

Article

Washback Effect of the Achievement Test on English Teaching in Senior Secondary Vocational Schools in Beijing

Haixia Liu

Beijing Academy of Educational Sciences, China

Received: 15 September 2021/Accepted: 31 January 2022/Published: 30 March 2022

Abstract

Assessment reform has been one of the major concerns of English teaching reform in senior secondary vocational schools in China. The Achievement Test on English Teaching in senior secondary vocational schools in Beijing was launched in June 2015 to better assess the effects of English teaching and learning in senior secondary vocational schools. Students who have completed the basic module of the English course take the test. This paper reviews briefly the history of achievement test, discusses the research on washback at home and abroad, and analyses the structure and components of the achievement test carried out in Beijing. It focuses on the washback effect of the achievement test in particular by comparing and contrasting the expected effect of the test with the real feelings and behaviors of teachers, thus providing implications for English teaching and learning. This paper concludes with the observation that while the achievement test has a number of positive effects, efforts nonetheless need to be made to prevent any potential negative effects.

Keywords

Washback, achievement test, senior secondary vocational school, English teaching

1 Introduction

The achievement test is a test that directly related to language courses. Its purpose is to establish how successful individual students, groups of students, or the courses themselves have been in achieving objectives (Hughes, 1989). Achievement test examines students' mastery of learning content and their achievements based on curriculum standards (Cui, 2010). It reflects the requirements for education at different levels in China (Chen, 2009) and plays an important role in teaching and learning. In fact, the achievement test has attracted great attention from researchers in China and abroad (Birenbaum & Dochy, 1996; Cui, 2007, 2008, 2010; Han, 2006; Hong, 2008; Lei, 2012; Liu & Wang, 2016; Rudner & Schafer, 2002; Vinovski, 2001; Yang & Cui, 2010; Zhang & Cui, 2010). In general, these studies explored issues of reliability, validity, design of test questions, marking criteria and test methods. However, few scholars have focused on the washback effects of the achievement test on teaching. Alderson and Wall, based on

many years of theoretical and empirical study, point out that every test, regardless of its scale, would to some extent affect related participants (Alderson & Wall, 1993).

With the promulgation of the “Syllabus of English Teaching in Senior Secondary Vocational Schools” (hereinafter referred to as the “Syllabus”) on April 1st, 2009, Senior Secondary vocational schools vigorously promoted diagnostic teaching and improved teaching quality in order to enhance the quality of education. As a result, most provinces and cities in China began to carry out the achievement test on English teaching in senior secondary vocational schools. Through the test, they not only want to evaluate how successful students have achieved the learning objectives but also expect to improve the quality of teaching by asking questions such as: Does the test have any impact on the curriculum and English teaching? Does the influence of the test have regional differences and How does it affect teaching practices? Based on research on the achievement test on English teaching in senior secondary vocational schools in Beijing, this study explores the washback effect of the achievement test on English teaching and learning in senior secondary vocational schools.

2 Literature Review

Washback refers to the impact of a test on teachers, students and teaching practices. It directly affects the assessment of the quality of the test (Alderson & Wall, 1993; Qi, 2004; Shohamy, 1992). Since the concept of the washback was first discussed, related studies have gained great attention. In 1993, Alderson & Wall presented a theoretical framework for washback effect, including 15 hypotheses and impacts on teaching practices and learning behaviors. Later, Hughes (cited in Bailey, 1996) proposed that the washback effect involves three factors: *participants*, *process* and *product*. In the framework, *participants* include teachers, students, materials developers and curriculum designers; the *process* refers to any test participants’ action that may be beneficial to the process of learning; and the *product* refers to what is learned in the process through participants’ different actions. According to Hughes’ washback model, a test will have a direct impact on participants, while different behaviors adopted by participants in the process will produce corresponding products. Based on Alderson & Wall’s hypotheses and Hughes’ model, Bailey (1996) further divided the washback effect of a test into the washback on learners and that on teaching management. She also proposed a model that focuses on promoting the positive washback of a test. Bailey’s model reveals the complexity of its mechanism, thus providing an operable and instructional framework for further studies.

Some educators in China have also carried out studies on washback. Related studies include theoretical studies (Zhan & Shi, 2016; Zou & Dong, 2014) and covers the College English Test (CET-4 and CET-6) (Gu, 2013; Jin, 2000), the Test for English Majors (TEM-4 and TEM-8) (Zou & Xu, 2014) and the college entrance examination (Qi, 2004). However, few people have carried out studies on the washback effect of the achievement test (Wang, 2014; Pang, 2007). This study searched 12 core foreign language journals and journals of key universities on CNKI for articles and papers on washback published from 2009 to 2018, but failed to find any study related to the washback effect of the achievement test. This reveals that currently there is a lack of studies on the washback effect of the achievement test, especially the achievement test on English teaching in China’s senior secondary vocational schools. However, with the deepening of the English teaching reform in senior secondary vocational schools, especially with the publication of the new curriculum standards, the implementation of achievement test in senior secondary vocational schools will inevitably be put on the agenda. Questions such as how to scientifically and comprehensively assess students’ comprehensive language ability and key competencies and how to establish a good interaction between testing and teaching will increasingly attract attention.

