

Active Learning Using ARCS Motivation on Social Cloud Model to Enhance Communication Skills in Foreign Language

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Abstract – This research is designing “Active Learning Using ARCS Motivation on Social Cloud Model (AL-ARCS on SC Model) to Enhance Communication Skills in Foreign Language,” and applying for teaching and learning activities plan both in-class and on social cloud (Facebook Page) within the subject Spanish for Communication course. The result of this research shows that learning achievement of the students after applying AL-ARCS on SC Model is higher than before, and higher than the criteria set at 80%. In conclusion, AL-ARCS on SC Model is able to enhance students’ communication skills in Spanish Language better than before and higher than criterion setting.

Keywords – Active Learning, ARCS Motivation, Social Cloud, Communication skills, Foreign Language, Spanish Language.

1. Introduction

Social cloud technology is now recognized as an efficient communication tool, and can support language learning, applying it in Active Learning activities along a language course. The motivation is

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also important to keep the progress of learners. ARCS Motivation [3] is one of motivation theories proposed to drive the process of teaching and learning, and to keep the progress of learners. This research, therefore, proposes an approach named Active Learning Using ARCS Motivation on Social Cloud Model (AL-ARCS on SC Model), and applies it in all activities both on social cloud and in-class. On social cloud, a Facebook page is created to be the online classroom where the instructor assigns online activities and communicates or gives feedback to the students. In the classroom, the students come to do active learning activities designed for practicing Spanish language in a variety of simulated daily life situations. In all activities, both online and in-class, AL-ARCS on SC Model is used to encourage the students in every steps of their learning process. This research also proposes a well-designed teaching-learning strategic approach which includes AL-ARCS on SC Model. The result, conclusion and discussion will be presented in the last sections of this research article.

2. Research Objectives

- 1) To design Active Learning Using ARCS Motivation on Social Cloud Model to enhance Communication Skills in Foreign Language.
- 2) To compare students’ learning achievement before and after applying Active Learning Using ARCS Motivation on Social Cloud Model.
- 3) To compare students’ learning achievement after applying Active Learning using ARCS Motivation on Social Cloud Model with criteria setting.

3. Research Hypothesis

Learning achievements of the students after applying Active Learning Using ARCS-SC Model in Spanish for Communication course is better than before and higher than criteria setting at 80%.

4. Research Framework

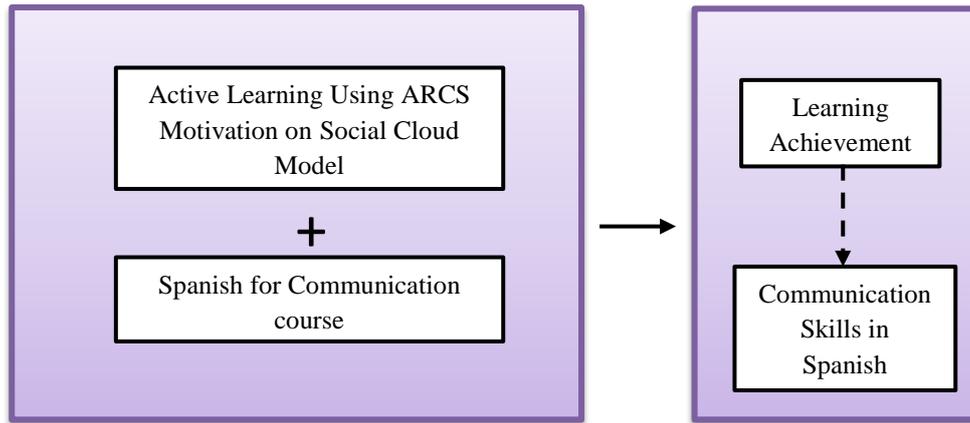


Figure 1. Research framework: Applying Active Learning Using ARCS Motivation on Social Cloud Model to Enhance Communication Skills in Spanish Language

5. Active Learning

Active Learning is defined as “any instructional method that engages students in the learning process. In short, “active learning requires students to do meaningful learning activities and think about what they are doing” [7]. Students that are engaged in more activities than just listening are more likely to develop a higher level of thinking (e.g. analysis, synthesis, evaluation and creating) [1]. In other words, Active Learning helps to enhance learner’s thinking skills, from lower level to higher level. Active Learning can be used in any learning environment, from standard lecture to online classroom to provide opportunities for the learners to think critically about the content through various activities that help preparing them for the challenges of real situations. Therefore, it’s important to design activities that promote higher level of thinking skills such as collaboration, critical thinking and problem-

solving activities. Active learning activities can range from low-stakes (more simple) to high stakes (more complex) activities [2].

