

IMPROVING SPEAKING SUB-SKILLS BY USING THE ATTENTION, RELEVANCE, CONFIDENCE AND SATISFACTION (ARCS) MODEL

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ABSTRACT

This research focussed on the use of the ARCS model to improve the speaking sub-skills of students. The sample for this research was 70 students in two groups; an Experimental Group (EG) and a Control Group (CG). The instruments used for collecting the data were tests (a pre-test and a post-test) and a questionnaire. The findings revealed that: (1) There was a significantly higher improvement in the scores of students who were taught using the ARCS model compared to the students who were taught using the Grammar Translation Method. The first hypothesis was proven by the z-test result (4.18); ie. That the difference was significant. The results from the data analysis proved that there were significantly better improvements in the post test scores of the EG, in terms of pronunciation, vocabulary, fluency and comprehension. The z-score for pronunciation was 3.29, grammar was 1.55, vocabulary was 2.35, fluency was 4.65 and comprehension was 2.25. Except for grammar, those z-scores were all outside the limits from -1.96 to +1.96. And (2) The results from the questionnaires showed the positive impact, viz: decrease in students' nervousness plus enhancing students' confidence and satisfaction in speaking in public.

Keywords: *Improve, ARCS Model, Public Speaking Sub-skills*

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INTRODUCTION

Speaking is one of the four skills in EFL which must be learned by high school students. This is because speaking is the key element for learning a language (Tennant & Negash, 2010, p. 29). However, speaking is considered a very complex skill because it covers important aspects such as grammar, vocabulary, pronunciation, accent, and comprehension (Hughes, 2011). This means that in teaching speaking a teacher should focus on these aspects to teach the students how to master the skills of speaking. Speaking English is still a major problem for senior high school students who are learning English as a foreign language (EFL) (Ellis, 1990). This also happens in Indonesia where learning English at school is compulsory. However, most of the students do not use English in daily conversation in their environment. They rarely use interpersonal and transactional speaking in EFL with others. As a result, they do not master the sub-skills in speaking such as pronunciation, grammar, fluency, vocabulary and understanding.

Meanwhile the National Education Department (Departemen Pendidikan Nasional, 2013) has stated that the aim of learning to speak EFL, for senior high school students, is to train them to be able to express meaning in transactional and interpersonal speech and to be able to sustain conversation in EFL in a daily life context (Daryanto, 2014). This implies that senior high school students are expected to be able to use English in social contexts such as to introduce people, to greet, invite, ask and give permission to others whether in a formal or in an informal context. As a consequence, teachers of English are responsible to train their students to be capable of using English orally.

Based on analysis of results from EFL speaking tests of students at MAN 3 high school in Banda Aceh, the researchers found that these students had difficulty in speaking English. They made mistakes in pronouncing words in English and did not know how to pronounce many English words. They tended to pronounce English words by following the rules for pronunciation from Indonesian, e.g. pronouncing “live” as “life” to express an address in English.

Meanwhile, the students also made errors in grammar when speaking. They made mistakes in word order. Also, they faced difficulties in differentiating between the use of the verb “to be” and the use of other verbs. They often used them together in an active sentence such as “I am live in Banda Aceh” instead of “I live in Banda Aceh” or “I am living in Banda Aceh”.

The students were also passive and could not speak English fluently when they were asked to perform in front of their class. They would often speak English haltingly, word by word with many pauses because of lack of vocabulary and often could not find the words to express their ideas. They would often read a text without looking at the audience. As a result, the speaking class was not interactive. Both the speakers and the audience did not enjoy the speaking classes at all. Meanwhile, lack of vocabulary also led these students to use Indonesian words in their EFL speaking class because they did not know the words in English. Some students also preferred keeping silent when the teacher asked them to speak in English. They were afraid of making mistakes when speaking EFL.

Another problem faced by the students was comprehension. Their lack of vocabulary led to sentences being misunderstood. Some of them did not understand the meaning of spoken sentences because they only remembered words or sentences without knowing the function or the meaning of these words or sentences. Consequently, most of these students got poor scores at the summative tests because they had not mastered the material.

This phenomenon suggested that the problems the students had with their speaking sub-skills needed to be solved. One of the solutions suggested to solve these problems was by using a motivational model of teaching, viz: The Attention, Relevance, Confidence, Satisfaction (ARCS) model for teaching speaking which is believed to be one possible solution to raise the motivation of students in the teaching-learning processes (Keller, 1987). It provides tactics in order to build students' motivation in learning. Keller has suggested that teachers should stimulate students' curiosity by providing novelty or surprise (*attention*), present content in understandable ways and related to the learners' experiences (*relevance*), provide challenging and meaningful opportunities for successful learning (*confidence*), and provide positive reinforcement and motivational feedback (*satisfaction*).

