Research Summary: Can integrated skills tasks change students' use of learning strategies and materials? A case study using PTE Academic integrated skills items

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Introduction

This study aims to investigate the influence of the integrated skills tasks on students' use of language learning strategies and choices of materials before and after the introduction of the integrated skills tests. The integrated skills tasks used in this study are items from the Pearson Test of English Academic (PTE Academic), comprising two item types: 'Retell Lecture' and 'Repeat Sentence'. The Official Guide to PTE Academic (Pearson, 2010) states that the 'Retell Lecture' item is designed to assess candidates' ability to "give a presentation on information from a lecture on an academic subject" (2010, p.51), while the 'Repeat Sentence' item tests candidates' ability "to understand and remember a sentence, then repeat the sentence exactly as you hear it using the correct pronunciation" (2010, p.41). Both of the item types assess speaking and listening skills in an integrated fashion.

Research design

The research question for this study is: can the new integrated skills test change candidates' use of learning strategies and learning materials? Three classes of students from the School of English Education in Xi'an International Studies University in China participated in this study. One class (n=31) served as the control group, while the other two classes (n=58) served as the experimental group. All of the students had just completed their Test for English Major Band 4 (TEM-4) and a university based speaking test.

The Test

The main differences between TEM-4 listening tasks, the university speaking test and the PTE Academic new integrated skills tasks include: 1) the audio input of PTE Academic has a wider range of accents and the background noise has not been removed with the aim of creating a more authentic environment; 2) the content of the listening materials in PTE Academic is not an audio record of news or of daily conversation topics, but is more academic; 3) the response format of PTE Academic does not consist of multiple choice questions and pair discussion in front of two examiners, but asks to orally summarise or repeat the listening materials; and 4) PTE Academic is conducted through a computer

system. The candidates in the experimental group were invited to complete PTE Academic and a survey twice, at the beginning and after a six week break. Their performance in the two constructed integrated skills tests is worth 5% of their academic overall marks in year three. Each test included two 'Repeat Sentence' items and two 'Retell Lecture' items.

The Survey

The first survey served as the baseline study, aiming to keep a record of candidates' previous tests and test preparation experiences. The same survey was administered after the participants completed the new integrated skills test in order to identify any possible changes. Apart from their demographic information, the survey consists of two parts: the first part deals with test takers' perceptions of the specific skills being tested in TEM-4 (listening tasks), the university-based speaking test and PTE Academic as used in this study. It consists of 36 statements and each statement is judged using a 5-point Likert scale (from strongly disagree to strongly agree). These statements come from the skills listed under the two item types 'Repeat Sentence' and 'Retell Lecture' in The Official Guide to PTE Academic (Pearson, 2010, pp. 41-45, 51-56). A higher overall rating of the listed skills therefore indicates a better understanding or awareness of what skills the two item types assess. The 50 statements in the second part of the survey are taken from the Strategy Inventory for Language Learning (SILL)Version 7.0 devised by Oxford (1990). Each statement is judged using the same 5-point Likert scale. At the category level, there are six types of strategies: memory, cognitive, compensation, metacognitive, affective and social strategies. Two paired t-tests were conducted through PASW (Predictive Analytics Software) Statistics 18.0 to check 1) whether the candidates had become more aware of the skills being assessed by PTE Academic over the two tests (by comparing their ratings to first part of survey before and after taking the integrated skills tests); and 2) whether the candidates had changed their learning strategies at any category level (sum of their ratings for each strategy under each category) or at the individual skill level (by comparing their ratings to the second part of survey). An independent t-test was also used to check whether the candidates in the experimental group responded significantly differently from their counterparts in the control group in the second survey.

The Interviews

After the two tests and the two surveys, the interviews were conducted, with the aim of gaining more insight into why the participants in the experimental group had changed their learning strategies. The semi-structured interviews were designed to provide greater insight as to how and why the new integrated skills test may change participants' learning strategies and materials, if there is any change. The interviewees were selected based on their ratings in the second part of the survey. The prompts for the interviews come from previous studies and include questions about language learners' beliefs about language

development, affective states, language learning experiences, the tasks they are required to perform and their learning outcomes (Ellis, 2008). The data was coded by two researchers independently with a view to investigating the roles played by these factors in the potential link between the new integrated skills tests and adapted learning strategies and materials. The prompts of the semi-structured interviews have been used as the primary source for coding the data.

