The Development of Cartoon Animation for Enhancing Speaking Ability for Communication of Matthayomsuksa 1 (Grade 7)
การพัฒนาสื่อเสริมทักษะการเรียนรู้การพูดภาษาอังกฤษ ด้วยการ์ตูนแอนนิเมชั่นสำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 1

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ABSTRACT: The purpose of this study was: 1) to develop and find out the efficiency of cartoon animation lessons in speaking ability communication for Matthayomsuksa1 (Grade 7) students to meet the criteria set at 70/70; 2) to compare the student's learning achievement before and after learning through the cartoon animation lessons in speaking ability communication; 3) to study the students' satisfaction towards the cartoon animation lessons in speaking ability communication. The samples were 22 Matthayomsuksa1(Grade7) students who enrolled the Fundamental English Course (EN 21101) in the first semester of the academic year 2013 at Watsrabua School in Phutthaisong District, Buriram Province, selected by using purposive sampling technique. The instruments used in this study were: 1) the cartoon animation lessons; 2) the learning achievement tests; and3) the satisfaction questionnaire. The statistics used for analyzing the collected data were percentage, mean, standard deviation, and dependent samples t-test. The significant difference was set at the level of .05. The results of the study were summarized as follows:

1. The cartoon animation lessons in speaking ability communication for Matthayomsuksa1 (Grade7) students had an efficiency of 80.46/78.83 which was higher than the criteria set at 70/70.

2. Matthayomsuksa1 (Grade7) students who learned by cartoon animation speaking ability communication after learning had higher achievement than before learning at the .01 level of statistical significant difference.

3. Matthamsuksa1 (Grade7) students were satisfied toward the cartoon animation for enhancing speaking ability communication as a whole at the most satisfactory level.

Keywords: Cartoon animation lessons, speaking ability, communication, satisfaction

บทคัดย่อ การวิจัยในครั้งนี้มีความมุ่งหมาย 1) เพื่อสร้างและหาประสิทธิภาพของสื่อเสริมทักษะการฟังภาษาอังกฤษเพื่อการสื่อสาร ด้วยการ์ตูนแอนนิเมชั่น สำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 1 ที่มีประสิทธิภาพตามเกณฑ์ 70/702)เพื่อเปรียบเทียบผลสัมฤทธิ์ทางการเรียนของนักเรียนชั้นมัธยมศึกษาปีที่ 1 ที่เรียนโดยใช้สื่อเสริมทักษะการฟังภาษาอังกฤษเพื่อการสื่อสารด้วยการ์ตูนแอนนิเมชั่นสำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 1 ก่อนเรียนและหลังเรียน3) เพื่อศึกษาความพึงพอใจของนักเรียนชั้นมัธยมศึกษาปีที่ 1 ที่มีต่อสื่อเสริมทักษะการฟังภาษาอังกฤษเพื่อการสื่อสารด้วยการ์ตูนแอนนิเมชั่น กลุ่มตัวอย่างที่ใช้ในครั้งนี้คือ นักเรียนชั้นมัธยมศึกษาปีที่ 1 จำนวน 22 คน ซึ่งเรียนวิชาภาษาอังกฤษพื้นฐาน (อ21101) ภาคเรียนที่ 1 ปีการศึกษา 2556 โรงเรียนวัดสระบัว อำเภอพุทไธสง จังหวัดบุรีรัมย์ ได้มาโดยการเลือกแบบเจาะจง เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูลได้แก่สื่อเสริมทักษะการ์ตูนแอนนิเมชั่นแบบทดสอบวัดผลสัมฤทธิ์ทางการเรียน และแบบสอบถามความพึงพอใจ สถิติที่ใช้ในการวิเคราะห์ข้อมูลได้แก่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และ Dependent Sample t-test โดยกำหนดค่าความมีนัยสำคัญทางสถิติที่ระดับ .05 ผลการวิจัยสรุปได้ดังต่อไปนี้

1. สื่อเสริมทักษะการฟังเพื่อการสื่อสารภาษาอังกฤษ ด้วยการ์ตูนแอนนิเมชั่น สำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 1 ที่ผู้วิจัยสร้างขึ้น มีประสิทธิภาพ 80.46/78.83 ซึ่งสูงกว่าเกณฑ์ที่กำหนดคือ 70/70