According to Molaei and Dortaj (2015), the implementation of the ARCS model in teaching-learning speaking was effective in improving speaking sub-skills such as fluency, coherence, lexical resources (vocabulary), grammar, accuracy, and pronunciation. Besides, it also motivated the students to learn. Another researcher, Chu (2017), found that the ARCS method led to improved efficiency in speaking and listening classes. He said that the ARCS instructional design was effective in improving students' grammar and vocabulary. Besides, he

also found that the ARCS model enhanced students' pronunciation and understanding.

This information encouraged the researcher to conduct a study with the title: Implementation of the Attention, Relevance, Confidence and Satisfaction (ARCS) Model to improve the EFL speaking skills of students in the first class (grade 10) at MAN 3 high school in Banda Aceh. The difference between this study and the previous ones cited was the object of the study. The researcher focussed on improving five of the speaking sub-skills, viz: pronunciation, grammar, vocabulary, fluency, and understanding. Furthermore, the object of this research was also different from the previous studies as the researcher chose students in the first class, 10th grade, at a senior islamic high school as the object of her research.

Research Questions

1. Will there be any significant difference in speaking scores between grade 10 students who are taught-learn EFL speaking by using the Attention, Relevance, Confidence, and Satisfaction (ARCS) model and students who are taught-learn using the usual model?
2. What will be the response of students to the implementation of the ARCS Model in teaching-learning speaking EFL in grade 10 at MAN 3, Banda Aceh?

Research Objectives

1. To find out the effect of the implementation of the Attention, Relevance, Confidence, and Satisfaction (ARCS) Model for teaching-learning EFL speaking in grade 10 at MAN 3 Banda Aceh.
2. To find out the response of the Grade 10 students at MAN 3, Banda Aceh to the use of the ARCS model in teaching-learning EFL speaking.

LITERATURE REVIEW

An Overview of the Attention, Relevance, Confidence and Satisfaction (ARCS) Model

The ARCS model is a teaching-learning model designed and developed by Keller (1987). It is an approach to gain the attention of students at the beginning and throughout the lesson. It uses a systemic

problem solving approach throughout the lessons. This includes knowing and identifying elements of human motivation, analyzing audience characteristics to determine motivational requirements, identifying characteristics of instructional materials and processes that stimulate motivation, selecting appropriate motivational tactics, and applying and evaluating appropriate tactics.

The ARCS instruction model was designed to enhance four learning motivation categories as described in detail below:

Attention

Attention in this case is related to creating & building excitement amongst the students to find out more about the subject matter. Students are stimulated to ask reflective questions about themselves such as “Why am I learning this subject material?”, “What is the subject about?”, etc. On that account, Keller (2010) has stated that attention can be built through generating perceptions by introducing unpredicted activities and questions to stimulate eagerness to solve a problem. Moreover, using some tactics such as using humor, videos, short lectures, mini-discussion groups, posing questions or problems, creating surprises or interesting events are also used to gain the attention of students.

Relevance

Relevance between the material with the students’ needs and goals should be filled in order to enhance learning motivation (Keller, 2010). Students are more motivated to learn when they can see that there is a direct benefit in the learning materials for their life, especially if the material is closely relevant to their interests and goals. Hence, telling the students about the benefit of the material or the objectives of the study can be a good strategy. For example, in teaching students about introductions in English, the teacher can provide a direct example by asking her students to start a conversations with a guest in the classroom. Another way to show relevance is by telling the students the implications of the conversation activity and how it can be of use when applied in their future life.

Confidence

The confidence of the students is engaged by establishing positive expectations for success (Keller, 2010). This means that students are directed to eliminate doubts and feelings of uncertainty especially that

the material being taught-learnt is difficult to study. Students need to be stimulated to grow their self-confidence by giving them challenges that they can solve so that they can proof that they are capable of studying something new.

Satisfaction

Satisfaction is a situation when a student has positive feelings after having a favorable learning experience (Keller, 2010). For example, students are tested to perform a dialogue in the classroom after they are taught about the way to perform a dialogue and what aspects should be fulfilled to achieve a good score. Students feel satisfied after giving a speech in their speaking class and receiving a good score and when they believe that they have been treated fairly.

