

Effectiveness of Simulation in Developing English Communicative Speaking Skill in Learners with Different English Proficiency

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***Abstract** The present research was aimed to examine the effectiveness of using simulation in English communicative speaking online learning package and to compare the difference between the mean scores of the high and the low English proficiency groups in the communicative speaking test after and before the use of developed online learning package using simulation. The subjects included 100 Bansomdejchaopraya Rajabhat Bachelor's degree English major (Semester 2/2013) students. They were divided as 2 groups based on their English proficiency using the scores they got from the university fundamental course. 40 students with the first 40 highest scores were assigned as a high English proficiency group and the other 40 students with the first 40 lowest scores were assigned as a low English proficiency group. The other 20 students who had the scores between these two groups were cut off. Research instruments included English Communicative Speaking Online Learning Package Using Simulation and English Communicative Speaking Test. A simple pre- and post-test comparison study was used as the research methodology. The results revealed that the mean of communicative speaking testing scores in the posttest of total 80 subjects was significantly higher than in the pretest at .05 significant level. Comparing between the results obtained from the subjects with high and low English proficiency level presented that in the high group, the mean of communicative speaking testing scores in the posttest was significantly higher than in the pretest ($t = 11.77$) and in the low group, the mean of communicative testing scores in the posttest was significantly higher than in the pretest ($t = 14.31$) at .05 significant level. The results were discussed in terms of the importance of simulation in conveying understanding to the learners and the appropriate use of simulation in learners*

with different English proficiency according to a performance pyramid.

Keywords: *simulation, English communicative, English proficiency*

Simulation is a technique for learning that can be applied to many different disciplines and types of learners. According to Jones (1982), simulation has been defined as reality of function in a simulated structured environment and Sam (1990) also defined simulation as a “structured set of circumstances that mirror real life and participants act as instructed” (Sam, 1990 cited in Dougili, 1987). In other words simulation can be defined as the act of initiating the behavior of some situation or some process by means of something suitably analogous. Another important characteristic of this teaching technique is that behavior is not controlled in a simulation. So, the participants bring to the situation their own skills, experience, and knowledge. This characteristic of simulation enriches the learning process and makes the academic setting a real life-like situation which is one of the fundamental conditions for effective and efficient language learning. A simulation is a learning method which the situation feels real and thus leads to more engaging interaction by learners of all ages.

The historical perspective of using simulation and its success in English Language Teaching (ELT) revealed that simulations provide a realistic situation for more interaction in which students can get extensive practice. The role of simulation has been much advocated in the realm of ELT (Loui, 2007; Rayan, 2007). Sam (1990) has presented three benefits of using simulation as a teaching technique in a language classroom as 1) the learners are forced to behave in a natural atmosphere and simulation activities stimulate learner-to-learner conversational interaction (Richards, 1985), 2) it provides rare opportunity for the learners to use language freely and creatively (Sam, 1990), and 3) simulation brings the real outside world in the classroom. Simulation encourages active participation of all learners. Simulation can be incorporated into regular teaching activities and it should be a part of the communicative classroom methodology in ELT classroom.

Thus, the present research was aimed to develop and investigate the efficiency of using simulation in English communicative speaking online learning package and to compare

the effectiveness of using simulation in English communicative speaking online learning package obtained from English learners with different English proficiency. The subjects included 100 Bansomdejchaopraya Rajabhat Bachelor's degree English major (Semester 2/2013) students. They were divided as 2 groups based on their English proficiency using the scores they got from the university fundamental course in Semester 1/2013. So, 40 students with the first 40 highest scores were assigned as a high English proficiency group and the other 40 students with the first 40 lowest scores were assigned as a low English proficiency group. The other 20 students who had the scores between these two groups were cut off. These 2 groups were divided as the experimental group and the control group.

Research purposes

1) To examine the effectiveness of using simulation in English communicative speaking online learning package.

2) To compare the difference between the mean scores of the high and the low English proficiency groups in the communicative speaking test after and before the use of developed online learning package using simulation.

Hypotheses of the study

1) There will be a statistically significant difference between the mean scores of the high and the low English proficiency groups in the communicative speaking test after the use of developed online learning package using simulation at .05 level.

2) There is a difference of statistically significant difference between the mean scores of the high and the low English proficiency groups in the communicative speaking test after the use of developed online learning package using simulation at .05 level.

Research Methodology

In order to evaluate and to compare the effectiveness obtained from the use of developed online learning package using

simulation in English learners with different English proficiency, a simple pre- and post-test comparison study was used as the research methodology.