2. นักเรียนชั้นมัธยมศึกษาปีที่ 1 ที่เรียนโดยใช้สื่อเสริมทักษะการฟังเพื่อการสื่อสาร ด้วยการ์ตูนแอนนิเมชั่นที่ผู้วิจัยสร้างขึ้น มีผลสัมฤทธิ์ทางการเรียนหลังเรียนสูงกว่าก่อนเรียน อย่างมีนัยสำคัญทางสถิติที่ระดับ .01

3. นักเรียนชั้นมัธยมศึกษาปีที่ 1ที่เรียนโดยใช้สื่อเสริมทักษะการฟังเพื่อการสื่อสาร ด้วยการ์ตูนแอนนิเมชั่น มีความพึงพอใจต่อสื่อเสริมทักษะการฟังเพื่อการสื่อสาร โดยรวมอยู่ใน ระดับมาก

คำสำคัญ : สื่อเสริมทักษะการฟังเพื่อการสื่อสาร ด้วยการ์ตูนแอนนิเมชั่น, ทักษะการฟังเพื่อการสื่อสาร, ความพึงพอใจ

Background of the Study

Nowadays, English is an international language, which is used by many people all over the world for communication either in speaking and writing. Thus, it is not surprising that teaching English is carried out in many parts of the world. For English learners in Thailand, learning English is instrumental. Knowledge of English provides individual opportunities for higher education, career advancement, and better jobs with better pay in foreign-funded joint ventures, study, and travel abroad.For the country, people with language proficiency are needed factors in developing country in many ways as in economy, politics, and education. Therefore, English is the main language that Thai students have to learn.

Recently, it seems that teaching English is limited for students in learning in the class. Yet, teaching speaking ability communication is indeed crucial for language learners. It is said that multi-media had provides the basic roles for enhancing speaking ability communication.Sittironnarit (2008 :69) mentions that the cartoon animation is to bring multi-media which relates to or includes the content and learning experience to help develop the students' learning behavior and learning achievement. The cartoon animation have shown its efficiency as a useful teaching material. It advantages the students in mentalaspect, it can reduce the students' anxiety or feel less pressure during learning. In addition, this approach reinforces and develops students' learning autonomy and ability in learning systematically as Collin (1998) claims that students are likely to understand and remember better when they have worked the rules out for themselves.In addition, cartoons can be used effectively in the teaching process when they provide information with regard to concretely instructive objects. They were used by many researchers in the classroom in order to promote learning, both in children and adolescents (e.g. Ball, 1982; De Fren, 1988; Demetrulias, 1982; Eulie, 1969; Madden, Chung, & Dawson, 2008; Peacock, 1995; Tsou, Wang, & Tzeng, 2006). Surprisinglyenough, the most innovative use in the instructive practice is that they initially capture the students' attention and, then, they allow them to travel with their mind in a world of imagination and amusement while they are learning.

In conclusion, to cope with the problem more effectively, this study aims at investigating the efficiency of the cartoon animation lessons as a teaching material whether it is able to solve the problems on the students' learning achievement on speaking ability communication and reinforce the students' learning skill for Matthayomsuksa1 (Grade 7) students at Watsrabua School. Consequently, the cartoon animation lessons have been selected for this research project with the belief in its effectiveness and capability in stimulating students' learning.In particular, the finding of the study will be beneficial to the teaching and learning the cartoon animation for enhancing speaking ability communication for Matthayomsuksa1 (Grade 7) students and other levels and can be also used as guidelines for improvement of the cartoon animation lessons for those who teach English speaking ability communication.

Purposes of the Study

1. To develop and find out the efficiency of the cartoon animation for enhancing speaking ability communication for Matthamyomsuksa1 (Grade 7) students to meet the criteria set at 70/70.

2. To compare students' learning achievement before and after learning through cartoon animation lessons in speaking ability communication for Matthayomsuksa1 (Grade7) students.

3. To study the students' satisfactions in learning speaking ability communication through cartoon animation.

Research Questions

1. What is the efficiency of cartoon animation for enhancing speaking ability communication for Matthayomsuksa1 (Grade 7) students?

2. Do students who learn cartoon animation for speaking ability communication have higher mean score on post-test than that of pre-test mean score?

