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The bearing of macro and micro culture on digital activity: EFL teachers' perception of computer-based matriculation oral language test reform

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ABSTRACT

Among the worldwide trend of computer application in the educational arena, there have been few attempts to examine the teachers' perception of face-to-computer high-stake matriculation language testing although college acceptance issues have been one of the top priorities all around the world. This article reports a case study on the face-to-computer matriculation EFL oral proficiency test reform in Guangdong (Canton), China. The goal of this research is to investigate the high school EFL teachers' perception of the testing reform on teaching and learning and provide the face-to-computer language testing designers some practical implications and suggestions for future development. Two hundred and twenty-three high school teachers in twelve high schools took a survey with closed and open-ended questions. It is found that the testing reform received a major acknowledgment for its necessity and impacts on teaching. Six principal obstacles in this reform are identified. Furthermore, change in tools alone will not suffice in our educational reforms assisted by computers. This article discusses the often-overlooked construct—culture at macro and micro levels in the testing context. The impact of cultural artifacts on the face-to-computer testing is modeled by connecting the ideas of culture to the framework of activity theory.

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1. Introduction

In the global field of educational computer applications, numerous studies that address computer-based language testing have mainly focused on software design, test items, test equating, contextual clues, and the over-all washback effects of TOEFL iBT, (e.g., Laborda & Litzler, 2011; McGrail, 2005; Wall & Horák, 2008). However, there have been few attempts to examine teachers' perceptions of the impact of face-to-computer high-stake matriculation language testing for high school graduates on a large scale, despite the fact that college acceptance issues are one of the top priorities in the field world-wide. The first step to fill this research gap is to determine the impacts on teaching and learning from the teachers' perspective to ensure successful technological integration. Therefore, this article reports a case study on teachers' perceptions of the impact of face-to-computer matriculation EFL (English as a foreign language) oral test reform on teaching and learning in Guangdong (Canton), China.

1.1. The Cantonese computer-based matriculation EFL oral test

In the Chinese macro social context, EFL education has been given great weight as one of the three key subjects for college entrance exams for over thirty years. As a province that is committed to further developing its export-oriented economy in the

context of growing globalization, EFL education has been valued and invested in heavily in Guangdong. The matriculation English test for college entry in the Canton area began as early as 1985 to improve high school graduates' oral English to improve communication with foreigners. In this case, test reform has also become a tool to fulfil policy makers' aims to promote an export-oriented economy.

From 2004 to 2010, the oral test section of the matriculation English test was changed from a face-to-face oral test to the computer-based matriculation EFL oral test (henceforth CMEOT) on a trial basis. A brief comparison of the two oral test formats is shown in Table 1. In the computer-based oral test of 2004, for example, the examinee speaks to a computer through a microphone according to the test instructions, and the computer records his or her voice. Then, the assessors listen to the recording, and rate his or her oral English proficiency accordingly. The in-field data for this study was collected from September to October of 2009, at the start of the new academic year of 2009–2010.

What is the basis of the CMEOT reform? High stake testing has long been believed to have a crucial impact on the educational system and has been seen as the most effective means of creating change (Wall, 2005). In the case of EFL teaching in China, it has been found that high schools have paid overdue attention to teaching students knowledge of a language with the goal of attaining a good mark in the high-stake matriculation written test, and the students did not speak English well in the context of such a written-test-oriented education (Cortazzi & Jin, 1996; Harvey, 1990; Qi, 2004). Therefore, The National Matriculation English Test (Henceforth NMET) designers have long expected that NMET could help to shift the focus of high school EFL teaching from teaching the knowledge of a language to cultivating students' abilities to use the language to think and express. Thus, it should be noted that the assessment is generally viewed as a measure of rote learning in the context of Chinese high school education, preceding the teaching like a conductor's baton (China Department of Education, 2003; Li, 1990; Qi, 2004; Zeng, 2012).

1.2. The perceived impacts of reforms with computer technology: teachers' perspectives

This study investigates the perceived impacts of the CMEOT by high school EFL teachers. The teachers' perceptions are vital for validating compulsory assessments, and they reveal how the tests have been interpreted and used in actual educational contexts (Ertmer et al., 2013; Karasavvidis, 2009; McGrail, 2005). van den Berg, Vandenberghe, and Sleegers (1999) noted that teachers construct personal systems of knowledge, attitudes and skills that are related to their work, and these perceptional constructions in turn shape their professional behaviour. Given the purpose of this paper, the idea of attitude here refers to the instrumental attitude that brings forth an appraisal of the consequences of a performed behaviour (Ajzen, 1991). As the crucial mediating factor in CMEOT reform, the teachers' perceptions may determine their implementation of computer technology in actual teaching and the specific impacts that computer-based testing reform could have on education.

Hannafin and Foshay (2006) reported a case study of Patriot High School's successful use of computer-based instruction (CBI) technology to improve pass rates in high-stake tests. They suggested that CBI may play a significant role in the high-stake test context. In the context of computer-based language testing, Laborda and Litzler (2011, P15) found that the significant difficulty in the use of computer technology in EFL teaching was not "the use of certain computer software programs" or "how to teach", but "the teachers' attitudes towards implementing technology in their teaching" and "what to teach". Ertmer, et al. (2013, P423) revealed the critical relationship between teachers' beliefs and technology integration practices: teachers' "student-centered beliefs undergirded student-centered practices". For those teachers who are recognized for their technology use, their own beliefs and attitudes towards technology have the biggest impact on their success.

In the literature, some of the factors of technological implementation that influence teaching and learning are explicit, such as a lack of equipment, and the unreliability of computer technology (e.g., Ertmer et al., 2013; Jones, 2004; US Department of Education, 2000). However, few studies have stepped aside to take a broader view and asked more global questions about a broad range of teachers' perceptions of computer-based high stake test reform on teaching and learning.

Table 1
Comparison of the two oral test formats.

	Face-to-face oral test	Computer-based oral test
Items	Face-to-face role-play	A. Modeling reading e.g. Watch a mini-clip and then read aloud the lines such as those in the video. B. Role-play e.g. Watch a mini-clip of a lecture. Then ask and answer three questions with guides in Chinese C. Oral composition e.g. Watch a soundless video clip and then describe what is seen
Scores	30	Item A--- 10 Item B--- 18 Item C--- 22 In total--- 50
Time required	Approximately 6 min	Approximately 30 min