Findings from the survey

The same 58 candidates (experimental group) participated in the study by completing both the surveys and PTE Academic. The control group consisted of 31 students, who completed the survey twice.

The analysis of the first survey indicated that there was no significant difference between experimental and control group in terms of their performances in the TEM-4 and university based speaking test as well as their responses to the survey at the category level. The Cronbach's Alpha reliability coefficients suggested a high overall reliability for the survey (r=.94) and at each category of the learning strategies (range from .73 to .84) in both groups. Moreover, the paired t-test suggested that the candidates in the control group had not changed their learning strategies significantly in any of the categories. This indicates that there is no other variable which had influenced students' use of learning strategies in this study.

The analysis of the difference between the first and the second survey indicated that the candidates in the experimental group changed some of their individual strategies after taking PTE Academic. However there was no significant change at the category level, except when they were aware of the listening and speaking skills being assessed.

Table 1: Learning strategies that have changed significantly reported by experimental group students

Experimental group		Mean	N	SD	P
Q8: I review SL lessons often.	Survey 1	3.86	58	.868	.025
	Survey 2	3.59	58	.937	
Q26: I make up new words if I do not know the right ones in the SL.	Survey 1	2.68	56	1.146	.008
	Survey 2	3.11	56	1.039	
Q36: I look for opportunities to read as much as possible in SL.	Survey 1	3.29	58	.991	.031
	Survey 2	3.57	58	.840	
Q48: I ask for help from SL speakers.	Survey 1	3.16	57	1.049	.022
	Survey 2	3.58	57	.999	

*SL= second language

Regarding the changes in the individual strategy, the paired t-test suggested that the students in the experimental group had changed significantly in respect of four strategies ($p<.05$), although there was no significant change at the category level. More specifically, a comparison of their answers to the questions in the second part of both surveys indicates that students had spent significantly less time on revising from textbooks and notes from English classes (the mean decreased from 3.86 to 3.59, $p<.05$) and devoted more time to taking extracurricular activities, such as talking with English native speakers (the mean increased from 3.16 to 3.58, $p<.01$), reading more English materials (the mean increased from 3.29 to 3.57, $p<.05$) and practicing their speaking skill with less attention to the accuracy (the mean increased from 2.68 to 3.11, $p<.05$).

As mentioned earlier, based on the answers to the first part of the survey, it seems that the candidates who have a higher level of awareness or have a better understanding of the differences between the assessed skills in the integrated skills tasks (PTE Academic), the listening tasks (TEM-4) and the university based speaking test, had changed their strategies significantly at the category level. A total of 19 candidates out of 58 reported that they had noticed the different listening skills being assessed in PTE Academic; 24 out of 58 candidates seemed to notice the different speaking skills in PTE Academic; 15 candidates reported that they noticed both of the different listening and speaking skills in PTE Academic; finally, 27 candidates, nearly half of the experimental group, reported that they had noticed neither.

The awareness of the different speaking or listening skills being assessed in PTE Academic appear to significantly influence candidates' use of learning strategies at the category level in a different way. The 19 candidates who noticed that the integrated skills tasks assessed different listening skills, reported that they had significantly changed in respect of four categories of learning strategies (see table 2).

Table 2: Changes at category level from students who noticed the different listening skills

Experimental group		Mean	N	Std. Deviation	P
Memory Strategies	Survey 1	27.05	19	6.433	.016
	Survey 2	31.58	19	7.321	
Cognitive Strategies	Survey 1	46.83	18	9.526	.046
	Survey 2	51.44	18	7.131	
Compensation Strategies	Survey 1	21.00	18	4.256	.084
	Survey 2	22.50	18	3.536	
Metacognitive Strategies	Survey 1	20.32	19	3.683	.290
	Survey 2	21.11	19	3.665	
Affective Strategies	Survey 1	31.68	19	6.325	.026
	Survey 2	33.84	19	5.766	
Social Strategies	Survey 1	20.17	18	3.519	.039
	Survey 2	22.28	18	3.801	

Table 3: Changes at category level from students who noticed the different speaking skills

