The effects of strategy-based writing instruction in Singapore primary schools

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A B S T R A C T

This study reports on a longitudinal intervention study of writing strategies in Singapore primary schools. The purpose of the study was to assess the impact of writing strategy instruction on Singapore primary school students' writing competence. Nine writing strategy-based lessons were taught to 442 primary five students. Both quantitative and qualitative analyses were performed to complement the possible inadequacy of either analytical method and for the purpose of data triangulation. The findings show that the intervention achieved a significant treatment effect on both the participants' writing competence and their strategy use, namely, text-generating, feedback handling, and revising. The qualitative analyses also suggest the experimental students orchestrated their strategy use better than before.

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1. Introduction

Writing strategies are particular processes or techniques that writers use to improve their writing. Descriptive research shows that there is a positive correlation between strategy use and writing competence (e.g., Bai, Hu, & Gu, 2014; Chien, 2012). The findings suggest that effective use of writing strategies can help improve students' writing competence. In a comprehensive meta-analysis of writing instruction for primary school students in the United States, Graham, McKeown, Kiuhara, and Harris (2012) show that writing strategies play a crucial role in primary students' learning to write, thus calling for the needs to implement evidence-based writing instruction into the primary classroom.

In the English as a second (ESL)/foreign (EFL) language context, intervention studies find that strategy-based instruction (SBI) can exert a positive impact on ESL/EFL learners' use of writing strategies both quantitatively and qualitatively, as well as their writing competence (De Silva, 2015; Hu, 2005; Ong & Zhang, 2013; Wong & Hew, 2010). However, several issues exist with regard to writing SBI research. Most previous studies were concerned with (young) adult learners. Little research can be found on the effects of SBI on primary students' writing competence. There is also a need for grounded approach (see Macaro & Erler, 2008), where sufficient piloting is conducted and the research instruments (e.g., questionnaires, tests, and lesson plans) are developed within the context of local culture, institution type, and proficiency level of the participants. Therefore, there is an urgent need of empirical SBI research to identify effective classroom practices for writing instruction in primary schools. The present study will examine whether writing SBI would be effective in the Singapore context.

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2. Literature review

Research on writing strategies grows out of the "process writing" approach (ManchÓn, 2001), where writing consists of three primary cognitive processes: planning, translating, and reviewing (Flower & Hayes, 1981) and the competence of writing processes is believed to play a more important role than the writer's linguistic competence (see Krapels, 1990). Influenced by general language learning strategies (LLS) research, most writing strategy research has focused on the differences between effective and ineffective writers (see Bai et al., 2014). The findings show that effective writers orchestrated their use of writing strategies more effectively than ineffective writers (e.g., Hu & Chen, 2007; Victori, 1999). In addition, effective writers employed a larger repertoire of writing strategies and used their strategies more frequently than their ineffective counterparts (e.g., Bai et al., 2014; Chen, 2011). These strategies include, but are not limited to, planning, organizing, monitoring, organizing, help-seeking and resourcing, and revising (e.g., Bai et al., 2014; Chamot & El-Dinary, 1999; Chien, 2012).

The findings of the above-mentioned descriptive research consistently indicate a positive relationship between strategy use and writing competence. This relationship suggests that underachieving writers need to be trained to employ the strategies used by successful writers through writing interventions (see Rubin, Chamot, Harris, & Anderson, 2007). Although the field of LLS has seen a plethora of studies investigating the relationship between LLS use and language learning achievements (e.g., listening, reading, and writing), and that investigations of the effects of strategy intervention have also been reported in various skill areas, such as listening (Goh & Taib, 2006), reading (Sengupta, 2000; Zhang, 2008), and writing (De Silva, 2015; Hu, 2005; Min, 2006), strategy-based intervention studies are still insufficiently documented, particularly with regard to teaching writing in an ESL context. In Singapore, although process writing has been introduced as an approach to teaching writing, many English teachers still teach writing as a product due to their entrenched beliefs (Chandrasegaran, 2013) or practical constraints, e.g., lack of time (Cheah, 2002). Therefore, it is highly desirable to investigate whether SBI would impact primary students' writing in Singapore primary schools.