3. What is the level of students' satisfaction in learning speaking ability communication by cartoon animation lessons?

Research Methodology

1. Research Samples: The samples were 22 Matthayomsuksa1 (Grade 7) students who enrolled the Fundamental English Course (EN21101) studying in the first semester of academic year 2013 at Watsrabua School in PhutthaisongDistrict, Buriram Province. They were selected by purposive sampling technique , andthey were taught Fundamental English Course (EN21101).

2. Research Instruments

2.1 The cartoon animation lessons for enhancing speaking ability communication for Matthayomsuksa1 (Grade 7) students constructed by the researcher including 3 parts, namely: 1) Cartoon animation 1: My new friend; 2) Cartoon animation 2: Go shopping; Cartoon animation 3: Let's go to the zoo. Each cartoon animation part comprised of cartoon animation lessons on CD,instruction, concept, objectives, pretest and posttest, contests, exercise, and keys.The cartoon animation were constructed by the researcher as the following steps: 1) Study and analyzed the causes and problems while learning and teaching English observation, teaching record, and students' learning report; 2) Studies the Basic Education Core Curriculum B.E. 2551 (A.D. 2008) about vision, principles, goal, learners' key competencies, desirable characteristics, learning standards, indicators, learning standards of foreign languages; 3) Studies and reviewed the principles, andtheories of cartoon animation lessons; 4) Chose the appropriate contents and designed the purpose, objectives and context of cartoon animation lessons based on Basic Education Core Curriculum B.E. 2551 (A.D. 2008); 5) Constructed 3 cartoon animation lessons including 1: My new friend, part1 on CD; 2: Go shopping, part2 on CD; 3: Let's go to the zoo, part3 on CD; 6) The cartoon animation lessons were given comments and examined by advisor about content validity quality and overall picture then improved the cartoon animation based on advisors' suggestion; 7) The cartoon animation lessons were then examined by 3 experts about content validity quality by using five point Likert scale; 8) Analyzed the scores from the experts to find out the mean scores and compared with criteria; 9) Improved the cartoon animation lessons on the experts' suggestion and purposed them to check again; 10) The cartoon animation were tried out with 17 Matthayomsuksa2 students who were not the samples inacademic year 2013 at Watsrabua School in Phutthaisong District, Buriram Province in order to find out the weak points and then improved the cartoon animation before using with the samples.

2.2 Thirteen lesson plans in Cartoon animation for enhancing speaking ability communication for Matthayomsuksa1 (Grade 7) students. The whole lesson plans took a total of 13 hours.The cartoon animation were constructed by the researcher as the following steps: 1) Study the Basic Education Core Curriculum B.E. 2551 (A.D.2008) ; 2) Studied methodology, principles, theory, and writing technique of lesson plan; 3) Three parts were chosen to be topics in lesson plan writing;

4) Examined by advisors about key concepts, indicator, learning strands, activities, learning media, and learning assessment to give some comments about content validity quality; 5) Examined by key concepts, indicator, learning strands, activities, learning media, and learning assessment to give some comments about content validity quality by using Likert's rating scale as employed in cartoon animation lessons; 6) Analyzed the scores from experts to find out the mean score and compared with the criteria as employed in cartoon animation; 7) Conducted the complete lesson plans for Matthayomsuksa1 (Grade 7) students which utilized with cartoon animation lessons in speaking ability communication in the first semester of academic year 2013 at Watsrabua School in Phutthaisong District, Buriram Province

    2.3 Questionnaire on students' satisfaction towards the cartoon animation lessons was designed to collect the information from the samples. The cartoon animation were constructed by the researcher as the following steps: 1) Reviewed the literature on satisfaction; 2) Studies literature review on how to construct the satisfaction questionnaire as explicated by Likert's method or five-point rating scales; 3) Gathered and arranged the issues concerning learning through the cartoon animation lessons in speaking ability communication into a list; 4) Proposed the statements to the advisors before creating based on the issues complied from learning via cartoon animation in speaking ability communication; 6) Organized the statements and tried out with Matthayomsuksa2 students at Watsrabua School in academic year 2013; 7) Each item of five-point rating scales was calculated utilizing Person's correlation coefficient formula to find out the discrimination power; 8) The method of coefficient alpha of Cronbach; 9) Selected 15 statements which had the most significant differences at level 0.05 to be the questionnaire.