In order to promote the implementation of the “Syllabus”, Beijing began to implement the achievement test in senior secondary vocational schools in 2015. The test adopts hybrid constructs,

examining students' English language ability in their daily and workplace communication on the basis of topics described in the "Syllabus" (see Appendix 1). Since the implementation of the test, the number of senior secondary vocational schools and students participating in it has gradually increased and stabilised. Table 1 shows that the number of schools participating the test has increased from the original 13 to 30 schools, with the number of students also increasing from 1,175 to over 5,000 from the year 2015 to 2020, with the number of schools reaching 163 and students 24,889. As a result, the role of the test in teaching evaluation has become increasingly more prominent.

Table 1

Number of Schools and Students Participating in the Achievement Test

Year	Schools	Students
2015	13	1,175
2016	28	3,911
2017	32	5,177
2018	30	4,601
2019	30	4,537
2020	30	5,488
Total	163	24,889

3 Research Methodology

Quantitative and qualitative methods were adopted to study the washback effect of the achievement test on English teaching in senior secondary vocational schools in Beijing. Research methods consisted of quantitative method of questionnaire survey (see Appendix 2 for the questionnaire) and qualitative method of interview (see Appendix 3 for the interview questions).

The questionnaire (see Appendix 2) was designed in written form and included three parts. The first part comprised five multiple choice items concerning basic information; the second part comprised four multiple choice items concerning respondents' (mainly teachers and related staff) attitudes towards the influence of the achievement test on the English curriculum in their schools; the third part comprised 12 questions, in the form of a five-point Likert scale, eliciting respondents' attitudes towards the effect of the test on English teaching. After the questionnaire was designed, four experts and six teachers were invited to review the contents. After two rounds of testing, questions of ambiguity or repetition were revised and the final draft was produced.

In order to collect valid data, a list of interview questions (see Appendix 3) was also prepared for this study. The list consists of 10 questions which mainly concern teachers' view of the achievement test and their attitude towards the influences of the test on English teaching in their schools.

4 Data Collection

The subjects of this study consist of 124 teaching staff and teachers (administrators, heads of teaching and research sections) from 30 secondary vocational schools in 14 districts in Beijing. These schools involve urban schools from six districts and suburban schools from eight districts. All staff and teachers have related work experience with the achievement test. Table 2 shows the proportion of subjects.

Table 2

Composition of Subjects (N=124)

		Number	Proportion (%)
Source	Urban schools	72	58.06
	Suburban schools	52	41.94
Years of Teaching	More than 15 years	48	38.70
	6-15 years	47	37.90
	2-5 years	17	13.70
	Less than 2 years	12	9.70

A total of 124 questionnaires were distributed and collected, of which 119 were valid, with a return rate of 95.97%. After the questionnaires were collected, 10 interviewees were selected by stratified sampling according to the 8 levels of three factors: school type, source and identity of the subject. Each teacher was interviewed in Chinese for 45~60 minutes and the interviews were recorded after gaining participants' consent. After that, the data collected from the questionnaires were analysed via SPSS 21.0 and the audio documents of the interviews were transcribed into texts in Chinese for qualitative analysis.

5 Results

After the questionnaires were collected, the internal consistency reliability was tested. As a result, with basic information being excluded, the questionnaires showed a reliability (Cronbach's Alpha) of 0.91, indicating that the questionnaires had good internal consistency and high reliability, and hence were suitable for subsequent data analysis.

Results of the interviews are similar to that of the questionnaires. The questionnaires focus on the influences of the test on English teaching practices, while the interviews provide abundant material for understanding the above-said influences as well as how these influences happened.

5.1 Influence of the achievement test on the English curriculum

"Curriculum" in this study covers timetable arrangements, teaching contents and teaching schemes, which are reflected in four questions (Qx, Qy, Qr, Qi) in the questionnaire. Frequency statistics of the four questions reveal that the timetable arrangement of almost all schools have met the requirement of the "Syllabus", among which 47.06% of schools have more English classes than regulated. Meanwhile, nearly all schools are using national-planned textbooks, while 18.49% of the schools, based on their own needs, also supplement teaching contents to further develop students' language ability. Teaching schemes of 97.48% of schools are made by the Academic Affairs Office which also carries out overall management of the teaching of each class. Besides, intensive tutoring was arranged before the achievement test in 25 (78.79%) schools.