The ARCS model provides a motivational design process which is very important for an instructional system in a classroom (Keller, 2010). In the latest version, the motivational design process is divided into four phases, viz: Analysis, design, development, and evaluation and each phase has some steps as shown below:

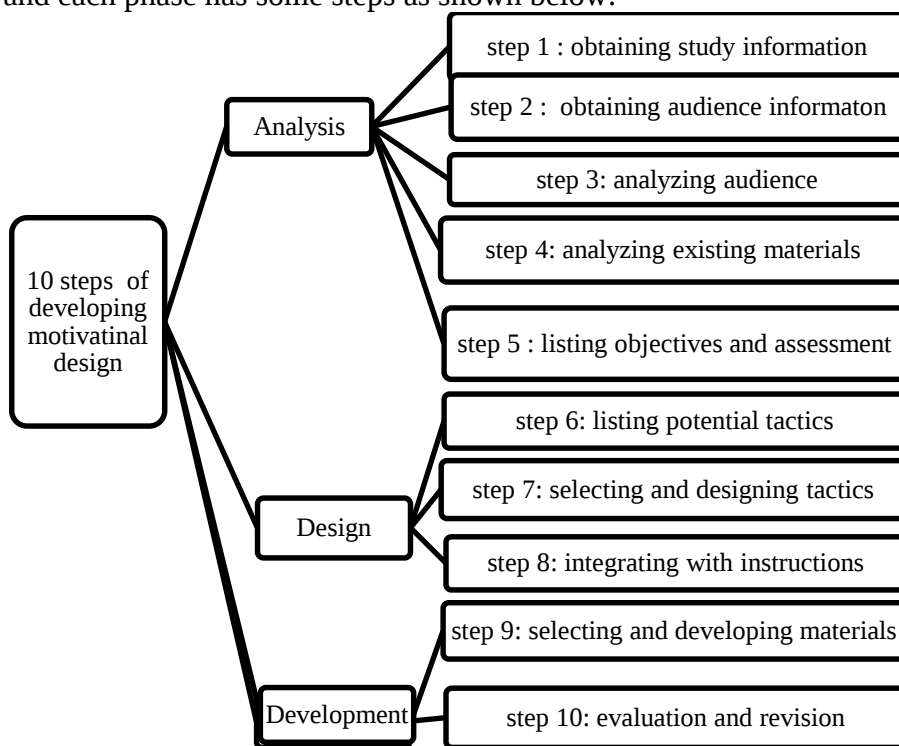


Figure 1. Ten steps of ARCS motivational design (Adopted from Keller (2010))

In the analyzing phase, information about the learner and course are collected and analyzed (steps 1 to 5). Before designing the course using the ARCS model, information about the course, the course description and rationale, the teachers and the students plus their attitudes and skill levels are collected. This data is then analyzed to find out the motivational problem (steps 4 and 5). This will then provide information about what kind(s) of ARCS category needs to be improved. This helps the teacher to design the teaching goals and the appropriate kinds of assessment for the teaching-learning. Then, the process is continued to the design phase (steps 6-8). In this phase, the teacher designs the motivational learning systems based on the problem(s). At step six, the teacher lists the probable solutions, as many as possible, without checking whether they are appropriate or not for the students. At step seven, the teacher selects the probable appropriate solutions and design tactics for beginning and carrying on throughout the teaching-learning processes. Later, at step eight, the most applicable solution is selected and the teacher predicts what will happen in the future.

For example, after analyzing the problems, it is found that the students are not confident when performing in front of the class. In this phase, the teacher lists as many solutions as possible to increase the confidence of the students, such as giving praise, letting students lead the program, giving students more opportunities to perform in front of the class or in front of a group and so on. The teacher cannot apply all of the possible solutions because the time for teaching is limited. The best possible solution is chosen by considering the skill level of the students, the limited time for teaching, etc. Then, by looking at the skill level of the students (for example, intermediate level), the time available for teaching-learning, for example, ninety minutes, then, the best possible solution for this problem may be giving the students the chance to perform dialogues in front of the class.

Later, in the development phase, the material is further selected and developed (step 9). The material can be selected by using available materials, modifying materials based on the situation or developing or producing new materials. For example, if the teacher selected dialogues for speaking activities about introducing one's self, it is possible to look at much existing materials which is already appropriate for students. Otherwise, the materials should be developed if and as they are needed. Development and evaluation is the last process in the ARCS design (step 10). This last step is designed based on the students'

reactions and satisfaction after implementation of the initial program of ARCS.

Speaking Skills

Skill in speaking is considered a very complex skill because it involves ability in grammar, vocabulary, pronunciation, intonation and voice projection amongst others (Bygate, 2003, p. 3). Meanwhile Byrne (1979) has said that speaking involves both productive and receptive skills (speaking and listening). It is a two-way process that needs listeners who accept and understand information from the speaker.

