Tests induce teachers to cover their subjects more thoroughly, making them complete their syllabi within the prescribed time limits.
- ii. Tests motivate students to work harder to have a sense of accomplishment and thus enhance learning.
- iii. Good tests can be utilized and designed as beneficial teaching-learning activities so as to encourage positive teaching-learning processes.

Shohamey (1992, as quoted by Bailey, 1996:266) indicated some conditions which can promote negative washback. She writes that:

After all, when reliance is on tests to create change; when emphasis is mostly on proficiency and less on the means that lead to it (i.e., what takes place in the classroom as part of the learning process); when tests are introduced as authoritative tools, are judgemental, prescriptive, and dictated from above; when the writing of tests does not involve those who are expected to carry out the change—the teachers; and when the information tests provide is not detailed and specific and does not contain meaningful feedback and diagnosis that can be used for repair; it is difficult to expect that tests will lead to meaningful improvement in learning.

Anderson, et al (1990) mentioned the habit of rote memorization in learners as a negative washback effect. Major discrepancies have been reported between test developers' intentions and that of the classroom practices which lead to create negative washback effect. Drawing on the possibility of negative washback effect, Alderson and Wall (1993) wrote that,

There was always a possibility that the exam and the textbook would be pulling in different directions...the most obvious danger was that teachers might concentrate on reading and writing rather than listening and speaking, since the oral skills were not to be tested. There were several other ways in which the examination could work against the textbook if it did not reflect the goals as fully as it should have. This would constitute negative washback'.

The following summarized hints, however, were forwarded by Pan (2009) to indicate negative washback effect:

- i. Tests encourage teachers to narrow the curriculum and lose instructional time, leading to "teaching to the test."
- ii. Tests bring anxiety both to teachers and students and distort their performance.
- iii. Students may not be able to learn real-life knowledge, but instead learn discrete points of knowledge that are tested.
- iv. Cramming will lead students to have a negative washback toward tests and accordingly alter their learning motivation.

In a nut shell, positive washback induces meaningful and effective learning activities in classroom. The teachers will focus on completing the syllabus. The learners will feel incentive in a thorough learning of all language skills. On the higher level educational settings, the school authority will use testing to achieve educational goals. But it will turn to negative washback effect if the authority uses these tests to get power and create anxiety among school staff and students.

3.2 How to Foster Positive Washback Effect?

Shohamy (1993:515) emphasized on the timely and detailed provision of test scores which are easily interpretable to foster positive washback effect from testing. Test scores should be credible for the test-takers (Spratt, 2005). Cheng (1997) wrote that teachers' selection of methodology is affected by the thought that the students have to take a certain test. The teacher has been recognized as the most prominent figure to reduce the negative washback effect from testing. Bailey (1996) holds that the objectives and goals of examination should be clearly articulated to foster beneficial washback, make sure whether the test measures what the program

intends to measure, ... and must be based on sound theoretical principles which are widely accepted in the field since a narrow view of linguistic competence has been replaced by a broader perspective on communicative competence. Similarly, Hughes (1989, p44-46) asserted that those skills should be tested which are intended to promote in students, through direct testing and criterion-referenced. Hughes (1989: 1) wrote that those abilities of the learners should be tested whose development is to be encouraged. The testers should be unpredictable in testing and, a wide array of samples should be considered while modeling the tests. Moreover, direct testing can be better than an indirect one. The objectives of learning should be kept in mind in testing the learning outcomes. The testers should be prudent enough in making understandable tests for both, the teachers and the learners. A co-ordination between the teacher and testers can also prove helpful in fostering positive washback effect. Bailey (1996:276-277) posed the following eight questions to find out whether testing will bring positive washback effect on teaching and learning, or not:

- 1) Do the participants understand the purpose(s) of the test and the intended use(s) of the results?
- 2) Are the results provided in a clear, informative and timely fashion?
- 3) Are the results perceived as believable and fair by the participants?
- 4) Does the test measure what the program intends to teach?
- 5) Is the test based on clearly articulated goals and objectives?
- 6) Is the test based on sound theoretical principles which have current credibility in the field?
- 7) Does the test utilize authentic texts and authentic tasks?
- 8) Are the participants invested in the assessment processes?