In recent years, researchers (e.g., Chamot, 2008) have called for rigorous intervention research on the impact of learning strategy instruction on learners' learning achievements. While researchers (Cohen & Macaro, 2007) have noted the need for empirical investigations of SBI, only several studies have explored the effects of SBI on learners' writing competence. These writing intervention studies set out to measure change in use of planning and revising strategies (e.g., Lee, 2002), peer review and scaffolding (e.g., Hu, 2005; Min, 2006; Wong & Hew, 2010) as well as change in both writing competence and use of writing strategies (e.g., De Silva, 2015; Ong & Zhang, 2013).

The findings of these studies suggest that an intervention can exert a positive impact on the learners' writing competence. However, they do not warrant a firm conclusion for the following reasons. First, most of these intervention studies involved a small number of participants. There were 36 Singapore primary 5 students in Wong and Hew's (2010) study, 12 Japanese university students in Sasaki's (2000) study, 18 Taiwanese university students in Min's (2006) study, and 29 Malaysian university students in Lee's (2002) study. The findings of these small-scale studies cannot be generalized to a larger population. In addition, the intervention studies tend to produce a short-term effect (see Hassan et al., 2005).

Second, in Flower and Hayes's (1981) theory, the writer goes through three primary cognitive processes in writing, i.e., planning, translating and reviewing in a recursive manner. These processes are translated into general writing stages, i.e., planning, writing and revising in writing instruction. To gain a holistic understanding of SBI and achieve ecological validity in the local context, the intervention should include all the stages necessary in writing instruction. Thus far, only De Silva (2015) included a full cycle of writing strategy instruction (e.g., from goal setting to evaluation), which is typical of writing instruction in the real classroom. Most of the aforementioned studies only examined the effects of one or two stages (e.g., planning and/or revising). Such research can only provide a partial picture of SBI in the context of writing instruction in schools. Furthermore, students are expected to experience a full cycle of writing in Singapore primary schools (see Curriculum Planning & Development Division, 2010) as well as other similar ESL contexts. Therefore, the present study should include those necessary stages that primary school students go through in their writing classes.

Third, most of the studies were concerned with the effects of SBI on (young) adult writers in the context of English for Academic Purposes (EAP). In particular, research on writing instruction in primary schools in the Singapore context is rare (Law, 2013). A writing SBI on primary school students is needed in order for researchers and teachers to understand how SBI may impact young writers' writing competence, given their differences (e.g., learning experiences, cognitive maturity, and knowledge structure) from (young) adult writers. Given the importance of writing, it is highly important to train students to write effectively from young.

Fourth, teachers are an essential agent for effective classroom instruction. Teachers should provide SBI to their own students for it to achieve ecological validity and generalizability (Gu, 2012). Thus far, virtually no previous research of writing SBI has involved real classroom teachers. Only the researchers provided SBI to the participants in the aforementioned studies. In a most recent intervention study (Gunning & Oxford, 2014) on primary students' ESL oral interaction competency in a Canadian Francophone primary school, the teachers and the researcher co-planned SBI lessons in the teachers' existing curriculum. Then, the teachers conducted the SBI to their students. The close collaboration between researcher and teacher contribute to the utility and practicality of SBI (Gunning & Oxford, 2014). Such research might be able to offer an effective working model for school teachers to implement SBI in their own writing classes as part of their teaching routines.

Fifth, it is highly necessary for further research to incorporate a more rigorous methodology, e.g., pre- and post- questionnaire administrations, pre-, post- and delayed tests, and experimental and control groups to measure the effects of SBI more effectively (see Chamot, 2005). In previous research, however, no delayed test was included in the design to measure if