The subjects of the study

The subjects included 100 Bansomdejchaopraya Rajabhat Bachelor's degree English major (Semester 2/2013) students. They were divided as 2 groups based on their English communicative proficiency using the scores they got from the university fundamental course in Semester 1/2013. So, 40 students with the first 40 highest scores were assigned as a high English proficiency group and the other 40 students with the first 40 lowest scores were assigned as a low English proficiency group. The other 20 students who had the scores between these two groups were cut off.

English communicative speaking online learning package using simulation design

Online learning was selected as a method of delivering communicative English skills using simulation techniques. Online learning allows the learners to access the content and simulation anywhere and anytime. I font type, size and colour were consistent through-out the online package to ensure that it was user- friendly without additional distractors.

Content and presentation of simulations

The content of the online learning was development based on the information of communicative English in order to give the information of 10 popular tourist places as Wat Suwannaram, Wat Rakhang, Wat Kanlayanamit, Woramahawiharn, Wat Arun, the Vichaiprasit Fort, the Taling Chan floating market, the Royal Barge Procession, the Princess Mother Memorial Park, Phra Racha Wang Derm, and Canal tour. Content and learning activity must include 4 basic communicative English skills as speaking, listening, writing, and reading. The activity was delivered to the learners using simulation technique as visual imaging, videos,

interactive tasks, and quizzes. The example of online learning was presented in Figure 1.

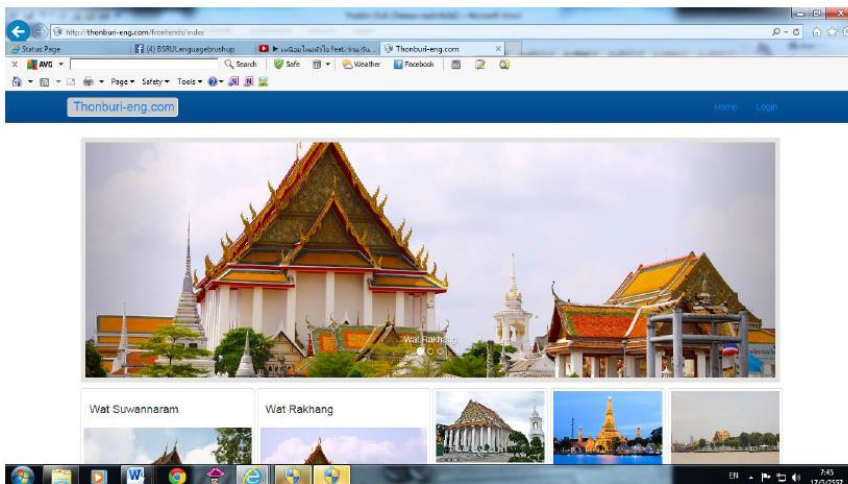


Figure 1: The example of develop online learning

The online learning package used in this study was developed and examined the efficiency and the satisfaction of learners in the study of Sudasna (2014) which the package was tested in 300 subjects and obtained the efficiency at 77.4/85.6. According to the satisfaction, the subjects showed the highest level of strong satisfaction/satisfaction on the useful of learning outcome for developing English skills (97%), followed by the help of simulation to practice English skills (95%), the sufficient interactive simulation (93.6%) the overall presentation and design of this online package (92.3%), the suitable of overall package for learning (92%), the design of the online package (90.6%), the increase of topic understanding using online learning package (87%), the enjoyable online learning package (85.6%), and the clear content (84%).

English communicative speaking test: Pretest-Posttest

The researcher has conducted a communicative proficiency test in the beginning of semester 2 of academic year as the pre-test and in the end of the term as the post-test. The three English native

speakers participated in this evaluation exercise. All the evaluators evaluated the samples according to the following procedure.

All the evaluators were briefed by the researcher about the evaluation criterion and it was decided that the marks of all the evaluators will be added and then divided by three to get the mean score for each participant's performance in English communicative test. Evaluation procedure was explained to all the participants. They were told to speak about the importance of English for their studies. They were given fifteen minutes to prepare the topic developed from the content and practice using the online learning package. They were told that paper reading will not be allowed and they needed to speak for at least one minute and then the evaluators would ask them three to four questions to check their comprehension. Individual scores of all the evaluators were added and then divided by three to calculate the mean. Then the average scores of both the groups were entered and paired sample test was applied to calculate statistical difference in the mean scores of both the groups: high and low English proficiency groups.

Data analysis

The average scores of both the groups (high and low English proficiency groups) were entered and paired sample test was applied to calculate statistical difference in the mean scores of both the groups: high and low English proficiency groups.