4. Some Pedagogical Implications of the Washback Effect

Parents' involvement in the process of assessment has also been reported to affect positively. Cheng, et al (2011) study included the parents' perspectives on students' examinations. His two surveys, one with the students and the other with the parents' show a close relationship with each other on the issue of school based assessment. Rea-Dicken (1997: 311) emphasizes on an active involvement of all stake holders in the assessment system. She wrote that,

The benefits of enhancing fairness through stakeholder approaches to assessment are clear. If teachers are given opportunities, starting through dialogue and working with the materials to develop a greater understanding of assessment process, then they in turn, will become better skilled in constructing tests. Learners should learn to become better test takers. Stakeholders' involvement promotes democratization, and it leads to more local control, thus promoting greater fairness within assessment and teaching practices.

4.1 Teacher's Role

The teacher's role has been emphasizes throughout the literature on washback to reduce its negative influences on teaching and learning. Bailey (2005) wrote that, 'We may have limited power to influence high stakes national and international examinations, but we do have tremendous power to lead students to learn, to teach them language and how to work with tests and test results'. The beliefs of teachers play crucial role in determining the impact of washback. Spratt (2005) asserted that the role of teacher, indeed, decides the intensity and direction of the washback effect. Spratt (2005:17) stated that:

The type and amount of washback on teaching methodology appears to vary from context to context and teacher to teacher. It varies from no reported wash back to considerable washback. The variable in these differences appears to be not so much the exam itself as the teacher...Nevertheless, the empirical studies reviewed (on washback effect) indicate strongly that an exam cannot of itself dictate what and how teachers teach and learners learn. Degree and kinds of washback occur through the agency of

various intervening bodies and are shaped by them. An important and influential agent in this process is the teacher.

Teacher Assessment Literacy (TAL) is another idea forwarded by some scholars (Kiomers, 2011). It is argued that teachers are normally not much aware of the philosophy of evaluation which brings negative impact to the students' learning. If teachers possess appropriate knowledge of testing, they can hinder the negative washback effect on their teaching and students' learning. Inbar-Lourie (2008) also asserted that the traditional assessment training to the teachers has led to produce negative impact of testing on the teaching and learning process. Teachers' fear of the poor results of students' exam can be reduced by involving them in the process of high stakes testing along with teaching. Exam-specific teacher's training has been suggested by some researchers which can improve communication between testers and teachers. Likewise, the testers should get course-specific training (Djuric, 2008).

4.2 How to Investigate Washback

How to investigate washback effect has remained a matter of concern for the researchers. The intensity and direction of washback effect is not easy to determine since numerous personal and contextual factors interact in determining the impact of testing on the classroom practices (Watanabe 2004, Alderson and Hamp-Lyons 1996). Some researchers seem to be skeptical about its occurrence even. Alderson and Wall (1993) pointed out in their study that,

what we did not know... was just how difficult it would be to determine whether washback has occurred at all, and to decide, if there were no evidence for it, whether this was because there was no such thing or because there were conditions in the educational setting that were preventing it from getting through (as cited in Cheng, 1997).

Alderson and Wall (1993) advocate 'a series of proposals for research' which indicates the necessity of further research in this field. Spratt (2005) has emphasized on classroom observation and a triangulation of data source. This seems appropriate since the prevailing empirical research has used either classroom observation, or learners, teachers' or parents' perception, or experimental design with pre-test/post-test, etc. Very few researchers have combined the research methodologies to evaluate the phenomenon.

5. Discussion and Conclusion

"Washback is presented as a stimulus for a change and as a bridge for efficient communication between teachers and testers" (Djuric, 2008). Though washback effect is not a new concept in the annals of educational assessment and its history can be traced in as early as Latham (1877), yet empirical evidence to this effect is comparatively new (Cheng, 2011). There is found a lack of understanding as to how washback works (Alderson and Wall, 1993). The focus of most of the studies has remained to investigate positive or negative washback effect on teachers, students, teaching methodology, learning strategies, students and teachers' attitudes and beliefs, course content or teaching materials, etc. The researchers have emphasized on the congruity between tests and curriculum objectives, learners' self evaluation, meaningful feedback, authentic tasks, a variety of testing and tasks, an increased understanding of testing criterion by the teachers and students, detailed score reporting by the testers, etc. (Bailey, 1996; Hughes, 1989; Messick, 1996; Shohamy, 1992; Bachman and Palmer, 1996).

Washback is not inevitable and also that it is malleable (Spratt, 2005). The test scores being used as accurate information of the students' learning is also not very credible in all cases. The ethical issues are also subject to public questioning (Smith, 1991). Spratt (2005) concluded that, 'an exam cannot of itself dictate what and how teachers teach and learners learn. Degrees and kinds of washback occur through the agency of various intervening bodies and are shaped by them.'