3. Data Collection Procedures

In this study, researcher design was one group pre-test- post-test design as shown in table below: Research Deign (Sai-yot. 1995:248-249)

Group	Pre-test	Treatment	Post-test
Experimental	T1	X	T2

As shown in Table above, T1 is pre-test, X is the learning English speaking ability communication via the cartoon animation lessons, and T2 is post-test, respectively.

To collect the data, the present study included achievement test, and the satisfaction questionnaire. The procedures for collecting data were as follows:
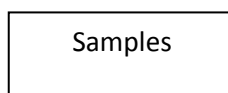
    3.1 A study was done with a pre-test. A pre-test was given to all of samples at the beginning of a class for 1 period.
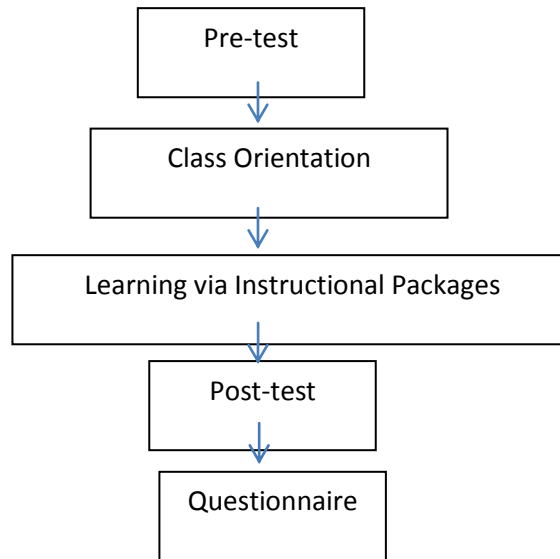
    3.2 The samples were orientated to understand about learning via cartoon animation lessons. Then they were taught English speaking ability communication by utilizing the cartoon animation lessons and did the activities for 13 periods.

    3.3 A post-test was administered with all of the class for 1 period.

    3.4 After doing a post-test, the samples were asked to fill out the questionnaires focusing on their satisfaction about learning via cartoon animation for 1 period.The research design could be illustrated below.

Figure 1 : Research Design

Samples

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┌─────────────────┐
│    Pre-test     │
└─────────────────┘
         ↓
┌─────────────────┐
│ Class Orientation│
└─────────────────┘
         ↓
┌──────────────────────────────────┐
│ Learning via Instructional Packages│
└──────────────────────────────────┘
         ↓
┌─────────────────┐
│    Post-test    │
└─────────────────┘
         ↓
┌─────────────────┐
│  Questionnaire  │
└─────────────────┘
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4. Data Analysis and Statistical Procedures

4.1 Pre-test and Post-test Scores in order to evaluate the students' English proficiency before and after being taught through cartoon animation lessons, the pre-test and post-test scores were computed to find out the percentage (%), mean ($\bar{x}$) and standard deviation (S.D.). The scores obtained from the activities and a post-test were calculated to find out the efficiency of the outcomes (E2), respectively. Dependent samples t-test was used to compare the difference between pre-test and post-test mean scores to detect significant difference set at .05 level. The efficiency index (E.I) was employed to find out the learners' progress from learning through cartoon animation lessons in speaking ability communication for Matthayomsuksa1 (Grade 7) students after learning.

4.2 Students' Satisfaction towards the cartoon animation toward learning English in speaking ability communication through cartoon animation, the data from five-rating scales was computed for mean ($\bar{x}$) and standard deviation(S.D.).

4.3 Additional Opinions Data obtained by learners' opinions and suggestion in the last part of the questionnaire were analyzed by content analysis technique to find out their satisfaction and reaction towards learning via cartoon animation lessons.

Results

This part presents the findings of this study. The results of each question are expressed in the following order: 1) research question one regarding the determination the efficiency of cartoon animation for enhancing speaking ability communication for Matthayomsuksa1 (Grade 7) students to meet the criteria set at 70/70; 2) research question two regarding the comparison between students' learning achievement before and after learning through cartoon animation for enhancing speaking ability communication for Matthayomsuksa1 (Grade 7) students ; 3) research question three regarding the investigation the satisfaction of Matthayomsuksa1 (Grade7) students towards the cartoon animation for enhancing speaking ability for communication. The findings presented are drawn from quantitative data from the exercises, achievement tests, and questionnaire; and the qualitative data from the open-ended questions. The open-ended questions are presented generally descriptively.