Moreover, it is also demonstrated by the interview materials that the test has an influence on the English curriculum. The sentence "More importance is attached to English course" was mentioned 33 times in the interviews, while the sentence "The school gives more policy support to English teaching and takes more effective measures to improve the quality of teaching" 24 times. The emphasis on English curriculum in schools and the measures taken to improve the quality of English teaching are mostly reflected in the teaching, the standardization of textbooks, the optimization of teaching schemes and the improvement of the teacher evaluation system were reiterated by participants.

LY is an administrator in a senior secondary vocational school. The interviewee has been responsible for the test organization of several times. LY stated:

After the achievement test, our school attached more importance to English courses. We increased English teaching hours and improved the teaching evaluation system. There will be rewards if the grades exceed the whole city's average.

Administrators' positive change of attitude towards the English curriculum and measures taken reflect the positive washback effect of the achievement test on the English curriculum. What's more, the influence of the test on school management also lies in the improvement of the teaching scheme and textbooks.

ZH, an English teacher of a secondary vocational school, has tutored students who were preparing for the achievement test. ZH stated:

In our school, the principal, who is in charge of teaching affairs takes charge of the test. Since the test began in 2015, we have modified our English teaching scheme, adjusted the teaching schedule and added periods in order to meet the requirements of the test. We also switched to use the state-planned textbooks.

DM is the director of the English teaching and research section in a senior secondary vocational school and a "the Lead Teacher of Beijing". The interviewee has participated in developing test tasks for the achievement test. DM stated:

The most important feature of our school is that we organised the English teaching and research section to design a plan for intensive tutoring before the test. We designed 10 modules according to the topics in the "Syllabus" and then carried out a two-week systematic review and tutoring. The effect was quite evident.

In conclusion, the achievement test has had a positive influence on the setting of the English curriculum in senior secondary vocational schools in Beijing, which are seen from the extra periods and improvement of teaching management and textbooks. The interview content reflects the positive attitudes of the school administrators to the test. In addition, measures taken to better cope with the test have enhanced the positive effect of the test.

5.2 Influence of the achievement test on English teaching

The "teaching" discussed in this study refers to teaching practices and learning behaviors in the classroom as well as the teacher's attitude towards courses and teaching research, which had direct impact on classroom teaching. These are reflected in the 12 questions in the third part of the questionnaire. An exploratory factor analysis of these 12 questions was carried out in order to clarify their construct validity to achieve dimension reduction. First of all, the KMO (Kaiser-Meyer-Olkin) test and Barlett's test were carried out. Results showed that the KMO value was 0.938 and the significance level of the Barlett's test was significant ($p=0.00$). Therefore, the construct validity of the Likert scales in the third part is ideal and exploratory factor analysis can be carried out. Principal component analysis was adopted to extract factors with eigenvalues exceeding 1 and factor loading greater than 0.5. As a result, three factors were extracted with a total variance accounting for 86.42% as shown in Table 3.

Table 3

Loading of Top 3 Factors

Factor	Eigenvalue Details			Variance Explained before Rotation			Variance Explained Rate after Rotation		
	Eigenvalue	Variance Explained	Total (%)	Eigenvalue	Variance Explained	Total (%)	Eigenvalue	Variance Explained	Total (%)
1	9.25	77.11%	77.11	9.25	77.11	77.11	4.11	34.25	34.25
2	2.66	5.57%	82.68	2.66	5.57	82.68	3.16	26.36	60.62
3	1.54	3.728%	86.41	1.54	3.72	86.41	3.09	25.79	86.41

Table 4

Factor Score Coefficient Matrix

Items	Factors		
	1	2	3
After the implementation of the test, I pay more attention to the development of students' comprehensive language use.	0.746		
After the implementation of the test, I increase contents related to practical application.	0.664		
After the implementation of the test, I pay more attention to the teaching of basic knowledge (e.g. vocabulary).	0.743		
After the implementation of the test, I make more efforts to improve students' listening and speaking.	0.856		
After the implementation of the test, I make greater effort to improve students' reading.	0.828		
After the implementation of the test, I make greater effort to improve students' writing.	0.895		
After the implementation of the test, I am more aware of the aims of the English curriculum.		0.833	
After the implementation of the test, I have become more aware of the requirements of the "Syllabus" in terms of language ability.		0.738	
After the implementation of the test, I have become more aware of the requirements of the "Syllabus" in terms of teaching evaluation.		0.845	
The test has promoted English teaching reform in my school.			0.811
The test has promoted the English teaching in my school.			0.805
The test has promoted the teaching research in my school.			0.703

Table 4 shows that Factor 1 includes six questions, covering changes in classroom teaching after the achievement test was implemented. Therefore, this factor is named "Influences of the achievement test on classroom teaching". Factor 2 consists of three questions concerning changes of teachers' attitudes towards courses. Therefore, this factor is named "Influences of the achievement test on teachers' attitude towards English course". Factor 3 includes three questions, covering changes in teaching research after the implementation of the test. Therefore, this factor is named "Influences of the achievement test on teaching research".