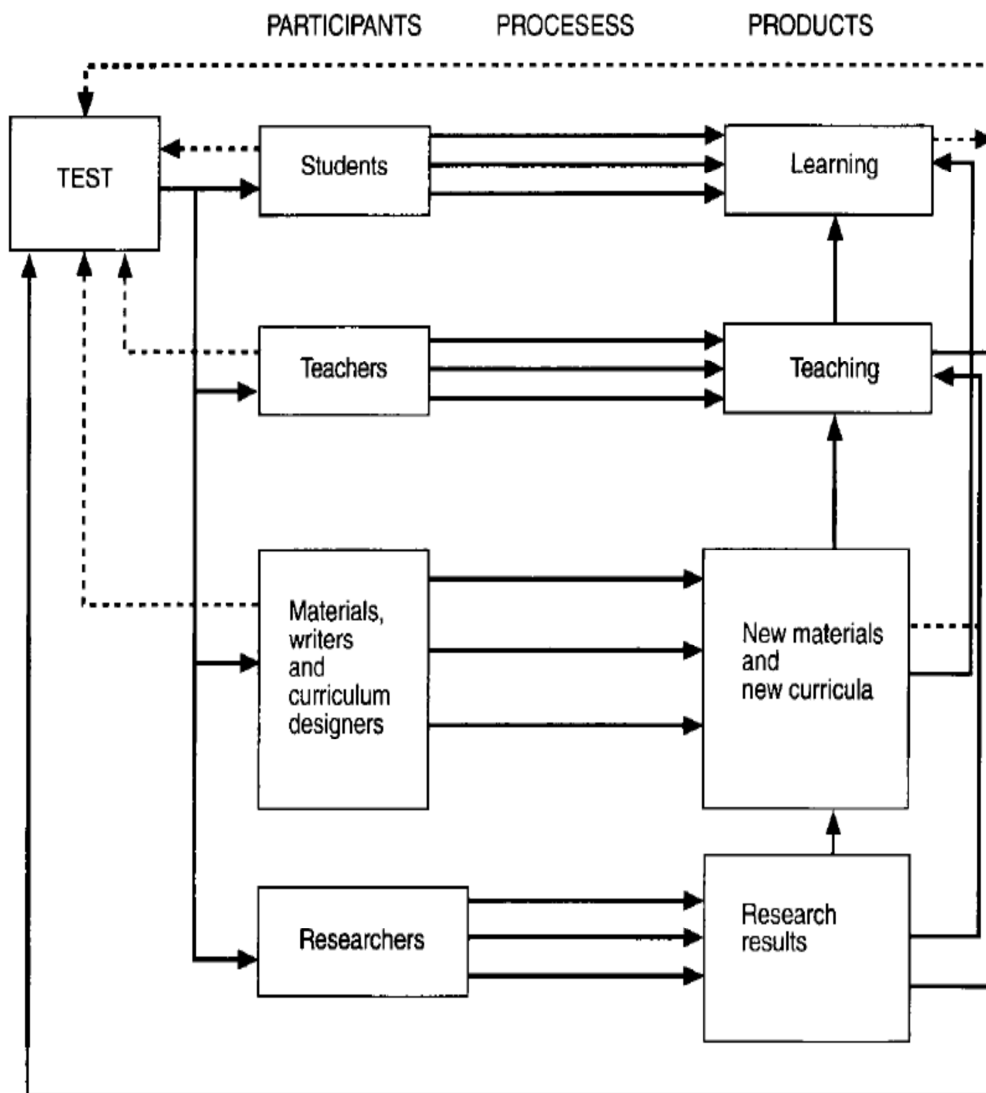
This study does not claim to include all empirical research till now done on washback effect. Examinations are crucial and all efforts should be directed to bring out positive washback effect from testing. The variety of terminology used for it does not indicate difference of meaning since the focus of every term used for it has one focus of studying the influences of testing on the process of teaching and learning. The prevailing empirical research lacks in leading towards any specific direction or indicating intensity of the washback effect. Still many vague ideas prevail which make washback a speculative phenomenon. Most of the researches taken till now fail to include multifarious perspectives involved in shaping washback and, all efforts have been put to prove the so called negative washback effect from examinations without considering complexity of the phenomenon. Teachers' assessment literacy is a comparatively new idea which should be rooted in the pre-service and post-service teachers training programs. There is a need to undertake larger studies to bring about generalizable results.

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Appendix 1 Washback model on Hughes (1993) framework



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