6. ARCS Motivation

ARCS Motivation is a teaching model developed by John Keller [3], [4], [5]. Motivation is considered an important element that must be presented for learners in order to engage them in their own learning. ARCS motivation “provides a systematic approach to designing motivational tactics into instruction”. The fundamental principle of ARCS Motivation is the belief that to motivate a student, four following “conditions” must be met: (1) Attention, (2) Relevance, (3) Confidence, and (4) Satisfaction. In addition, all these conditions must be created for the students step by step, as shown in the following figure:



Figure 2. The fundamental principle of ARCS Motivation

7. Social Cloud

Social Cloud technology is a combination of social networks (e.g. Facebook) and cloud technology. A Social Cloud, therefore, is a resource and service-sharing framework utilizing relationships established between members of a social network.

Social Cloud can be applied as a teaching-learning tool. The first reason is that Social Cloud has a property of social network; we can share our knowledge or opinions and can interact simultaneously about it with other people. The second one is that Cloud technology is like a large

storage to which we can upload resources as document files, video clip, picture, music, links etc. for learners and can let them work together. Social Cloud also gives learners notification when there is something updated.

8. Spanish for Communication

Spanish for Communication is an elective course provided by Burapha University Language Institute for undergraduate students of all faculties. This course focuses on 4 principal skills of communication in Spanish language: listening, speaking, reading and writing for short sentences and passages together with grammar, vocabulary and expressions for basic communication in Spanish language.

9. Method and Materials

Population and Samples

The population of this research is a group of 68 undergraduate students of Burapha University who registered in Spanish for Communication course. They are from various faculties and have not learnt Spanish before.

The sample group consists of 46 students selected by purposive sampling technique. The data of the sample group is considered completed: has both pre-test, post-test and all activities scores.

Methodology

This research is an Experimental Research with one-group pre-test and post-test design. The process of this research consists of 5 steps:

1) Literature and research review on the current challenges and needs analysis key elements of this research to develop a conceptual framework and to design Active Learning Using ARCS Motivation on Social Cloud Model.

2) Analyzing input factors of AL-ARCS on SC Model and design a Teaching-Learning process.

3) Developing the lesson plan according to Teaching-Learning Strategic plan by using AL-ARCS on SC Model and defining activities (in-class and online), expectation, assessment method and assessment tool.

4) Implement AL-ARCS on SC Model in Spanish for communication course for 1 semester.

5) Assess the applicability of the students on during and after applying AL-ARCS on SC Model.

The researcher assesses:

- a) The progress of the students through 6 key activities (3 in-class and 3 online), each activity has the maximum 5 points, and is assessed by Rubric's Scores method, and
 - b) The students' learning achievement using pre-test and post-test before and after the course.
- 6) Analyze and compare the students' learning achievement scores on during, before and after applying AL-ARCS on SC Model.

10. Research Result

1) Active Learning Using ARCS Motivation on Social Cloud Model to Enhance Communication Skills in Foreign Language as shown in *Figure 3*.