Among all the questions in Factor 1, "Influences of the achievement test on classroom teaching", the question with the highest average score is "After the implementation of the test, we pay more attention to the teaching of basic knowledge." ($M=4.218$, $SD=0.567$), followed by the item "After the implementation of the test, we increase content related to practical applications." ($M=4$, $SD=0.59$) This indicates that the construct of the achievement test has played a positive guiding role in English teaching in senior secondary vocational schools. After the implementation of the test, teachers paid more attention to students' language foundation and learning needs, striving to promote students' English language ability. In this way, the previous textbook-oriented and content-targeted teaching situation has been improved. Moreover, the construct that tests students' capability of language use in real-life situations also has an obvious effect on English teaching. According to the analysis of the interviews, 71.42% teachers indicated that after the implementation of the test they paid great attention to situational language teaching, and to establish connections between teaching contents and practical use, aiming to cultivate students' language competence. To a large extent, this has changed the previous teaching practice of paying all attention to language itself, so that English classroom teaching is now more in line with the concept and requirements of the "Syllabus".

Factor 2 has the highest average score among the three factors, showing that the achievement test has the most significant effect on this factor. The average scores of the three questions are 4.18, 4.22 and 4.23 respectively. This indicates that after the implementation of the test, teachers become significantly more familiar with the objectives, teaching contents and requirements of evaluation in the “Syllabus”, which provides a quality guarantee for English teaching practices. The achievement test is a criterion-referenced test that aims to examine teaching results based on the “Syllabus”. The conception, contents and criterion of the test are based on the “Syllabus”. Therefore, after the implementation of the test, schools pay more attention to learning and studying the contents of the “Syllabus”. What’s more, teacher training courses organised by teaching and research institutes of the city also help teachers better understand the contents of the “Syllabus”. Hence the test indeed has an obvious impact on improving teachers’ cognition and understanding of the “Syllabus”.

Descriptive statistics of Factor 3 data were then analysed. Table 5 shows that changes in English teaching reform, research activities and teaching research after the implementation of the test are positive. Teachers hold positive attitudes towards the other two questions except for the question concerning teaching research which has a slightly lower score. Especially with regard to research activities, 98.32% of subjects believed that the test has helped improve the quality of English research activities in their schools. Accordingly, the majority of subjects maintained that the test has promoted the English teaching reform and teaching research. This indicates that though the test requires schools and teachers to invest more time and energy, it is recognised as both effective and worthwhile by researchers and English teachers. Meanwhile, the test has played a positive role in English teachers’ seminar and English teaching research.

Table 5

Descriptive Statistics of the Influence of the Achievement Test on Teaching and Research

	Teaching Reform	Research Activities	Teaching Research
Positive	93.27%	98.32%	89.07%
No Influence	6.72%	1.68%	10.92%
Negative	0	0	0

The positive washback of the test on teaching is also verified by the interviews. “Classroom teaching changes” appeared in interviews 65 times. When talking about “classroom teaching changes”, “teachers’ changes” appeared 38 times, “students’ changes”, 27 times, “research activities”, 22 times, “subject study”, 11 times and “teaching reform”, 10 times. After the implementation of the achievement test, teachers’ beliefs of teaching has been updated, students are more motivated and more measures for teaching reforms were taken in schools. These represent the positive influences of the test.

WY is an English teacher in a senior secondary vocational school, who has tutored students for two consecutive years before they participated in the test. WY stated:

I think the achievement test has a greater influence on teachers. Take myself as an example. I experienced great changes in teaching after the implementation of the test. Before the test, I mainly focused on the contents of the textbooks. But now it’s different. I don’t make every effort to teach the content in the textbooks only. That’s because questions in the test are situated in real contexts so as to evaluate students’ ability to use language to do things. Therefore, I now attach greater importance to creating situations in teaching. In daily life, I also pay attention to accumulating such resources. I often take notes of authentic language materials encountered in daily life and apply them to the teaching when teaching similar topics. As for the effects on the class, my present (classroom teaching) is more popular with students, which makes me feel better.

CJ is director of the English teaching and research section and a Senior Teacher, who has participated in developing test items of the achievement test. CJ stated:

Teachers play a significant role in the achievement test. They study the characteristics of the examination papers and adjust their teaching practices accordingly to meet the requirements of the test. For example, the achievement test mainly examines students' ability to use language in a real context, so teachers should consider whether their teaching practices can cultivate students' language competence. If a teacher only used to emphasize the learning of language points before, they should immediately adjust their teaching practices. Only in this way can they improve their teaching efficiency.