ESL speaking involves many complex skills such as grammar, vocabulary, intonation, pronunciation, stress and choice of language functions (Nunan, 2003, p. 39). This implies that in a speaking class, the students are required to be able to produce English speech sounds and sound patterns; use word and sentence stress, intonation patterns and the rhythms of English; select appropriate words, collocations and sentences according to the proper social setting, audience, situation and subject matter; organize their thoughts in a meaningful and logical sequence; use language as a means of expressing values and judgments; and produce EFL language quickly and confidently (Nunan, 2003).

Speaking Sub-skills

According to Harris (1969, p. 84), there are five speaking sub-skills that need to be assessed. They are:

Pronunciation

Pronunciation is the way of producing words or sounds. Good pronunciation is important to produce clear language when people speak (Kline: 2001). Furthermore, clear language will be more understandable which helps listeners to receive a clear message. The parts of pronunciation are stress, rhythm, and intonation.

Grammar

Grammar is the study of rules about the use of words, changes in words, word orders and how to make sentences. Nelson (2001, p. 1) has stated that grammar is a set of rules for organizing words into larger units. A speaker of English needs to learn both grammar and collocation and meanings of vocabulary in order to produce sentences that are correct, in order to avoid misunderstandings in delivering a message.

Vocabulary

Vocabulary is the knowledge of the meaning and functions of words. Learning vocabulary means learning the meanings, spellings, pronunciation and use of words. According to Richards and Schmidt (2002) vocabulary includes single words, compound words and idioms. This means that learning vocabulary is not only learning about what are the meanings of words, but also includes how to use the words or collocation.

Fluency

Fluency refers to the ability to speak communicatively and easily without many pauses, fillers or hesitations. In teaching speaking, students must be allowed to speak without any interruptions from others to help them to practice speaking fluently. Thus, it is better not to correct students straight away in order to let them express their ideas without interruption (Pollard, 2008).

Comprehension

Comprehension in speaking refers to the understanding by the speaker of the information conveyed in what they say. The comprehension of a speaker to the subject that they are speaking about is very important to avoid providing misinformation to their listeners. Meanwhile, comprehension can be inferred from speakers' non-verbal and verbal responses (Cohen et al., 2005).

RESEARCH METHODOLOGY

This was a quasi-experimental research study which focussed on implementation of the ARCS model for teaching-learning EFL speaking. In this quantitative study, data was collected from tests and a questionnaire. For the sake of a research study, the population has to be determined. The population is the individuals or objects that have similarities in one or several aspects to be observed in a research study (Gay, 2006, p. 139). The population for this research was all of the first class, 10th grade, students at MAN 3 Banda Aceh in semester 1 of the 2016-2017 academic year. Two classes of students were selected as the sample by using random sampling. The first class was chosen as the experimental group (EG) and another class was chosen as the control group (CG). Students in the EG were taught EFL speaking by using the

ARCS model. Meanwhile, in the CG, the students were taught speaking by using the standard technique.

In this research, the researcher used tests and a questionnaire as the instruments for the research. Tests were used to find out the speaking achievements of the two groups to test the hypothesis. A pre-test was given in the first meeting and a post-test was given in the last meeting. In designing the tests, the writer used the curriculum for speaking for first year (10th grade) students. The tests were a kind of oral test in which the students were required to perform a dialogue (role-play) based on a given theme/situation. The test was about “Introducing One’s Self” where the students were asked to introduce each other in groups for seven or eight minutes. Five elements of speaking were scored in the tests, these were pronunciation, grammar, vocabulary, fluency, and understanding.

Meanwhile, a questionnaire was given to the EG in order to find out the students’ responses to the use of the ARCS model in teaching-learning speaking. A Likert-Scale model of questionnaire was used for this research. The questionnaire consisted of fifteen questions which were divided into two types, closed and open-ended questions. The questions were related to the students’ agreement and their responses toward the implementation of the ARCS model in teaching-learning speaking and about the ARCS model itself. Every question had four optional answers, viz; (1) strongly agree, (2) agree, (3) disagree, and (4) strongly disagree. Nine questions were about the implementation of the ARCS in speaking and six questions related to the implementation of the ARCS model for teaching-learning speaking. Meanwhile, the researcher mixed up positive and negative statements in the questionnaire in order to avoid bias. Furthermore, the researcher also added a blank line below the answers for each question in order to let students give more information about their reason for choosing their optional answer.

The data collected in this research was analyzed by using quantitative analysis. The Means (M), Standard Deviations (SD) and z-scores were calculated for each group. Furthermore, scores for the sub-skills were analyzed using SPSS to compare the z-scores from the EG with those from the CG. Meanwhile, the questionnaire was distributed to the EG in order to find out their response to the implementation of the ARCS model for teaching-learning EFL speaking.