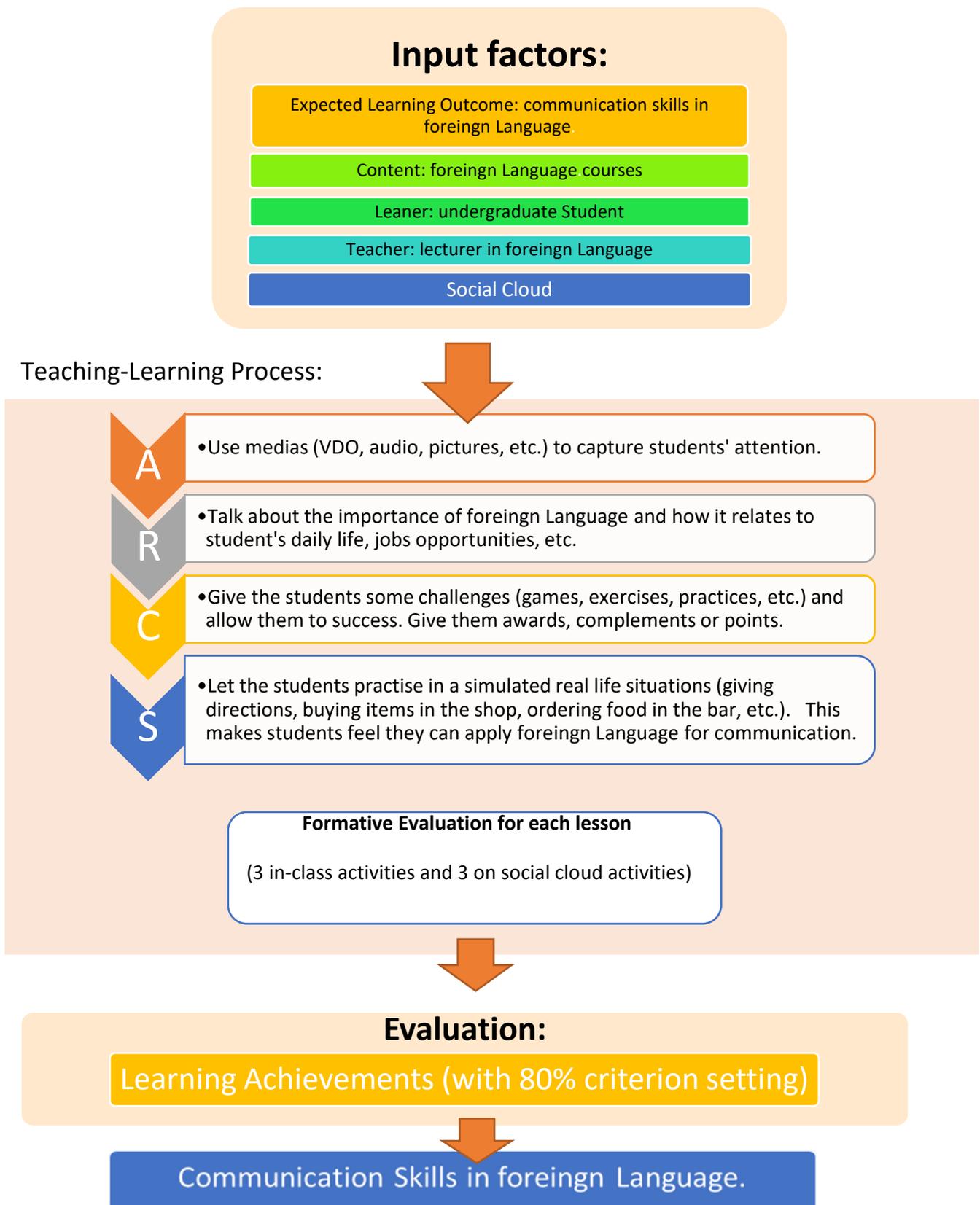


Figure 3. Active Learning Using ARCS Motivation on Social Cloud Model (AL-ARCS on SC Model) to Enhance Communication Skills in Foreign Language

Teaching and Learning Design

The following table is using AL-ARCS on SC Model in teaching and learning activities Plan (in-class and on social cloud), the above is used in 15 classes (1 class per week) along the semester. Each class is designed for one topic and the approach is

applied appropriately to each topic in Spanish for Communication course. The table also explains the expectation and the assessment method. Rubric's scores are used as the assessment tool to evaluate the student's achievement.