Experimental group		Mean	N	Std. Deviation	p
Memory Strategies	Survey 1	26.92	25	5.816	.004
	Survey 2	31.00	25	6.494	
Cognitive Strategies	Survey 1	46.39	23	8.457	.011
	Survey 2	51.00	23	6.557	
Compensation Strategies	Survey 1	20.40	25	4.163	.004
	Survey 2	22.24	25	3.270	
Metacognitive Strategies	Survey 1	19.36	25	3.365	.094
	Survey 2	20.40	25	3.342	
Affective Strategies	Survey 1	31.54	24	5.831	.008
	Survey 2	33.79	24	5.556	
Social Strategies	Survey 1	20.38	24	3.294	.000
	Survey 2	23.13	24	3.639	

The 19 candidates who noticed that the integrated skills tasks assessed different listening skills reported that they had significantly changed their 1) memory strategies (the mean increased from 27.05 -SD=6.43- to 31.58 -SD=.7.32-, $p<.05$), 2) cognitive strategies (the mean increased from 46.83 -SD=9.53- to 51.44 -SD=7.13-, $p<.05$), 3) affective strategies (the mean

increased from 31.68 -SD=6.33- to 33.84 -SD=5.77-, p<.05) and 4) social strategies (the mean increased from 20.17 -SD=3.52- to 22.28 -SD=3.80-, p<.05); while the 24 candidates who had become more aware of the different speaking skills in the integrated skills test, appeared to change their 1) memory strategies (the mean increased from 26.92 -SD=5.82- to 31.00 -SD=6.49-, p<.01), 2) cognitive strategies (the mean increased from 46.39 -SD=8.46- to 51.00 -SD=6.56-, p<.05), 3) compensation strategies (the mean increased from 20.40 -SD=4.16- to 22.24 -SD=3.27-, p<.01), 4) affective strategies (the mean increased from 31.54 -SD=5.83- to 33.79 -SD=5.56-, p<.01) and 5) social strategies (the mean increased from 20.38 -SD=3.29- to 23.13 -SD=3.64-, p<.01). It is not surprising that the candidates who noticed the different speaking skills in the integrated skills test had used compensation strategies more frequently, as these strategies have to do with with guessing intelligently and overcoming limitations in speaking and so obviously match the format of the "Retell Lecture tasks".

Table 4 presents, for each of the five categories "memory", "cognitive", "compensation", "affective" and "social", what specific strategies have been used significantly more frequently after the candidates became more aware of the listening and speaking skills being tested in PTE Academic. Overall, the candidates reported that they had used 8 specific strategies more frequently after they became more aware of the listening skills and 19 strategies after they became aware of the different speaking skills. In other words, a change in the level of awareness seems to lead to various changes in the use of specific learning strategies. On one hand, the candidates who became aware of the different listening skills showed significant changes in their use of strategies for learning, memorizing and using new vocabulary. The 19 participants reported that they had tried memory strategies more frequently in order to memorize words: making connections between the visual aids to the sound of words (Q3) and the spelling of words (Q4), acting out new words physically (Q7) and memorizing words or phrases by remembering the places from where they had learned them (Q9). Moreover, these participants indicated that they had also tried some compensation strategies, such as guessing the meaning of words from contexts (Q24). On the other side, the candidates who became aware of the different speaking skills tended to practice a wider range of strategies to memorize and learn new vocabulary: using the new words more frequently (Q2), connecting the sounds (Q3 and Q5), the spellings (Q4) and the meanings (Q6) of new words to visual aids more frequently. Moreover, they reported that they had practiced the words more frequently by talking to native speakers (Q11), reading out the words (Q12) and using these new words in different ways (Q13). When encountering problems with expressing their ideas during communication, the respondents reported that they had tried some compensation strategies, such as using body language (Q25), making up new words (Q26) and using more synonymous words (Q29). Finally, they also used more social strategies to practice English outside of the class, such as talking to

other students (Q47) and native speakers (Q50), asking native speakers for help (Q48) and slowing down or repeating their words during their communications (Q45).

