Piloting Small-Group Online English Tutoring with Interactive Pedagogy

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Abstract: *The aim of this paper is to describe piloting small-group online English tutoring service for children from low socio-economic families in Taiwan and to present the preliminary results from the joint operations with community service organizations for integrating online English classes into the on-going after-school programs. This small-group online tutoring service consists of real-time meeting technology, multimedia content and course design, interactive pedagogy for small-group teaching, and asynchronous game-based coursework for individual practice and assessment. As consistently observed, over 90% of the students love to learn through playing online word games with team competition and collaboration and we found that the choice of technology plays such an important role that pedagogical approach should be reviewed and modified upon the selection of technology as far as online interactivity is concerned.*

Keywords: online tutoring, JoinNet, English learning, small-group teaching, interactive pedagogy

1. Introduction

The Association for the Advancement of Online Tutoring, abbreviated as AAOT, is a non-profit organization with the mission of bringing online tutoring service to every child who needs help on learning. Since its establishment in 2012, AAOT has been working with local community service organizations in Taiwan to set up computer rooms with network connections, the so-called Learning Hubs, in their premises in order to offer free online English classes to strengthen their existing after-school programs for elementary age students.

Numerous researches on different aspects of online tutoring have been reported and reviewed at great length (e.g., Chuang, 2013; Pettigrew & Shearman, 2013; OʻHare, 2011). In this study, the focus is on designing interactive pedagogy for small-group online English tutoring—in particular, transforming in-house learning games into online group interactivities that cultivate cooperative learning. Twelve online tutoring classes (12 tutors and 52 students) were selected for the study of this project. Each class meets once a week by using online meeting software, and students were asked to sign in the AAOT website to do homework assignments three times a week. Both the synchronous online teaching and asynchronous homework practicing were recorded at cloud servers for the purpose of observation and evaluation.

2. Technology

Since real-time communication technology defines online classroom and the functionality of online classroom may affect the design of online pedagogy, becoming familiar with real-time communication technology is one of the prerequisites of becoming a good online tutor. Among the very few of the top-ranked online meeting/collaboration systems, for the online tutoring project, AAOT decided to deploy JoinNet, an online multimedia communication software that automatically records entire meeting at cloud server for future playback and sharing.

Since there is only one online class a week, the design of the corresponding after-class homework and self-pace exam becomes very important to the success of the online English tutoring project of AAOT, which is accomplished through the Word Challenge Site (WCS) implemented for the AAOT online English tutoring project.

2.1. Online Classroom: JoinNet

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JoinNet defines online classroom in a very unique way that it provides not only the necessary teaching tools—e.g., audio and video for online dialogues, whiteboard for printing slides, annotated by handwriting and/or pointer; joint web browser for bringing students to view the same webpage or watch the same online streaming video—but also records the entire online teaching session for future playback, which provides a practical way of reviewing the teaching moments in tutoring classes. As one of its best practices, JoinNet has been used by the Ministry of Education in Taiwan since 2006 for a national-wise after-school one-to-one online tutoring project that has involved more than 11,000 college students from about 27 universities and 7,500 students from about 85 elementary & middle schools in remote areas (Liu & Lin, 2015; ChanLin et al., 2012; ChanLin et al., 2015). In this study, there are four features of JoinNet that are important to the design of interactive pedagogy: (1) classroom management, (2) game-based group interaction, (3) tutor-led joint web browsing, and (4) just-in-time online quiz—some of which will be explained briefly in the session regarding online pedagogy.