4.1 Research Question One: What is the efficiency of cartoon animation for enhancing speaking ability for communication Grade7 students?; This research question was directed towards the

efficiency of cartoon animation in speaking ability communication who participated in this research. To answer this question, the researcher employed the quantitative data from the cartoon animation and achievement test, which determined the efficiency of the cartoon animation speaking ability for communication for Matthayomsuksa1 (Grade7) students based on the criterion set at 70/70. The quantitative data consisted of the activity scores from all episodes (efficiency of the process), and post-test scores (efficiency of the outcomes). There were 3 episodes in this study. The total mean scores from all activities scores of episodes were 140 scores: episode1 (48 scores), episode2 (48 scores), episode3 (42 scores). The total mean scores from the achievement test or post-test were 60 scores. Table 4.1 below illustrates mean, standard deviation, percentage and the efficiency of the cartoon animation lesson. The efficiency of the cartoon animation speaking ability for communication of Matthayomsuksa1 (Grade7) students, which were conducted by the researcher, is 80.46/78.83 which was higher than the criteria set at 70/70. It claims that students, who learned English speaking ability for communication through the cartoon animation, received total mean scores from the activities scores of cartoon animation at 80.46% and total mean scores from the achievement test after learning through cartoon animation at 78.83 %. The efficiency of outcome (E2) was lower than the efficiency of process (E1) might be caused by the post-test was more difficult than the activities and limitation of time in taking post-test.

The information as to the perceived efficiency of the cartoon animation for enhancing speaking ability communication for Matthayomsuksa1 (Grade7) students. Revealed that the students tend to employ a wide range of speaking ability communication when teaching English by cartoon animation, which was higher than the criteria set. In order to reflect more profoundly upon the students' mean scores on post-test than that of pre-test of English speaking ability communication through cartoon animation, a detailed quantitative analysis of the very aspect based on multiple sources of data is provided in the Research Question Two.

4.2 Research Question Two: Do students who learn cartoon animation for speaking ability communication have higher mean scores on post-test than that of pre-test mean scores?; To gain more insights into the student's learning achievement before and after learning through cartoon animation in speaking ability communication, the second research question was formulated. To address this question, the researcher used quantitative data in terms of the comparison the difference between pre-test and post-test mean scores. Evidently, pre-test scores (60 items) and post-test scores (60 items) were also compared to find out the statistically significant difference. For this study, the level of significance was set at .05..

Table1: Comparison the Difference between Pre-test and Post-test Mean Scores

No.	Pre-test Scores (60)	Post-test Scores (60)	Difference (D)	Double Difference(D^2)
1	18	48	30	900
2	25	50	25	625
3	19	48	29	841
4	20	43	23	529
5	21	44	23	529
6	28	49	21	441
7	18	41	23	529
8	17	46	29	841
9	15	47	32	1024
10	19	46	27	729
11	17	47	30	900
12	16	45	29	841
13	19	46	27	729
14	18	44	26	676
15	25	51	26	676
16	18	49	31	961
17	27	52	25	625
18	20	48	28	784
19	19	47	28	784
20	27	50	23	529
21	18	43	25	625
22	28	50	22	484
Total	452	1034	582	15602
$\bar{x}$	20.55	47.00	26.45	709.18

The twenty-two Matthayomsuksa1 (Grade 7) students who enrolled the Fundamental English Course (EN 21101) in the first semester of the academic year 2013 at Watsrabua School obtained the pre-test mean scores at 20.55 and post-test mean scores at 47.00, which reported that the students who learned by cartoon animation speaking ability communication after learning had higher achievement than before learning. It should be noted that the information presented in the table above only represents the comparison the difference between pre-test and post-test mean scores of the twenty-two Matthayom1 (Grade7) students, regardless of their cartoon animation speaking ability communication. Table 4.3 below then displays the difference between students' pre-test and post-test mean scores.

Difference between Pre-test and Post-test Mean Scores

Achievement	N	Total Scores	$\bar{x}$	S.D.	t
Pre-test	22	60	20.55	22.37	18.17**
Post-test	22	60	47.00	19.31	

** significant difference at .01

As indicated in the table above, the independent samples t-test was conducted in order to find whether there was a significant difference in the using the cartoon animation lessons of the pre-test and the post-test mean scores. The results showed that there was statistically significant difference between the pre-test and the post-test mean scores in using cartoon animation speaking ability communication on conditional sentences at a.01 level.