The kernel of the washback effect of the achievement test lies in the influence on teaching. Positive guidance on teachers' belief of teaching is produced through test constructs, and teachers optimise their teaching content and teaching quality through teaching design and teaching activities. This reflects the washback effect of the achievement test.

In addition to influences on teachers, impacts on students also reflect the washback effect of the test. The test's psychological and behavioral influences on students directly affect the test quality and students' quality of learning.

JQ is a Senior Teacher in a senior secondary vocational school, who has participated in organising the achievement test in the school. JQ stated:

The achievement test indeed has influences on students, especially on their motivation for learning. After all, this is an important exam. From the day they entered this school, school administrators, classroom teachers and teachers have been constantly emphasising the importance of the test. So, most of the students want to take the chance to prove their ability and competence.

ZH is an English teacher with an intermediate title in a senior secondary vocational school, who has tutored students several times to prepare for the test before they participated in the achievement test. ZH stated:

The achievement test certainly has an impact on students. This impact is particularly noticeable for students who perform better in their daily studies because they follow closely their teachers' instructions on preparing for the test. Test results also show that such students usually get good grades.

The achievement test helps students set a clear short-term goal. This can effectively stimulate their internal learning motivation and arouse their subjective initiative in the process of learning. Consequently, they would actively set their own goals and adjust learning strategies, thus improving learning efficiency.

Teaching research is one of the important factors that influence the quality of classroom teaching. The test has an impact on teaching research, through which the quality of classroom teaching is indirectly improved. This is an important way for the achievement test to produce positive washback.

WZ is a Senior Teacher and administrator in charge of teaching research in a senior secondary vocational school, who has participated in the organising of the achievement test in the school several times. WZ stated:

One of the commendable things of our school is that all the English teachers have thoroughly studied the achievement test paper after the test was implemented in Beijing. They have looked at the structure of the test paper and the characteristics of the test questions and analysed and discussed it all. These inspiring studies help teachers better understand the achievement test and adjust their teaching practices accordingly. The results prove the importance of these studies. Students in our school have got good grades in recent years and our teachers' teaching has greatly improved due to the emphasis placed on our teaching-research activities.

To sum up, the achievement test has had a positive washback on English teaching in senior secondary vocational schools, mainly reflected by the positive guidance in terms of teachers' belief of teaching and the impact of this on students. Specifically, teachers have a more accurate understanding of course objectives and requirements and their teaching design and teaching activities are more effective; students have a stronger learning motivation and more actively participate in learning activities; more teaching experiments, and teaching reform activities focused on the achievement test have been carried out.

The interview content reflects that the adjustments made by teachers, students and researchers in school according to the requirements of the achievement test are important to the washback effect of the test. These are important for the washback model of the achievement test.

5.3 Influence of the achievement test on schools

The English curriculum and the development of teaching activities in senior secondary vocational schools are organised and carried out at the school level, so comparatively speaking, the influence of teachers, as individual factors, on these aspects is relatively small. Therefore, this study made a differential analysis of schools in different regions of Beijing.

Table 6 shows the results of the independent sample t-test for each factor. The results indicate that on the premise of normal distribution and homogeneity of variance, respondents from different regions (urban schools and suburban schools) showed no significant difference ($p > 0.05$) in Factor 1 "Influences of the achievement test on classroom teaching", Factor 2 "Influences of the achievement test on teachers' attitude towards English courses" and Factor 3 "Influences of the achievement test on teaching research". Therefore, the setting and geographical location of the school has no significant impact on the washback effect of the achievement test on teaching and research.

Table 6

Subjects' Attitudes towards the Washback of the Achievement Test on English Teaching

	Your school is a (an) (average score \pm standard deviation)					
	Urban Schools (N=55)		Suburban Schools (N=47)		t	P
	M	SD	M	SD		
Influences of achievement test on classroom teaching	4.15	0.99	4.17	0.96	-0.12	0.89
Influences of achievement test on teachers' attitude towards English courses	4.00	1.11	4.00	1.04	0	1
Influences of achievement test on teaching research	4.04	1.14	4.04	1.08	-0.02	0.97

The interviews reflect that teachers and administrators from schools in different regions have no significant difference in understanding the achievement test and attitudes towards the influence of the test on teaching. Therefore, the regional difference has no obvious impact on the washback effect of the achievement test.

