

Exploring Pedagogical Synergy of Peer Assessment and Social Learning Platform for Fostering English Grammar Learning

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Abstract: In view of the trends toward the pedagogical goals and the technological integration for English grammar learning in the twenty-first century, this study aims to explore the pedagogical synergy of peer assessment and social learning platform for supporting English as Second Language (ESL) learners at the elementary school level to develop English grammatical knowledge. A technology-mediated pedagogy has been designed to combine the element of guided inquiry with the use of topic-specific e-learning websites and the element of peer assessment with the use of social learning platform for supporting elementary ESL learners to develop knowledge about English basic tenses through English writing tasks. An empirical research which combines qualitative and quantitative methods is planned to investigate the impact of two settings of the designed technology-mediated pedagogy in a real classroom environment. Two classes of Grade 4 ESL learners will be invited to learn the three target grammatical topics under the two settings during a three-week trial teaching period, respectively. The empirical research will conduct attainment tests, content analysis of student artifacts, questionnaire surveys and semi-structured focus group discussions to investigate the impact of the designed technology-mediated pedagogy on the achievements, processes and perceptions of learners in the development of English grammatical knowledge through peer assessment of writing products. This study will contribute to pedagogical innovations in the use of social learning technology for effective development of high-level linguistic knowledge among ESL learners in elementary school education.

Keywords: English, elementary school, grammar, peer assessment, social learning platform

1. Research Motivation

School education in the twenty-first century puts a growing emphasis of learner-centered learning through the meaningful integration of Information and Communication Technology (ICT) with practical pedagogies for classroom learning and teaching across different subject areas (Chan, 2010; Säljö, 2010). There is a growing use of free digital resources, ranging from static PowerPoint slides to interactive subject-related websites, available on the Internet for subject teaching and learning in school education (Halse & Mallinson, 2009; Solomon & Schrum, 2007). In language subject area, there is a research advocacy of investigation into the impact of using ICT in language classrooms in the elementary school sector, especially on the development of high-level linguistic knowledge about syntactic rules, because language learning in elementary school is critical for young learners to build foundation for the long-term development of linguistic intelligence (Andrews, Freeman, Hou, McGuinn, Robinson, & Zhu, 2007; Richards, 2009).

In Hong Kong elementary school sector, there is a decade-long emphasis on the pedagogical integration of ICT into the delivery of English as Second Language (ESL) curriculum, as English language is not the native language of the majority of student population. The use of ICT is considered helpful to provide young ESL learners in local elementary schools with various types of affordances for effective learning of the very important but very difficult components in English

language subject, such as grammatical knowledge of tense and agreement (Hegelheimer & Fisher, 2006; Zhao & Lai, 2008).

As the reciprocal influence between learners' performance of writing tasks and their development of grammatical knowledge is well established (Hegelheimer & Fisher, 2006; Yin, Sims, & Cothran, 2012), the ESL research community in recent years devotes their effort to continuously research into the use of different types of digital resources for supporting learners to enhance the processes and outcomes of English grammar learning through everyday English writing tasks (Andrews et al., 2007; Hegelheimer & Fisher, 2006). In this vein, social learning platforms such as Wikispaces are increasingly adopted in elementary school education over the world. On the other hand, peer assessment is long advocated to be a potential pedagogical approach for ESL writing classrooms. The research delineated in this paper, therefore, is motivated to explore a technology-mediated pedagogy which integrates the approach of peer assessment and the technology of social learning platform for English grammar learning in elementary ESL writing classrooms.

2. Research Issue

This study aims to explore the pedagogical synergy of peer assessment and social learning platform for supporting ESL learners at the elementary school level to develop English grammatical knowledge through everyday English writing classes.

Peer assessment, which is premised on the social learning theory, refers to the process that learners use criteria to make judgments and give feedback on the learning products of their peers. The rationale behind this pedagogical approach is that learners take an active role in constructing target domain knowledge and managing their learning progress through timely interaction with peers to exchange ideas and collect feedback on their learning products (Roberts, 2006; Topping, 2005). In the field of ESL education, the pedagogy of peer assessment is often implemented in writing lessons across different grades with a great flexibility for classroom implementation, in terms of group size, member ability, proportion between peer feedback provision and teacher feedback provision, etc. Learners in peer assessment activities are usually asked to review and comment different aspects of the writings produced by group members, such as the language use and content scope. For the peer assessment activities for young learners, researchers suggest that teacher feedback provision might follow learners' feedback provision for the purposes of learning guidance (Shih, 2011; Xiao & Lucking, 2008).