RESULTS AND DISCUSSION

Results of Tests

To prove the hypotheses, the scores of the EG and the CG were compared. The level of significance in this case was 5% with assumptions:

1. If the z-score was between -1,96 and + 1,96, Ho was accepted and Ha rejected
2. If the z-score was outside of the limits -1,96 to +1,96, Ho was rejected and Ha was accepted.

The hypotheses for this analysis were:

1. Ho : There was no significant difference in speaking ability between students who were taught-learnt using the ARCS model and those who were taught using the standard technique.
2. Ha : There was a significant difference in speaking ability between students who were taught-learnt using the ARCS model and those who were taught using the standard technique.

Based on the analysis of the data, the mean score for the EG post-test was 77 and the mean score from the CG post-test was 72. The z-test result for this difference was 4.18. According to z-test result, the difference was significant because it was outside of the limits from -1.96 to +1.96) Thus thee results showed that there was a significant increase in the scores of the EG taught with the ARCS model. This proved the hypothesis that there would be a significant difference in the scores of students who were taught by using the ARCS model compared to those who were taught by using the standard method.

To find the difference between the means and the standard deviations of the speaking sub-skills for both groups, SPSS version 23 was used. The results for the EG speaking sub-skills are shown in Table 1 which follows:

Table 1. Results from the Pre-tests and Post-tests of the EG

	Test	N	Minimums	Maximums	Mean	Std. Deviation
Pronunciation	pre-test	36	8	15	11	1.313
	post-test	36	11	17	15	1.424
Grammar	pre-test	36	10	15	12	1.268
	post-test	36	12	18	16	1.404
Vocabulary	pre-test	36	9	15	11	1.461
	post-test	36	11	17	16	1.437
Fluency	pre-test	36	9	15	11	1.372
	post-test	36	11	17	15	1.477
Comprehension	pre-test	36	9	15	11	1.389
	post-test	36	11	17	16	1.610

Table 1, above, shows that the pretest and post-test results from the EG were significantly different for every sub-skill. The table shows that the mean for pronunciation increased by 4 points as did that for grammar and fluency while those for vocabulary and comprehension increased by 5 points.

Table 2. Results from the Pre-tests and Post-tests of the CG

	Tests	N	Minimum	Maximum	Mean	Std. Deviation
Pronunciation	pre-test	34	8	14	11	1.334
	post-test	34	10	15	14	1.114
Grammar	pre-test	34	10	16	12	1.467
	post-test	34	10	17	15	1.744
Vocabulary	pre-test	34	9	16	12	1.533
	post-test	34	10	17	15	1.314
Fluency	pre-test	34	8	14	11	1.273
	post-test	34	9	15	14	1.419
Comprehension	pre-test	34	9	16	12	1.723
	post-test	34	11	17	15	1.167

The results in Table 2 also show that the CG mean scores for all five speaking sub-skills also all increased by 3 points.

Z-Score for Speaking Sub-Skills

Based on the results from analysis of the speaking sub-skills scores from the pre-tests of the EG and the CG, it was proved that the z-scores for four sub skills were in the limits given -1,96 and 1,96. The z-score for pronunciation was 0,16, for grammar it was 1,323, for vocabulary 1,301 and for fluency 1,197. Those scores are all within the limits given from -1.96 to +1.96. This means that the H_0 for those sub skills was accepted. In other words, the students' sub-skills ability in term of pronunciation, grammar, vocabulary and fluency for the EG and the CG were equal before the treatment. However, for comprehension, the z-score was 2,382. This was beyond the limits -1,96 and +1,96. which means that the EG & the CG's ability in term of comprehension was not equal before the treatment.

Then, the post-test scores for the EG and the CG speaking sub-skills were also analyzed. The aim was to find out the difference in the means from the post-tests for the EG and the CG. The statistical summary of the post-test scores for both group are set out in Table 3 which is on the page that follows.

The analysis showed that there were significant differences in post-test scores for pronunciation, grammar, vocabulary, fluency and comprehension. The z-score for pronunciation was 3.29, grammar was 1.55, vocabulary was 2.35, fluency was 4,65 and comprehension was 2,25. Those z-scores were all outside the limits from -1,96 to +1,96. This means that H_a was accepted for every sub-skill. In other words, the result from the post-tests prove the alternative hypothesis which shows that there were significant differences in the post-test scores for the sub skills from the students who were taught using the ARCS model and those who were taught with the standard technique.