2.2. Online Homework & Exam: Word Challenge Site

As JoinNet online meeting provides synchronous teaching and learning, Word Challenge Site (WCS) provides asynchronous practice and assessment, which contains Word Bank, Homework and Exam. Every student can sign in WCS to review vocabulary being taught, do homework assignments and take required exams. Both homework and exam are given by the same format: with hints of picture, audio, and definition in Chinese or English, student selects the right answer from the five different words, as shown by Figure 1. The frequency of doing homework and exam from each student, as well as the time spent on doing them, is recorded in WCS as an indication of student's motivation and speed of learning.
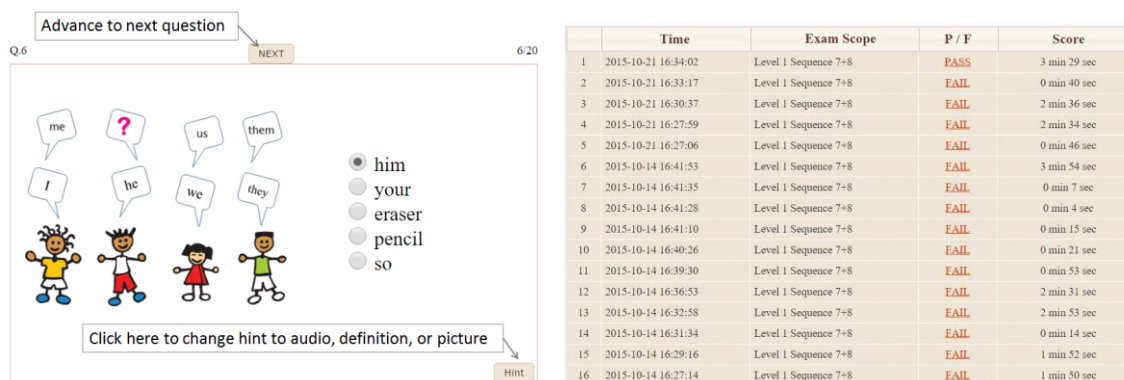

Figure 1. WCS highlights: homework & exam format and exam record (anonymous learner).

3. Content

AAOT Online English tutoring being focused here is private tutoring that provides entry-level vocabulary and phonics lessons to children of primary school who are familiar with alphabets A-Z—and nothing more. The purpose of teaching is to build a good start on English learning and set the tone of happy English learning. AAOT Word Bank Elementary Level consists of 12 sequences of 690 words, that provides beginners a sequential vocabulary build-up process from body to room, from room to house, from house to people, and then from school to city, plus 163 words from Phonics Lesson One and 171 words from Phonics Lesson Two—a total of 1,024 words over a 90-week course.

4. Pedagogy

Table 1 shows examples of the game-based small-group interactive pedagogies that have been practiced during the online English tutoring project. Please note that these games were modified with help of special features of JoinNet,

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such as free-hand drawing, select-and-move, webcam snapshot, etc., for better engagement with the online learners.

Table 1. Three Examples of Game-based Small-Group Interactive Pedagogies.

	Word Search	Drag & Drop	Scavenger Hunt
Objective	In searching for a given set of words, students read and memorize the words in a way that they enjoy.	Students recognize the words they learned by moving certain image to its right spot.	Hands-on approach requires visual, listening, and doing as necessary skills to memorize vocabulary.
Instruction	Find the words that are shuffled in a grid of letters and aligned horizontally, vertically or diagonally.	Click and drag objects to put them in the correct order or to the right positions.	Students retrieve physical subjects related to the target vocabulary, and show them via webcam.
Task	Use free-hand drawing tool to highlight a word.	Select the right item, move it to the right place and read it aloud.	Present the objects to the class with correct pronunciation.

5. Methods

Since the summer of 2013, 15 college students, and graduates, from English departments of universities in Taiwan were recruited to tutor 105 elementary and middle school students online via real-time meeting software, JoinNet, for 90-minute weekly English classes provided by AAOT. The average size of a class is 6. Each tutor has microphone headset and webcam to communicate with his or her students who have similar microphone headsets and webcams. The tutors conduct online teaching from their residences or in campus's computer labs. Meanwhile, the tutees are in their own Learning Hub of the community service organization which they attend, accompanied by a coworker of the organization.