Social learning platforms, which are emerging web-based tools specific for educational use, refer to websites with interface layouts and communication functions similar to those in social networking sites, but with user groups and interaction contexts limited for designated communities within schools for pedagogical purposes (Ghamrawi & Shal, 2012; Solomon & Schrum, 2007). These platforms provide affordances that support learners across different grades to conveniently share and store multimedia resources, and easily exchange and track discussion ideas within restricted groups of teachers and learners for learning purposes anytime, anywhere. They are therefore considered potential to help learners to achieve active, constructive and interactive learning when appropriate subject topics and pedagogical designs are selected in classroom teaching (Halse & Mallinson, 2009; Säljö, 2010).

Based on the literature review on the pedagogy of peer assessment and the technology of social learning platforms for educational purposes, a technology-mediated pedagogy is conceptualized with a goal of forwarding the use of ICT for fostering English grammar learning among elementary ESL learners. ESL teachers over the world are found to mainly adopt two pedagogical approaches to English grammar teaching — the form-focused approach which focuses on inculcating grammatical knowledge through tasks on grammar-rule manipulations; and the communicative approach which focuses on applying grammatical knowledge in classroom interactions through authentic learning tasks. Therefore, the design of the target pedagogy takes the growing advocacy in English grammar learning and teaching — a strategic combination of inquiry learning under the form-focused approach and collaborative learning under the communicative approach — into consideration.

The designed technology-mediated pedagogy integrates the approach of peer assessment and the use of social learning platform. As elementary school teachers in Hong Kong habitually use free online resources for subject teaching and learning, the designed technology-mediated pedagogy will

focus on the use of free-of-charge topic-specific e-learning websites and social learning platform available on the Internet for the trial teaching. On the one hand, the designed technology-mediated pedagogy includes guided-inquiry activities which ask learners to browse topic-specific e-learning websites for generalizing knowledge about grammatical rules and then recording and sharing the learned grammatical knowledge on the selected social learning platform. On the other hand, it includes theme-based short writing tasks followed by peer assessment tasks on the selected social learning platform to engage learners in applying, reflecting on and consolidating the learned grammatical knowledge. The peer assessment task is designed to have two variations for a flexible implementation according to the learning needs of the target young learners: one variation focuses on peer review only, and the other one includes peer review coupled with teacher feedback.

3. Research Plan

This study will be an empirical research which adopts both quantitative and qualitative methods to investigate the impact of the designed technology-mediated pedagogy in a real classroom environment.

An elementary school that has rich experience in ICT in education will be purposefully sampled in the author's home city as the partner school. Two classes of Grade 4 students, each consisting of around 30 students with similar learning ability, will be selected from the partner school for a three-week trial teaching period. This amounts around nine 40-minute lessons. The topic of the trial teaching period will focus on the three basic tenses in English language system, namely present simple tense, past simple tense and future simple tense. Each trial teaching week will cover the teaching of one basic tense. The English teachers of the two sampled classes will take charge of the classroom teaching throughout the whole trial teaching period. The two sampled classes will be randomly assigned to one of the following two settings for learning English grammar in pairs in every trial teaching lesson:

- Setting 1: Guided inquiry with selected websites >>> Short writing task and peer assessment (peer review only)
- Setting 2: Guided inquiry with selected websites >>> Short writing task and peer assessment (peer review coupled with teacher feedback)

Three research questions are made for the empirical research:

- (i) What are the achievements of elementary ESL learners in English grammar learning under the designed technology-mediated pedagogy?
- (ii) What are the patterns among elementary ESL learners in peer assessment involving the use of social learning platform for English grammar learning under the designed technology-mediated pedagogy?
- (iii) What are the perceptions of elementary ESL learners in English grammar learning under the designed technology-mediated pedagogy?

4. Research Methods

Four methods will be adopted in the empirical research to investigate the effect of the designed technology-mediated pedagogy. First, all students will sit for identical pre-test and post-test (Creswell, 2012) before and after each of the three trial teaching weeks, respectively. The test papers will be adapted from the established instrument adopted by Yin et al. (2012) to include a series of questions that assesses students' knowledge of the target English grammatical topics. Second, a content analysis (Krippendorff, 2013) of student artifacts will be conducted to identify the patterns among students in each of the two settings when they perform peer assessment involving the use of social learning platforms during the whole trial teaching period. The function of the selected social learning platform for tracking posts will be used to keep records of every input by each learner during peer discussions. These records will be processed by content analysis to contextualize learners' types of peer feedback and strategies of feedback provision.