Students' sub-skills scores in the pre-test results were lower than the sub-skills scores in the post-test results. Before the treatment, students often made mistakes in grammar such as skipping the to be in a passive sentence, missing the preposition to when saying "I want to introduce my friend," etc. Students also mispronounced many words, lacked vocabulary when they wanted to introduce someone, and were often lost for English words for their ideas which made them pause many times when speaking. In all the sub-skills, the EG students' scores in the post-test results were higher than those in the pre-tests. This indicates that the EG students got better scores after they were taught speaking using the ARCS model.

These findings were also supported by those from a previous study by Yan Chu (2017) who found that the ARCS model improved efficiency in a speaking and listening class. He found that the ARCS instructional design was effective for improving students' grammar and vocabulary. Besides, he also found that the ARCS model enhanced students' pronunciation and understanding.

These findings were also supported by an earlier study by Molaee and Dortaj (2015) who motivated students by using the ARCS instructional model. He found that the implementation of the ARCS model in speaking was effective for improving speaking sub-skills such as fluency, coherence, lexical resources, grammar, accuracy, and pronunciation.

Table 3. Statistical Summary of Post-test-scores for EG and CG

Independent Samples Test										
		Levene's Test for Equality of Variances		Z-test for Equality of Means						
		F	Sig.	Z	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pronunciation	Equal variances assumed	1.537	.219	3.291	68	.002	1.010	.307	.398	1.622
	Equal variances not assumed			3.314	65.759	.001	1.010	.305	.401	1.618
Grammar	Equal variances assumed	4.282	.042	1.554	68	.125	.587	.377	-.166	1.340
	Equal variances not assumed			1.545	63.369	.127	.587	.380	-.172	1.345

Vocabulary	Equal variances assumed	.497	.483	2.473	68	.016	.815	.330	.157	1.473
	Equal variances not assumed			2.480	67.931	.016	.815	.329	.159	1.472
Fluency	Equal variances assumed	.074	.786	4.645	68	.000	1.609	.347	.918	2.301
	Equal variances not assumed			4.650	67.977	.000	1.609	.346	.919	2.300
Comprehension	Equal variances assumed	3.228	.077	2.249	68	.028	.760	.338	.086	1.434
	Equal variances not assumed			2.270	63.820	.027	.760	.335	.091	1.429

Results from Questionnaires

The questionnaire results showed that the majority of the EG students gave positive responses toward the implementation of the ARCS model in teaching speaking. More than 70% of the students agreed with the positive statements. For example, 28% strongly agreed and 56% agreed (ie. total 84%) that they felt confident to speak English with their friends. This meant that the EG students could reduce their nervousness after being taught by using the ARCS model. Also 47% strongly agreed and 39% agreed (ie. total 86%) that the ARCS model was an appropriate model for teaching speaking.

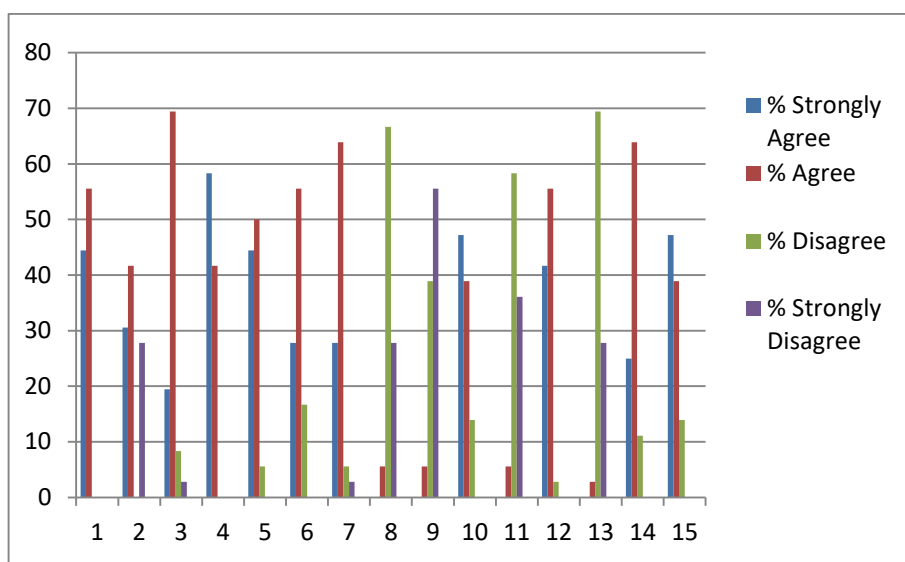


Figure 2. Results from Questionnaires

The results from analysis of the answers to the questionnaire showed that 71% of the EG students agreed that they did not feel afraid to speak in front of the class which means that the majority of them agreed that they were able to reduce their nervousness when speaking in front of the class after learning with the ARCS model. Besides, 21 students (58%) strongly agreed and 15 students (42%) agreed that the teacher should show appreciation of their efforts after they spoke in front of the class.