Results

This section presents the research results of the study based on the research objectives: 1) the effectiveness of using simulation in English communicative speaking online learning package and 2) the effectiveness of using simulation in English communicative speaking online learning package obtained from English learners with different English proficiency (high and low English proficiency groups).

The effectiveness of using simulation in English communicative speaking online learning package

The developed online learning package was used to teach in the experimental groups of high and low English proficiency, total

80 subjects to response. The results summarized in Tables 1 presented comparison of communicative testing scores between pretest and posttest.

Table 1: Comparison of communicative speaking testing scores between pretest and posttest

Test	n	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>p</i>
Pretest	80	21.5/50	1.61	79	12.41*	.05
Posttest	80	44.5/50	1.24	79		

According to Table 1, the mean of communicative testing scores in the posttest of total 80 subjects was significantly higher than in the pretest ($t = 12.41$) at .05 significant level. The results implied that using simulation in English communicative speaking online learning package is statistically significant effective.

The effectiveness of using simulation in English communicative speaking online learning package from English learners with different English proficiency

The effectiveness of using simulation in English communicative speaking online learning package obtained from English learners with different English proficiency was examined with comparing the difference of mean scores obtained from the high and the low English proficiency groups in the communicative speaking test before and after the use of developed online learning package. The results were shown in Table 2.

Table 2: Comparison of communicative speaking testing scores between pretest and posttest in high and low English proficiency groups

Proficiency Group	Test	<i>n</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>p</i>
High	Pretest	40	28.0/50	1.75	39	11.77*	.05
	Posttest	40	47.5/50	1.21	39		
Low	Pretest	40	14.0/50	2.11	39	14.31*	.05
	Posttest	40	41.5/50	1.89	39		

According to Table 2, the mean of communicative speaking testing scores in the posttest of total 40 high English proficiency subjects was significantly higher than in the pretest ($t = 11.77$) at .05 significant level. In addition, the mean of communicative speaking testing scores in the posttest of total 40 low English proficiency subjects was significantly higher than in the pretest ($t = 14.31$) at .05 significant level.

According to the difference of statistically significance found in the high and the low English proficiency subjects implied that the effectiveness obtained from the use of developed online learning package using simulation in English learners with different English proficiency showed the different impact. The results obtained from this study revealed that the impact of simulation in the learners with low English proficiency was greater than obtained in the learners with high English proficiency.

Discussions

The qualitative literature on teaching using simulations emphasizes the importance of conveying information as well as conveying understanding (McLaughlin & Talbert, 1993). Teaching the students should involve not so much information without the understanding. Students should learn concepts and can apply them to various situations or they learn the concepts that underlie the solutions. These skills can be conveyed by providing examples or concrete versions of simulations. The research (Graves & Sunstein, 1992; McLaughlin & Talbert, 1993) also revealed that using simulation as a part of teaching method can produce qualitative improvements in the academic performance of all students, regardless of their backgrounds. It is not only appropriate for

advanced students; even those in need of more basic skills can benefit from understanding the basis of skills. The results obtained from the present study in which simulation technique is effective to develop English communicative speaking skills because simulations provide the various situations of English communication for the students and they can practice and apply knowledge in various situations and context.

However, the research results revealed that simulation technique had the greater impact on students with the low English proficiency. The results can be discussed in term of the appropriate use of simulation according to a performance pyramid suggested by Lynch and Cross (1991) which can be regarded as a modeling tool that assists in the design of new performance measurement systems. Glavin (2008) suggests evaluating the appropriate use of simulation according to a performance pyramid in which the base reflects factual knowledge and higher levels of the pyramid move upward into higher levels of skill proficiency. Thus, simulation technique will facilitate and help the students' understanding since the basic level to the higher level of skill proficiency. This characteristic of simulation technique can be used to help the low proficiency students to understand the acquired skill as English language speaking skill.

Conclusions

The results of the present research revealed that the mean of communicative speaking testing scores in the posttest of total 80 subjects was significantly higher than in the pretest at .05 significant level. Comparing between the results obtained from the subjects with high and low English proficiency level presented that in both high and low groups, the mean of communicative speaking testing scores in the posttest was significantly higher than in the pretest at .05 significant level. The results implied that simulation technique encourages students to understand the knowledge by practicing it in another context. This technique is appropriate for both high and low English proficiency learners because it facilitates and helps the students' understanding since the basic level to the higher level of speaking skill proficiency.

Comparing communicative speaking testing scores between pretest and posttest in high and low English proficiency groups also showed the effectiveness of using simulation in English

communicative speaking online learning package. That is there was statistically higher significance found in the low English proficiency subjects than in the high English proficiency subjects.

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