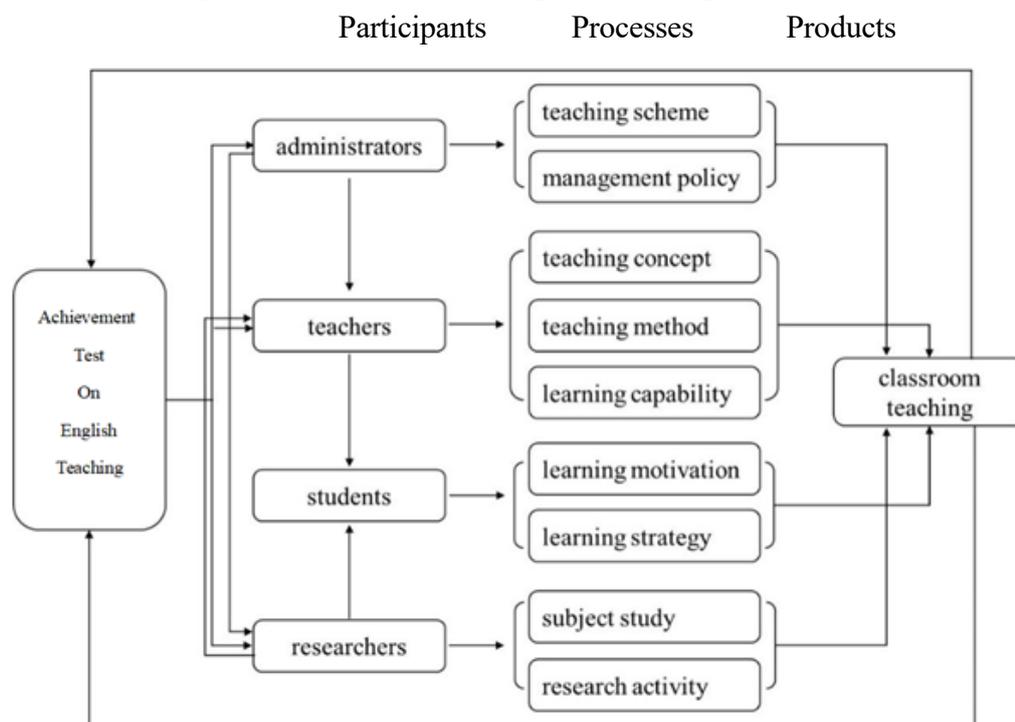
5.4 Washback model of the achievement test

Hughes (1989) proposed in his washback model that a test may first influence the participants. These influences, in turn, may affect what participants do in activities related to the test so that, at last, washback

is produced. He then pointed out that this is the basic model of washback. In order to further find out how washback in the achievement test occurs, based on Hughes' washback model, this study explores the types of participants, specific activities relating to their participation in the test and the reflections of the washback effect. Moreover, a washback model of the achievement test has been established based on the analysis of the internal relations between these elements (see Figure 1).

Figure 1

Washback Model of Achievement Tests on English Teaching



In Hughes' model, "participants" include students, teachers, administrators, materials developers and publishers. He believed their "perceptions and attitudes toward their work may be affected by a test" This study mainly explores what washback effects the achievement test may have on school teaching. Since materials developers and publishers are not participants in this test, they are not considered as the subjects of this study. But researchers in schools may be affected by this test, so they are regarded as participants of this test. Therefore, "participants" of the achievement test include students, teachers, administrators and researchers.

"Processes" refer to any action taken by the participants, including materials development, syllabus design and changes in teaching methods, etc. Since participants of this study are different, actions taken by participants of the achievement test also vary. Their actions include adjustments in teaching management policy, teaching concept, teaching methods, teaching contents, students' motivation, factors affecting students' learning, teaching research and development of research activities, etc.

"Products" refer to "what is learned and the quality of learning" (ibid). According to the interviews in this study, all types of participants of the achievement test pay more attention to the quality of classroom teaching. Respondents believe that the purpose of the achievement test is to examine students' mastery of the teaching contents stipulated in the curriculum standards and it can also evaluate a school's quality of teaching. Classroom teaching reflects a school's teaching management, research ability, teaching level and learning quality, and it also embodies the washback of the achievement test. Therefore, in the above model, classroom teaching is used as the carrier that reflects the washback.

In the above washback model of the achievement test, participants will have a direct influence on classroom teaching through their own activities. For example, administrators can directly affect classroom teaching by adjusting the teaching scheme of the school. Meanwhile, they can also indirectly influence classroom teaching through the impact on other participants. For example, in addition to affecting classroom teaching by carrying out related projects, researchers can influence teachers and students through studies related to testing contents and learning strategies, thus affecting classroom teaching. What is worth noting is that the washback effect of the achievement test is not unidirectional. The test not only influences test takers and classroom teaching, but also affects the test itself. In this way, it achieves the mutual influence between the achievement test and teaching.