Table 1. An applied AL-ARCS-SC Model in teaching and learning activities Plan (in-class and on Social Cloud)

Motivations Used in Learning-Teaching Process	Activities		Expectation	Assessment methods
	In-class	Online		
A (Attention)	Use various media to capture student's attention (VDO clips about Spanish culture, cartoon, pictures, Talks about experience in Spain, etc.)	On Facebook page, post pictures or info-graphic to capture the attention. Use Kahoot quiz on Smartphone before the lesson.	Students pay attention on the media.	Ask some questions about the media and most students can response correctly.
R (Relevant)	Relate the knowledge that the students have known about Spain or Spanish. Ask them: What they have known. Why they want to learn Spanish. And then discuss about the relevance of what they have known and what they will learn. Compare Spanish with other languages that have some similar words or grammar. This will help the students to learn Spanish easily. Compare some Spanish culture with Thai. Talk about the importance of Spanish language worldwide. Talk about the relationship between Thailand and Spain.	Post introduction that is related to the lesson of the week (on Facebook Page). (Students can access the posts from Smartphones or Computer.)	Students can relate their previous knowledge to Spanish.	Ask them some questions about how they relate other languages to Spanish. Most students can answer the question correctly.
C (Confidence)	Start teaching by providing an introduction. Then, go step-by-step, consequently, from the most fundamental to the more complicate lesson. This method (provide and consequence) guarantees that the students would achieve a success in each	First of all, post the content of the week (a review of the lesson they have learnt every week) on Facebook page. Then, to inspire independent learning and searching for information outside the classroom (<i>flipped classroom</i>), the	Students have confidence to speak and they can do that correctly.	Most students speak Spanish fluently and correctly (use Rubric's scores).

	step easily. These can give them a confidence . After finishing one lesson, a quiz was provided so that every student can speak and the instructor can evaluate them.	instructor (the admin) suggests some links from which the students can get knowledge about Spanish. Finally, post an activity (a question) at the end of the post. The students are requested to reply in comment box. The instructor can feedback them by replying to their comment immediately.		
S (Satisfaction)	Use some methods of reinforcements to motivate the students while doing the quiz: 1) compliment 2) award 3) points, etc. Those things create a kind of satisfaction . (The quiz was designed for the communication in Spanish in daily-life. For example, let the students do a dialogue activity, speak and act like they are in the real situation.)	Student's comments were evaluated by Rubric's score approach. The instructor can also explain or compliment to each student via comment box.	Students feel that they can use Spanish well in various situations in daily-life communication.	Most students can speak Spanish in the situations given by the instructor each week and they can do it well (use <i>Rubric's scores</i>)

This research applies AL-ARCS on SC Model in all activities along the course, both in-class and online:

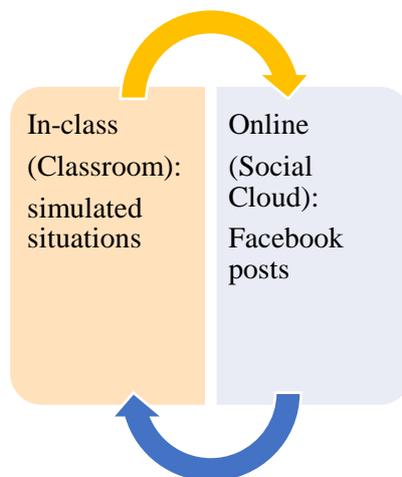


Figure 4. Application AL- ARCS on SC Model in class and online

2) This research collects 2 learning achievements, the first one is activities scores (Table 2.), and the second one, Pre-test and Post-test scores (Table 3.-4.). The scores were statistically calculated as follows.

Table 2. The result of learning achievement scores in activities during the class

Assessment Activities (N = 46)											
In-class						Online					
1 st		2 nd		3 rd		1 st		2 nd		3 rd	
mi pasatiempo		ir de compras		en el restaurante		Quiero...		¿Dónde está?		frases favoritas	
X	s	X	s	X	s	X	s	X	s	X	s
3.4	0.8	4.3	0.7	4.5	0.6	4.2	0.5	4.9	0.2	4.9	0.2

Table 2. shows the descriptive assessment statistics of the students' learning achievement scores after applying AL-ARCS on SC Model during the course. It shows the progress of achievement scores of activities both in-class and online.