In addition, 44% strongly agreed and 50% agreed that they had fun when they were learning with the ARCS model. Only 6% disagreed that learning with the ARCS model was fun. Also 10 students (28%) strongly agreed and 20 students (56%) agreed that they felt confident to practice their English when learning with the ARCS model, while 23 students (64%) agreed and 10 students (28%) strongly agreed that they felt satisfied with their scores after learning using the ARCS model.

Meanwhile, 10 students strongly disagreed and 24 students disagreed with statement 8, while 2 students agreed that the ARCS model will not often be used when learning English. This means the majority of the EG students thought that the ARCS model will not often be used for teaching-learning English. Furthermore, the majority also disagreed with a negative statement about using the ARCS model in teaching-learning speaking since 36% strongly disagreed, 58%

disagreed and only 6% agreed that learning with the ARCS model was boring.

Based on the results from the questionnaire, it was found that the EG students gave positive responses to using the ARCS model in teaching-learning speaking. They also denied the negative statements about using the ARCS model being boring in teaching-learning speaking. This was consistent with acceptance of the second, ie, the alternative hypothesis for this research.

Discussion

The Effect of Implementing the ARCS Model on the Speaking Skills of the Students

The results from the analysis of the data showed that there were significant differences in students' post-test scores in term of pronunciation, grammar, vocabulary, fluency and comprehension. The z-score for pronunciation is 3.29, grammar is 1.55, vocabulary is 2.35, fluency is 4.65 and comprehension is 2.25. All the z-scores, except that for grammar, were outside the limits from -1.96 to +1.96. This means that H_0 was accepted for grammar and H_a was accepted for the other sub-skills. In other words, the results from the post-tests proved the alternative hypothesis that there would be a significant improvement in the speaking sub-skills of the students taught by using the ARCS model compared with those who were taught using the standard technique with the exception of grammar.

The sub-skills scores in the pre-tests were lower than in the post-tests. Before the treatment, the students often made mistakes in grammar such as skipping "to be" in a passive sentence and leaving out the preposition "to" when saying "I want to introduce my friend," and so on. Students also mispronounced many words, and could not find the right words when they wanted to introduce someone, and they could not easily find the words for what they wanted to say which made them pause many times when speaking. The scores for the sub-skills in the post-tests were higher than in the pre-tests which showed that the students could get higher scores after they were taught-learned EFL using the ARCS model.

These findings were supported by a previous study by Chu (2017) who found that ARCS improved efficiency in a speaking and listening class. He found that the ARCS instructional design was effective to improve the grammar and vocabulary of students and he also found that the ARCS model enhanced their pronunciation and understanding.

These results were also supported by a previous study by Molaee and Dortaj (2015) who motivated students using the ARCS instructional model. They found that the use of the ARCS model in speaking was effective for improving speaking sub-skills such as fluency, coherence, lexical resources (vocabulary), grammar, accuracy, and pronunciation.

Students' Responses to the Use of the ARCS Model for Teaching Speaking

Furthermore, the results from the questionnaires showed that the students gave positive responses to the use of the ARCS model for teaching speaking. 28% of the students strongly agreed and 56% students (ie. total 84%) agreed that they felt confident to speak English with their friends. This meant that the students could reduce their nervousness after being taught speaking using the ARCS model. Also 47% of the students strongly agreed and 39% students agreed (ie. total 86%) that the ARCS model was an appropriate model for teaching speaking. They also argued that they could find the relationship with materials for daily use and they claimed that the ARCS model helped them get better scores in speaking. Based on the finding from the questionnaire results, it was concluded that the responses were positive towards the implementation of ARCS in teaching speaking. In short, the second hypothesis was proved.

This was also similar to Keller's (1987) findings. Keller proved that the ARCS model helped teachers to get the attention of students in the classroom and to treat the students based on their motivational needs. The finding from this study were in line with Keller's theory that students' motivation was improved by using motivational tricks such as giving motivational praise and positive feedback.

These findings are also in line with Wang (2013) who also did research related to the use of the ARCS model in teaching. He found that the ARCS model can effectively improve students' performance in speaking skills. This is because the attention of the students was captured from the beginning of the class by using interesting media. Teachers appreciated that their performance was able to raise students' confidence. Meanwhile, the students' satisfaction was raised by getting positive feedback for their performances. The corrections from the teacher enabled the students to measure their own ability. It also helped the students to find their own mistakes and to make corrections before the next performances.