6 Conclusion

As a standardised test to check the school's implementation of the "Syllabus", the achievement test is important because schools and educational administrative departments rely on it to get reliable information. Moreover, currently, vocational education faces the disadvantages of lacking proper teacher training and teaching research systems. Therefore, the criterion-referenced achievement test also plays a significant role in guiding teaching practices, promoting teaching reform and improving teaching quality. However, for a long period of time, there have been no teaching quality-targeted achievement tests in the field of vocational education. Nor have any research findings on this been published. Based on the questionnaires and interviews with staff and teachers in some senior secondary vocational schools in Beijing, this study analyzed the washback effect of the achievement test on English teaching in senior secondary vocational schools. The study revealed that most respondents hold a positive attitude towards the implementation of the achievement test, believing it is beneficial to English teaching in senior secondary vocational schools in Beijing. Moreover, through the analysis of the data, a washback model of the achievement test was put forward.

There are also some limitations. The objects of research are limited to staff and teachers related to the achievement test major points, while further research was carried out on other test users such as students. Besides, the mixed methods study of questionnaire and interview can be explored to a greater extent. Diversified research methods can be adopted in future studies. Hopefully, this study may provide some reference for further studies on the washback effect of the achievement test on English teaching.

Appendix 1

Contents, question types, amount and scores of "English achievement test for senior secondary vocational schools in Beijing"

Parts	Sections	Question Type	Items	Score
Listening	Section A	Listen to the dialogue and choose the right picture	5	5
	Section B	Listen to the dialogue and fill in the product information card	2	6
	Section C	Listen to the paragraph and put the work processes in correct order	2	8
	Section D	Listen to the paragraph and fill in the form	1	6
Vocabulary	Section A	Choose the words or phrases according to the pictures of a real communication situation.	10	10
	Section B	Read the situation and classify the phrases	10	10

Reading	Section A	Read the chart/table and choose the right information	5	10
	Section B	Read the introduction of the processes/steps and put the pictures in correct order	5	10
	Section C	Read an article on daily life and choose the right answers	5	10
	Section D	Read an article on profession and choose the right answers	5	10
Writing	Section A	Read an e-mail/introduction and write an advertisement, poster or notice	1	5
	Section B	Write a short article according to the given situation	1	10
Total			52	100

Appendix 2

Survey of the washback effect of the BEAT in Beijing senior secondary vocational schools

Part I: personal information

1. My school generally arranges students to participate in the test in _____

- the first year the second year the third year

2. My school is a _____

- national model school national key school general school

3. My school is located in the _____

- urban area suburban area

4. My professional title is _____

- Senior teacher / senior lecturer intermediate teacher / lecturer
 junior teacher / associate lecturer other title

5. I have taken part in the Achievement Test (including tutoring students, marking papers, arranging tests and invigilating exams, etc.) _____ times.

- 4 3 2 1 0

Part two: influence on the English Curriculum

After the implementation of the test, ...

6. ... the textbooks used in my school are _____

- national planning textbooks optional teaching materials
 national planning textbooks and optional textbooks Other

7. ... has your school arranged more English classes?

- Yes No

8. ... there are _____ of English class every week in my school.

- 2 hours 3 hours 4 hours Other

9. ... has your school arranged intensive tutoring for students before the test?

Yes No

Part three: influence on English teaching

(For items 10-21, enter 0 (low level) to 5 (high level) in the space.)

After implementation of the test ...

10. ... I pay more attention to the development of students' comprehensive language use:

11. ... I increase content related to practical applications:

12. ... I pay more attention to the teaching of basic knowledge (e.g. vocabulary):

13. ... I put greater effort into improving students' listening and speaking:

14. ... I put greater effort into improving students' reading:

15. ... I put greater effort into improving students' writing:

16. ... I am more aware of the aims of the English curriculum:

17. ... I have become more aware of the requirements of the "Syllabus" in terms of language ability:

18. ... I have become more aware of the requirements of the "Syllabus" in terms of teaching evaluation:

19. The test has promoted English teaching reform in my school:

20. The test has promoted the development of English teaching and research activities in my school:

21. The test has promoted the development of teaching research in my school:

Appendix 3

Interview questions

1. What job do you mainly do in your school: administration, English teaching or teaching research?
2. How many times have you taken part in the achievement test on English teaching in senior secondary vocational schools in Beijing? What kinds of work have you ever done?
3. What do you think are the features of the achievement test on English teaching in senior secondary vocational schools?
4. Has the English teaching scheme in your school been revised since the implementation of the achievement test? How was it revised?
5. Does the test make any influence on your attitude towards English course? How does it occur?
6. Does the test make any influence on the English classroom teaching in your school? How does it occur?
7. What is the students' attitude towards the achievement test?
8. What is the students' attitude towards English course after the implementation of the achievement test?
9. Does the test make any influence on the students' English learning strategies? How does it occur?
10. What researches on achievement test or English teaching have been conducted in your school?