Table 3. The result of comparative study of learning achievement scores of students in Spanish for Communication before and after applying AL-ARCS on SC Model

Achievement Scores	N	\bar{X}	S	t
Before	46	10	1.5	54.32**
After	46	33	2.1	

$t_{(.01,45)} = 2.68$, ** level of significance 01.

Table 3. shows the result of the comparative learning achievement scores of the students before and after applying AL- ARCS on SC Model. The t-calculated is 54.32. The t-value was 2.68, so the t-calculated is higher than the t-values (normal distribution table):

H_1 accepted and H_0 denied. That means the learning achievement scores of the students after class is higher than before, at the .01 level of significance.

Table 4. The result of comparative study learning achievement scores of students in Spanish for Communication after applying AL- ARCS on SC Model is higher than the criteria setting at 80 %.

N	$\bar{X}_{(%)}$	$\mu_{0(%)}$	S	t
46	82.5	80	2.1	8.33**

$t_{(.01,45)} = 2.68$, ** level of significance 01.

Table 4. shows the result of the comparative analysis of learning achievement scores of the students after taking Spanish for communication course and the mean score were found as follows: the calculated t-value was 8.33. The t-value was 2.68, so the

calculated t-value was higher than the t-calculated. H_1 accepted, and H_0 denied. The average score was higher than 80% criterion, at the .01 level of significance.

11. Conclusion and Discussion

The research results show that after applying AL-ARCS on SC Model in teaching and learning strategic approach in Spanish for Communication course for 1 semester, the students’ learning achievements increase significantly.

The students are progressively assessed and motivated with AL-ARCS on SC model. They have opportunities to practice and improve continuously. The better scores show that the students have progress. Moreover, the students are engaged more with active learning activities such as roll play, short conversation, games, interview, etc.

The students’ scores in online activities are quite high because students are assigned to do activities at home (on Facebook posts and comments) so they have more time and more information sources (especially online) to do activities correctly. This helps students to know how to search information and learn by their own, and they can also share knowledge, opinions, ideas, etc. to each other on social cloud.

In each online activity, the instructor can simultaneously give feedback to students’ responses through comment box. This helps students to improve their skills and get better score in next activities. Using smartphone in an interactive learning can improve students’ learning motivation

and self-learning after classes. The authors also extend their research to Dynamic group formation for an active learning system using smartphone during classes and the result is that the students can keep their learning motivation [10], [11]. With respect to the perceptions of cloud applications of collegiate students, there is a positive correlation between self-efficacy, ease of use and users’ perception of usefulness and effectiveness of cloud-based applications [8]. In the research, 97.5% of students use at least two forms of cloud technology and 87.5% use three or more applications.

Motivation is considered an essential key of learning achievement. The comparison research [9] shows that higher self-confident students obtain higher evaluations (summing up by various factors, such as task scores, grades, anxiety levels, peer comparison, etc.) than lower-confident students. Certain types of motivational beliefs are adaptive and do help to promote and sustains self-regulated learning. The mentioned motivational beliefs are: 1) self-efficacy; 2) task value beliefs; and 3) adopting a mastery goal orientation [6].

The students’ post-test scores are significantly higher than pre-test: the scores reach the criteria setting at 80%. This relates to the students’ progress in Table 3., in which the score is progressively higher

after applying Active Learning using ARCS-SC Approach. We can assume from the results that if we use this Approach for a determined period (in this case, 15 weeks), students acquire more ability to communicate in Spanish for Communication course, then get higher scores.

It's important to note that in Table 4., the distribution of post-test scores is quite narrow. This implies that the result of applying AL-ARCS on SC Model can complete the learning process of the students both in-class and online.

In conclusion, the hypotheses of this research are approved statistically (as shown in Table 2.-4.) and that means AL-ARCS on SC Model is considered an effective learning and teaching approach for Spanish for communication course. For the future researches, it's suggested to apply AL-ARCS on SC Model to other language courses as well.

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