5.1. Research Context and Participants

To focus on interactive pedagogy for small-group teaching, 12 tutoring classes (12 tutors and 52 students) were selected for the study of this project. Students were asked to do WCS homework assignments at least three times a week and pass the required exams—each homework, or exam, takes approximately less than 5 minutes to complete.

Among the 52 students, 5 of them are from preschool, 13 from grades 1-3, 23 from grades 4-6, 8 middle schoolers and 3 first-year high schoolers who wanted to learn English all over again. When the survey was taken, 22 of them enrolled in this project for less than 3 months, while 28 of them have been staying in this project for about a year or longer. Before joining this AAOT project, 28 students attended English classes but only 4 of them continued non-AAOT English classes when this research was done.

5.2. Data Collection and Analysis

All online tutoring sessions were recorded at a JoinNet cloud server and reviewed selectively afterwards, focusing on observing the interactions between tutors and their students. If low level of interactivity or any student's misbehavior were observed, it would be brought out in an online discussion meeting and tutors were encouraged to discuss their experiences and difficulties in tutoring the mix-level students. As for the tutees, in addition to the online recording files, audio interviews were conducted during physical visits to the students' Learning Hubs, both students and coworkers were interviewed. A survey form was distributed to the students to understand students' learning attitudes, motivations and satisfactions. The quantitative data collected from the survey was analyzed with descriptive statistics.

6. Results and Findings

During this study, all tutors, 100% agreed that the proposed interactive word games helped a lot to engage online learners and the design of homework and exam from WCS was intuitively fun so that students were willing to do homework and exam by themselves repeatedly. One important feedback from the participating tutors is: when engaging

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students via online word games, it is better having two groups of students competing with each other in real time.

Table 2 lists the survey-question responses from the students regarding their general attitude to the online English learning experiences. According to the on-site audio interviews, using computer and headset for online learning is extremely cool to the students, 89% of the students feel great about the online English class; 92% of the students love playing online word games and 88% are willing to spend more time doing homework at WCS, which is a good sign of self-motivated learning. According to the students participated in the survey, "online" seems to provide a safe distance that makes them feel more comfortable to talk and to ask, or even to be silent.

Table 2. Numbers and percentages of the students' agreement levels on survey items

Item Statement	Strongly agree	agree	Neutral	disagree	Strongly disagree
1. I feel great about online English class	41(79%)	5(10%)	4(7%)	1(2%)	1(2%)
2. I love English sing-alone video	25(48%)	12(23%)	6(12%)	6(12%)	3(5%)
3. I love playing online word games	44(84%)	4(8%)	2(4%)	2(4%)	0(0%)
4. I love interacting with other students online	38(73%)	7(13%)	4(8%)	2(4%)	1(2%)
5. I am glad that I can learn and say more English words	40(77%)	9(17%)	3(6%)	0(0%)	0(0%)
6. I like tutor's explanation in Chinese	45(86%)	5(10%)	2(4%)	0(0%)	0(0%)
7. The slides prepared by tutor help me a lot	41(79%)	6(11%)	4(8%)	1(2%)	0(0%)
8. I am willing to spend more time on homework	38(73%)	8(15%)	5(10%)	1(2%)	0(0%)
9. I really feel like I am learning English	43(82%)	4(8%)	5(10%)	0(0%)	0(0%)

7. Conclusion

Kids love online English tutoring with interactive game-based pedagogy. Unlike teacher-centered repeat-after-me teaching style, facilitating interactive online group games provides a good example of student-centered pedagogical approaches. Consistent with arguments reviewed in most literatures, students love to learn through playing online word games with team competition and collaboration. It have been argued that pedagogy should come first before technology, but in this study we found that the choice of technology plays such an important role that pedagogical approach should be reviewed and modified upon the selection of technology as far as online interactivity is concerned. Simply put, instructor had better be familiar with the technology at hand in order to develop good online interactive pedagogy.

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