References

- Alderson, J. D., & Wall., D. (1993). Does washback exist? *Applied Linguistics*, 2, 115-129.
[DOI:10.12691/education-5-8-13](https://doi.org/10.12691/education-5-8-13)

- Bailey, K. (1996). Working for washback: A review of the washback concept in language testing. *Language Testing*, 3, 257-279. DOI: 10.1177/026553229601300303
- Birenbaum, M., & Dochy, F. (1996). *Alternatives in assessment of achievements: Learning processes and prior knowledge*. Kluwer Academic Publisher.
- Chen, G. S. (2009). *Differentiation and analysis of common educational concepts*. East China Normal University Press.
- Cui, Y. H. (2007). On students' achievement based on curriculum standards. *Curriculum, Teaching Material and Method*, 1, 13-18. DOI:10.19877/j.cnki.kcjcj.2007.01.004
- Cui, Y. H. (2008). On reform of assessment of student academic achievement. *Journal of Shanghai Educational Research*, 8,1.
- Cui, Y. H. (2010). On a new paradigm of academic evaluation. *Educational Science Research*, 3, 11-15.
- Cui, Y. H. (2010). *Standards-based assessments of student academic achievement*. East China Normal University Press.
- Gu, X. D. (2013). A longitudinal study of the washback effect of CET on college English classroom teaching. *Foreign Language Testing and Teaching*, 1, 18-29.
- Han, W. J. (2006). Academic achievements of children in immigrant families. *Educational Research and Review*, 12, 286-318.
- Hong, Z. Z. (2008). On the quality monitoring of American students' achievement: The experience of the NAEP. *Global Education*, 6, 69-73.
- Hughes, A. (1989). *Testing for language teachers*. Cambridge University Press.
- Jin, Y. (2000). Washback effect of the CET-SET on teaching. *Foreign Language World*, 4, 56-61.
- Lawrence, M., & William, D. (2002). What teachers need to know about assessment. National Education Association.
- Lei, X. Y. (2012). Achievement test for high schools and standard-based education evaluation. *Examinations Research*, 8(6), 2.
- Liu, Z. J., & Wang, H. W. (2016). Senior high school education under the background of achievement test: Difficulties and transcendence. *Global Education*, 12, 63-69.
- Ministry of Education of the People's Republic of China. (2009). *Syllabus of English teaching in senior secondary vocational schools*. Higher Education Press.
- Pang, C, F. (2007). An analysis of the washback of the English achievement test in junior high schools. *Heihe Education*, 5, 43.
- Qi, L.X. (2004). *The intended washback effect of the national matriculation English test in China: Intentions and reality*. Foreign Language Teaching and Research Press.
- Shohamy E. (1992). Beyond proficiency testing: A diagnostic feedback testing model for assessing foreign language learning. *Modern Language Journal*, 76(4), 513-521. DOI: 10.1111/j.1540-4781.1992.tbo5402.x
- Rudner, L. M. & Schafer, W. D. (2002). *What teachers need to know about assessment*. National Education Association
- Su, H. (2012). Achievement test in American elementary education: System, mechanism and inspiration. *Journal of World Education*, 5, 40-43.
- Vinovskis, M. A. (2001). Overseeing the nation's report card: The creation and evolution of the national assessment governing board. <http://www.nagbOrg/pubs/pubs.html>.
- Wang, L. W. (2014). Thinking on the washback of achievement test in senior secondary vocational schools on English teaching. *Journal of Jilin TV & Radio University*, 1,124-125.
- Yang, X. D., & Cui, Y. H. (2010). A comparative study of the academic test for ordinary high schools. *Global Education*, 4, 7-14.

- Zhan, S. X., & Shi, J. (2016). Review of washback research in China in the past 20 years. *Examinations Research*, 3, 43-47.
- Zhang, Y. Q., & Cui, Y. H. (2010). Development of a framework for achievement evaluation of students in compulsory education phase. *Journal of East China Normal University (Educational Sciences)*, 9, 38-49.
- Zou, S., & Dong, M. X. (2014). An overview of washback studies in China between 1994 and 2013. *Foreign Language in China*, 7, 4-14. DOI: [10.13564/j.cnki.issn.1672-9382.2014.04.002](https://doi.org/10.13564/j.cnki.issn.1672-9382.2014.04.002)
- Zou, S., & Xu, Q. (2014). Criterion-referenced assessment and its washback: the case of TEM. *Foreign Language Learning Theory and Practice*, 1, 42-48.

Senior Lecturer Haixia Liu is a Teaching Researcher at the Vocational Education Institute of Beijing Academy of Educational Sciences. Her main publication and research interests are in computer-assisted language learning, language teaching and assessment in vocational schools.