Third, a questionnaire survey (Creswell, 2012) will be conducted at the end of the whole trial teaching period. All students from the two settings will be asked to complete a self-administered

questionnaire to indicate their perceptions of the implementation of the designed technology-mediated pedagogy for English grammar learning. Fourth, one-fifth of the students in each of the two settings will be randomly selected for the semi-structured focus group discussions (Creswell, 2012) to further investigate their perceptions of the implementation of the designed technology-mediated pedagogy. The selected students will be asked to describe the changes in their process, motivation and achievement in the learning of English grammar through the lessons that implement the designed technology-mediated pedagogy.

5. Research Contribution

For the elementary school sector in most Asian cities such as Hong Kong wherein English language is not the native language of the majority of student population, there is a genuine need to empower local ESL teachers to plan and implement effective and efficient methods for the pedagogical use of ICT in English grammar learning and teaching. The learning tasks in English writing lessons always require learners to demonstrate their grammatical knowledge. This in turn creates opportunities for ESL teachers to make pedagogical innovations in the use of ICT for fostering learners' development of English grammatical knowledge through the process of English writing.

This study sets to contribute to the field of ICT in ESL education in two aspects. The research approach of this study will lead the evidence-based research outcomes, which not only give ESL teachers recommendations on the advancement of English grammar learning in ESL writing classrooms; but also support ESL teachers to gain insights into further effort in the innovative design of technology-mediated pedagogies for English grammar learning in elementary school education.

The empirical research in this study is going to be conducted in a real classroom environment. The research results obtained will help to inform the establishment of a pedagogically sound practice that exploits the potentials of peer assessment and social learning platforms for maximizing the learning effectiveness among elementary ESL learners in English grammar learning.

References

- Andrews, R., Freeman, A., Hou, D., McGuinn, N., Robinson, A., & Zhu, J. (2007). The effectiveness of information and communication technology on the learning of written English for 5- to 16-year-olds. *British Journal of Educational Technology*, 38(2), 325-336.
- Chan, T. W. (2010). How East Asian classrooms may change over the next 20 years. *Journal of Computer Assisted Learning*, 26(1), 28-52.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA ; Hong Kong: Pearson.
- Ghamrawi, N., & Shal, T. (2012). Let us teach them the way they learn: A vision on using social networking and mobiles in teaching and learning. *Educational Research*, 3(12), 921-926.
- Halse, M. L., & Mallinson, B. J. (2009). Investigating popular Internet applications as supporting e-learning technologies for teaching and learning with Generation Y. *International Journal of Education and Development using Information and Communication Technology*, 5(5), 58-71.
- Hegelheimer, V., & Fisher, D. (2006). Grammar, writing, and technology: A sample technology-supported approach to teaching grammar and improving writing for ESL learners. *CALICO Journal*, 23(2), 257-279.
- Krippendorff, K. (2013). *Content analysis: An introduction to its methodology* (3rd ed.). Los Angeles, CA: SAGE.
- Richards, G. (2009). Technology-mediated learning environments for young English learners. *Educational Technology and Society*, 12(2), 334-336.
- Roberts, T. S. (2006). *Self, peer, and group assessment in e-learning*. Hershey, PA: Information Science Pub.
- Säljö, R. (2010). Digital tools and challenges to institutional traditions of learning: Technologies, social memory and the performative nature of learning. *Journal of Computer Assisted Learning*, 26(1), 53-64.
- Shih, R. C. (2011). Can Web 2.0 technology assist college students in learning English writing? Integrating Facebook and peer assessment with blended learning. *Australasian Journal of Educational Technology*, 27(5), 829-845.
- Solomon, G., & Schrum, L. (2007). *Web 2.0 new tools, new schools*. Washington, DC: International Society for Technology in Education.
- Topping, K. J. (2005). Trends in peer learning. *Educational Psychology*, 25(6), 631-645.
- Xiao, Y., & Lucking, R. (2008). The impact of two types of peer assessment on students' performance and satisfaction within a Wiki environment. *Internet and Higher Education*, 11(3-4), 186-193.

- Yin, M., Sims, J., & Cothran, D. (2012). Scratching where they itch: Evaluation of feedback on a diagnostic English grammar test for Taiwanese university students. *Language Assessment Quarterly*, 9(1), 78-104.
- Zhao, Y., & Lai, C. (2008). Technology and second language learning. In L. L. Parker (Ed.), *Technology-mediated learning environments for young English learners: Connections in and out of school* (pp. 167-206). New York: Lawrence Erlbaum Associates