4.3 Research Question Three: What is the level of students' satisfaction in learning speaking ability communication by cartoon animation lesson?; The third research question focused on gaining an understanding of the level of the students' satisfaction in leaning speaking ability communication by cartoon animation.All of twenty-two Matthayomsuksa1 (Grade7) students were asked to complete the 15-item of 5-rating scale satisfaction questionnaire, ranging from the most satisfactory (5) to the least satisfactory (1). Table 4.4 below demonstrates mean and stand deviation for each questionnaire item.

The students' satisfaction in learning English speaking ability communication by cartoon animation lessons as a whole was at "the most satisfactory" level ($\bar{x}$ = 4.66, S.D. = 0.48) When considering at each item, it was found that the three highest mean scores were no.1 "You enjoy activities provided in the cartoon animation" ($\bar{x}$ = 4.78, S.D. = 0.41), followed by no.2 "The knowledge gained from learning English speaking ability communication can be used for communication in everyday life." ($\bar{x}$ = 4.75, S.D. = 0.43), and no.15 "You have positive attitude toward learning English after learning through cartoon animation." ($\bar{x}$ = 4.66 S.D. = 0.47), respectively. In contrast, the three lowest mean scores were no.9 "Learning through cartoon animation lessons helps you understand the contents well." ($\bar{x}$ = 4.36, S.D. = 0.48), followed by no.12 "Learning English through cartoon animation lessons enhances your critical thinking process." ($\bar{x}$ = 4.51, S.D. = 0.51), and no.13 "Learning through cartoon animation lessons enhance your autonomous learning." ($\bar{x}$ = 4.50, S.D. = 0.50), respectively.

Conclusion and Discussion

1. The Efficiency of cartoon animation lessons for enhancing speaking ability communication was 80.46/78.83, which was higher than the criterion set at 70/70. This is because the cartoon animation lessons in speaking ability communication were completely developed in three trails; an individual, a small group, and a field trail. For each step, the researcher could see both good and bad point. Thus, every step of trying out helps to develop the cartoon animation. It can be seen that the first efficiency of the process (E1) were higher than the second efficiency of the outcomes (E2) That means the students got activities mean scores more than post-test mean scores. It might be that they were interested in doing activities in the cartoon animation for enhancing speaking ability communication, they could learn and check their answers with immediate feedback. This might motivate them to pay more attention in doing activities in order to get high scores. Besides, the efficiency of the outcomes was lower than the efficiency of the process since the post-test had more difficulty than the activities.

2. Differences between Students' Learning Achievements. The result revealed that students who learned speaking ability communication through cartoon animation had higher learning achievement of speaking ability on post-test mean scores than in pre-test mean scores with statistically significant difference at a .01 level. This could be concluded that cartoon animation had the efficiency because they could lead the students achieve higher learning. The result caused by they were quite new and interesting for the students to learn. The cartoon animation lessons can motivate the students to learn

the content eagerly more than they used to be. In addition, they consist of diverse components, and activities which support self-learning and they were tried out and found the efficiency before use with samples. Therefore, students who learn through the cartoon animation had higher proficiency in learning.

3. Students' Satisfactions towards the Cartoon animation for enhancing speaking ability communication. The result illustrated that students' satisfaction in speaking ability communication through the cartoon animation were at most satisfactory level. The findings showed that the students were satisfied with learning throughcartoon animation lessons. This could be explained that the cartoon animation were evaluated the quality by experts consequently, the cartoon animation had high quality, appropriate content, and suitable for the level of students. The cartoon animation lessons supported individual learning and promoted interaction between both students-to-students, and students-to-teacher. Therefore, a learning atmosphere was created. The students had unstressful learning situation. It indicates that all of students have participation in learning English speaking ability communication through cartoon animation at pass level ($\bar{x}$ = 4.66). They participate in all activities, attend in learning, and can conclude or summary the lessons.

Suggestions for Further Studies

Based on the findings from the present study, the researcher draws the following conclusions which are outlined in four points:

1. A comparison of language learning through cartoon animation lessons and other teaching kit should be done.

2. Research on language learning through cartoon animation should be done in other speaking ability communication contents or on other skill.

3. Studying the result of learning via cartoon animation lessons with other variable such as the level of intelligence, attitude, and consistency in learning should be investigated.

4. The language multi-media should play an active role in speaking ability communication in learning English.

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