CONCLUSIONS AND SUGGESTIONS

Based on the results, the EG post-test scores were significantly higher than those of the CG. The EG post-test mean score was 77 while that for the CG was 72. The result of the z-test score showed that the score difference was significant ($-1.96 < 4.18 > +1.96$). To be specific, the results proved that there was a significant improvement in the students' post-test scores in terms of pronunciation, vocabulary, fluency and vocabulary. The z-score for pronunciation was 3.29, grammar was 1.55, vocabulary was 2.35, fluency was 4.65 and comprehension was 2.25. Except for grammar, these z-scores were outside the limits from -1.96 to +1.96. This proved the alternative hypothesis that there would be significant positive differences in the speaking sub-skills of the students taught using the ARCS model compared to those taught using the standard techniques.

The results from the questionnaire showed that the EG students responded positively to the implementation of the ARCS model for teaching-learning speaking. The students agreed that the ARCS model was an appropriate model for teaching-learning speaking and stated that they felt confident to perform in front of the class when learning with this model of teaching. They were able to reduce their nervousness and were ready to speak English with their friends and class-mates. They could find relationships between the teaching material and their daily life and they were satisfied with their scores after learning with the ARCS model. Hence, these findings proved the second hypothesis that there would be a positive response from the EG students to the implementation of the ARCS model to improve their speaking skills.

It is expected that the findings from this research can be a reference for EFL teachers to help them improve the speaking skills of their students and to help their students reduce their nervousness and their mistakes. The ARCS model can be a solution for teachers to make students feel happier, more confident and more satisfied when learning speaking. These finding can be a reference for teachers wanting to design interesting, up to date teaching-learning programs for EFL speaking, so that students will give their full attention to the program and its' materials.

For further research, it is recommended that they do similar research in the field using the ARCS model for teaching-learning English. The findings of this research are expected to be a starting point for further research in the same field. In this case, the researcher

suggests that other researchers, who are interested in conducting similar research, really pay attention to the four elements of the ARCS model for teaching-learning reading, listening or writing skills. Besides, doing further research to investigate elements of the ARCS model is also recommended in order to discover further new uses for the ARCS model.

REFERENCES

- Bygate, M. (2003). *Speaking*. Oxford: Oxford University Press.
- Byrne, D. (1979). *Teaching Oral English*. New York: Longman.
- Chu, Yu, (2017) Instructional Design of Online Pre-Class Tasks of the Flipped Classroom on the Basis of the ARCS Model. *3rd International Conference on Social Science and Management (ICSSM 2017)*.
- Cohen, L. Manion, L. and Morrison, K. (2005). *Research Methods in Education: Fifth Edition*. London: Routledge Falmer.
- Daryanto. (2014). *Pendekatan Pembelajaran Saintifik Kurikulum 2013*. Yogyakarta: Gava Media.
- Ellis, R. (1990). *Instructed Second Language Acquisition*. New York: Basil Blackwell.
- Gay, L. R. (2006). *Educational Research: Competencies for Analysis and Application*. Beverly Hills, CA: Sage Publications.
- Harris, David P. (1969). *Testing English As a Second Language*. New York: McGraw-Hill.
- Hughes, R. (2011). *Teaching and Researching Speaking*. London: Longman.
- Keller, J. M. (1987). Development and Use of the ARCS Model of Motivational Design. *Journal of Instructional Development*, 10 (3), 2-10. [John Keller's Official ARCS Model Website.]
- Keller, J. M. (2010) *Motivational Design for Learning and Performance: The ARCS Model Approach*. London: Springer.
- Kline, J. A. (2001). *Speaking Effectively: A Guide for Air Force Speakers*. Alabama, USA: Air University Press.
- Molaei, Z., & Dortaj, F. (2015). Improving L2 Learning: An ARCS Instructional-Motivational Approach. *Procedia: Social and Behavioural Science*. 171 (1214-1222). Online journal, retrieved on 20th April 2018 from www.sciencedirect.com.
- Nelson, G. (2001). *English as Essential Grammar*. London: Routledge.

- Nunan, D. (2003). *Practical English Language Teaching*. New York: McGraw-Hill.
- Pollard, L. (2008). *Teaching English: A Book to Help You through Your First Two Years in Teaching*.
- Richards, J. C., & Schmidt, R. (2002). *Longman Dictionary of Language Teaching and Applied Linguistics: Third Edition*. London: Pearson Education Limited.
- Tennant, A., & Negash, N. (2010). *Language Improvement for English Teachers*. UK: British Council.
- Wang, W. (2013). Research on the Validity Test Method of Teaching Based on ARCS Motivational Design. *2nd International Conference on Management Science and Industrial Engineering*. China: Binzhou.