Table 4: Learning strategies that have changed significantly between the two tests

	The learning strategies	All	L	S
Mem.	Q2: I use new second language (SL) words in a sentence so I can remember them.			*
	Q3:I connect the sound of a new SL word and an image or picture …		*	**
	Q4: I remember a new SL word by making a mental picture of a situation…		*	*
	Q5: I use rhymes to remember new SL words.			*
	Q6: I use flashcards to remember new SL words			*
	Q7: I physically act out new SL words		*	
	Q8: I review SL lessons often	*		
	Q9: I remember new SL words or phrases by remembering their location on the page …		*	
Cog.	Q11: I try to talk like native SL speakers.			*
	Q12: I practice the sounds of SL.		*	**
	Q13: I use the SL words I know in different ways.			*
	Q16: I read for pleasure in the SL			**
	Q23: I make summaries of information that I hear or read in the SL			*
Com.	Q24: To understand unfamiliar SL words, I make guesses		*	
	Q25: When I can't think of a word during a conversation in the SL, I use gestures			*
	Q26: I make up new words if I do not know the right ones in the SL	**	*	**
	Q29: If I can't think of an SL word, I use a word or phrase that means the same thing			*
Met.	Q33: I try to find out how to be a better learner of SL			*
	Q35: I look for people I can talk to in SL			**
	Q36: I look for opportunities to read as much as possible in SL	*		
Soc.	Q45: If I do not understand something in SL, I ask the other person to slow down …			*
	Q47: I practice SL with other students		*	**
	Q48: I ask for help from SL speakers	*		*
	Q50: I try to learn about the culture of SL speakers			*
In total		**4**	**8**	**19**

Key to abbreviations: "Mem." = memory strategies, "Cog." = cognitive strategies, "Com." = compensation strategies, "Met." = metacognitive strategies, "Soc." = social strategies.
* 'p<.05', ** 'p<.01'.

Findings from the interviews

The interview data provide more insights on the relationship between the candidates' awareness of the new integrated skills tasks in PTE Academic and their adapted learning strategies and materials. Five candidates agreed to participate in the interviews and they are labeled as S1 to S5 in this paper.

First of all, the five candidates' previous activities to develop speaking and listening skills seem to be related to their test experiences with TEM-4 and with the university based speaking test as well as to their beliefs in developing these skills. All candidates quoted "a larger vocabulary size" and "more efforts to learn the vocabulary" as the key factors in developing listening and speaking skills. Concerning vocabulary they referred to those words which frequently appeared in the previous exams, such as TEM-4. One particular student gives a clear example of his sustained efforts in relation to listening skills: "I put more effort into practicing listening skills, to increase confidence… I extend my use of vocabulary" (S1). Then, he describes his previous learning activities saying: "I listen carefully to every word from the English news and read questions and guess the content of the listening materials… I try to learn vocabulary".

Secondly, interview data support the finding from survey data, which is that the level of awareness of the new skills being assessed by PTE Academic seems to be associated with the changes in the use of specific learning strategies. All five interviewees noticed the change of the response format: from multiple choices questions in the listening tasks and pair work in the speaking tasks to oral monologue in the PTE Academic integrated-skills items. All of them claimed that they tried to practice their summarizing skills and three of them said that they started to practice note taking skills, as "TEM-4 listening tasks are in multiple choice question format, which does not ask for quick note taking skill" (S1). In line with the findings from the survey data, it seems to be difficult for the test candidates to become fully aware of the differences between the new test and the previous one. For example, in relation to the audio input, both S3 and S4 reported that they were aware of the different listening materials in PTE Academic. However, S4 noticed the topics and genre of the listening materials and therefore he practiced more listening tasks with a wider range of topics (rather than the news from BBC and VOA as in the previous tests) from a free internet based test website; unlike S4, S3 was aware of the wider range of accents in the listening input of the new integrated skills task, and as a result, he reported that he tried to talk with foreigners not only from the UK and America, but also from India and Japan in order to become more familiar with more types of accents. In short, interview data appear to suggest that the

students' level of awareness is closely related to the differences between the new integrated skills tasks and the previous listening and speaking tasks. These differences encompass a wide range of factors, such as the response formats, accents and content of the listening materials, as well as the assessed skills in the new test.

Thirdly, the candidates appeared to develop new strategies that seem to be a combination of newly adapted strategies, the strategies to cope with their previous tests and their beliefs in language development. S-5, for example, seemed to do the preparation work for TEM-4 and PTE Academic at the same time: on the one hand, "listening to BBC and VOA news and learning the vocabulary" seems to relate to previous test experiences with TEM-4 listening tasks; on the other hand, summarizing "what I have heard from the broadcasts in my Ipod" and searching and practicing the listening and speaking tasks in a format which the new integrated skills test asks for indicates that he adapted these strategies specifically for the new test.

Finally, awareness of the format and content of the new test seems to have affected the choice candidates made with regard to learning materials. All of the interviewees reported that they specifically added some new learning materials in order to prepare for PTE Academic. For example, S-2 and S-4 reported that the topics of the recordings in the new integrated skills test did not include the news from BBC or VOA (as tested in TEM-4). Both of them stated that they had made attempts to widen their range of audio input, though their choices of materials slightly varied. Regarding the materials for practicing oral skills, S-1 used to discuss "daily topics" with his classmates. After realizing that the 're-tell lecture' task expects the candidates to organize their oral responses logically, he practiced by listening to a wider range of clearly-structured audio input, such as podcasts and recorded debates.

Discussion and conclusion

This section discusses the answers to the research questions, based on the findings of this study.

Overall, the introduction of the PTE Academic integrated skills tasks influence all of the candidates' uses of learning strategies and materials to some extent and this depends on the extent to which they have become aware of the differences (assessed skills, contents/topics and formats) between their previous tests and the new one. The test takers seemed to change four learning strategies to prepare for the new integrated skills tasks in PTE Academic, without interference from other external variables, such as teachers' supervision and guidance. The students who became more aware of the new listening skills being tested by the test reported using more 1) memory, 2) cognitive, 3) affective and 4) social strategies, while the those who noticed the different speaking skills reported that they used more 1) memory, 2) cognitive, 3)

compensation, 4) affective and 5) social strategies. The results provided some evidence to support the hypotheses proposed by Alderson and Wall (1993) that a test will influence learning, and what and how learners learn.

Secondly, the candidates did not reach agreement on what skills PTE Academic was assessing, indicating that it may not be easy to recognize them and therefore become more aware of the difference between the new test and the previous tests. In this study, only about 25% of the candidates reported that they noticed both the different listening and speaking skills in PTE Academic; while nearly half of the respondents had noticed the change in neither the speaking nor in the listening skills in the tests. In other words, integrated skills tasks seem to increase the candidates' difficulty in recognizing the different assessed skills, formats and topics.

Moreover, because the changed strategies and learning materials appear to be associated with the candidates' levels of awareness of the different skills, content, topics of the audio input and formats in the new tests, the influence of the PTE Academic integrated skills on learning strategies tend to vary widely at the individual level. In this study, the candidates in the experimental group seemed to notice the difference between their university teaching curriculum and the integrated skills test and then used four strategies significantly more frequently after taking the first test. The candidates who noticed the different listening skills reported that they had used 'vocabulary memorization' and 'vocabulary practice' strategies more frequently. Further interview data links the adapted 'memory strategies' to their beliefs in developing listening and speaking skills. The candidates who noticed the different speaking skills being tested by the new test reported that they have practiced and developed a wider range of strategies: 'memory', 'compensation', 'affective' and 'social' strategies. These strategies seem to be relevant to their awareness of the skills being tested by the new task (re-tell lecture): starting and maintaining a monologue and expressing an idea thoroughly.

Finally, an increased awareness of what skills and contents a new test assesses does not seem to guarantee the uses of appropriate strategies. This study identified three factors that influence the test candidates' choices of their learning strategies and materials: 1) their beliefs in developing listening and speaking skills, 2) previous listening and speaking test experiences and 3) awareness and understanding of the new integrated skills tasks. Even if the newly developed strategies and added learning materials seem to be associated with an increased level of awareness of the new test, the interview data also revealed that the candidates did not give up some of their previous learning activities and materials. As a result, after the introduction of the new integrated skills test, the candidates seemed to prepare their new integrated skills tests and previous tests at the same time.

In conclusion, the study provided an insight into the way PTE Academic integrated skills items affect test takers' use of materials and learning strategies. Further studies would need to enlarge the sample analysed, to take into account the long term effects and finally, to investigate the nature of the awareness.

References

- Alderson, C. and Wall, D. (1993). 'Does washback exist?' *Applied Linguistics, 14*, 2, 115-129.
- Ellis, R. (2008).*The study of second language acquisition (2nd edition)*.Oxford: Oxford University Press.
- Oxford, R. L. (1990). *Language learning strategies: what every teacher should know*. New York: Newbury House.
- Pearson. (2010). *The Official guide to Pearson Test of English Academic*. UK: Longman.