

A Study of L2 Sound Speech to Improve Learners' Speaking Proficiency

Than Chhorn

School of Foreign Languages and Literature, Shandong University (SDU)

No 5, Hongjialou, Jinan, Shandong, P.R China 250100

PhD. Student held in Foreign Linguistics and Applied Linguistics

Abstract

Second language sound speech is a complexity sound system for non-native learners to acquire. This article aimed to investigate the effects of Second language sound speech systems to improve learners' speaking proficiency; it also examined how learners develop their speaking productions. The study showed that the problems which learners have faced in their expressive speaking were Second language sound speeches such as pronunciation errors, accents, word stress, and intonation. The study also identified how fast learners can improve their speaking and what perspectives they carry out to develop their speaking proficiency with Second language sound speeches. To provide exact evidences for this scientific research in order to ensure that the differences were significant or not, a paired sample t-test of data analysis tool was constructed to result that. The current study resulted that there were differential variables of significance of students' problematic sound speeches within speaking improvement between the cognitive groups and encouraged groups. According to data analysis, the means of cognitive group were greater than encouraged group's means. As a result, cognitive group learnt and understood Second language sound speeches faster than the encouraged group did.

Keywords: sound speech, pronunciation error, accent, word stress, intonation

1. Introduction

The study aimed to investigate the L2 sound speech systems to improve learners' productive speaking in proficiency; it also identified how can learners develop and adapt their L2 sound speeches of speaking productions. To do a research of these factors with significant evidences the scholar would like to review and figure out some backgrounds and previous empirical studies related to L2 sound speech systems to improve students' productive speaking. On accordance to the factors mentioned in the abstract, the researcher decided to take opportunities to explore these roots in order to find out cognitive perspectives and solutions to deal with learners' problematic speech sounds such as pronunciation errors, accents, word stress, and intonation.

1.1. Background of Study

Since the World War II (1939 -1945), the oral communication was constructed for military to communicate with each other. For speaking productions, many researchers and scholars have developed and adapted its theories and practices to make it better. On accordance to Krashen's (2014) viewpoints, SLA is a barrier for non-native learners; the non-native learners do not have the well-enhanced and well-gone for their L2 learning like productive speaking. L2 speaking is a complicated adaptive language system; L2 speaking can be developed and adapted with various conditions that are presented by both internal and external learning environmental contexts (Hamakali, 2017). The study aimed to examine the effects of L2 sound speech system to improve learners' speaking production in proficiency. L2 sound speech system is a complexity sound speech system for L2 learner to acquire. This article also identified the problems that learners have faced during learning L2 – sound speech systems (pronunciation errors, words stress, accents, and intonation). In this case, the research attempted to assign the L2 speaking improvement strategies and cognitive perspectives to solve the learners' productive speaking problems with sound speech system (Taimi et la., 2014b). Based on speaking production theories and practices, L2 learners are prompted to identify on the L2 sound speech systems. The present study also focused on the development and adaptation of students' L2 speaking behaviors and outcomes with L2 sound speeches.

According to Kalati (2016), numerous differential theories of SLA have been developed and reformed various language learning or speaking tools designed. Therefore, L2 speaking is an obstacle for the non-native learners. The purpose of the intensive research is to examine how students can improve their L2 sound speech systems such as pronunciation errors, accents, word stress, and intonation of productive speaking, which are the key factors that have affected and shaped the L2 learners' speaking perspectives and productions (Dewi et la., 2017). Similarly, this study found out better to encourage learners to improve their L2 speaking behaviors and outcomes with problems-solving, in particular with respect to sound speech systems included pronunciation errors, accents, word stress, and intonation in efficiency (Gary, 2010).

Besides, L2 learners with high motivation, self-confidence, a good image and a low level of anxiety were better equipped for success in the SLA such as sound speech systems (pronunciation errors, accents, word stress, and intonation). Nevertheless, the sound-speech systems of the SLA were very crucial for the L2 learners to

develop their speaking production in proficiency. It meant that there were numerous variables of L2 sound speech systems (pronunciation errors, accents, word stress, and intonation) around the world (Partanen, 2013). The L2 sound speech systems such as pronunciation errors, word stress, and intonation were the key problems for L2 learners to learn. According to Ong'ondo's (2017) views, the language teaching education was increasingly developed and had fundamentally influenced conceptualisation. This discussion featured in both theoretical and research literature in the field. To succeed L2 learning or speaking production, L2 learners have to identify on L2 sound speech systems to ensure that they themselves know how to pronounce the words based on the tones or speech (phonetics and phonology, connected sound speeches) adequately, and they had better develop and adapt their L2 learning or speaking behaviors and outcomes in proficiency. For this context, the study encouraged the language teachers to figure out and assign the lectures related to oral communicative competence based on the L2 learner levels, and language teachers might focus on the L2 learners' demand like sound speech systems (pronunciation) and productions, especially denoted on the effects and strategies of L2 learners' problematical sound speeches during learning or speaking a language.

Thereafter, the L2 learners' problems were the key factors that language teachers had better assigned cognitive and developmental perceptions and solutions to deal with these problems (Nation, 2014). In my own experience in teaching a language, it was not easy to enable the L2 learners to learn well with their L2 learning included speaking production because this kind among expressive skills was the speaking production (Pingping, 2013). Productive skills or speaking skills referred to the ways that the L2 learners produce their own productions after learning a target language (Roquet & Perez-Vidal, 2017). As Sujannah & Cahyono (2017) argued that teaching the L2 learners to enable their L2 learning or speaking with sound speech systems was a difficult task for the language teachers because the L2 learners were not familiar and challenged with the new sound speeches and acts such as pronunciation errors, accents, word stress, and intonation. Most of the L2 learners came from differential regions or countries to pursue their studies in the higher education institutions, so they had faced many problems during learning a non-native language such as sound speech systems.

Overall, the study has extremely researched the current problems focused on L2 sound speech systems that the numerous learners have encountered for their L2 learning or speaking. L2 sound speech systems such as pronunciation errors, accents, word stress, and intonation were the key terms and factors that have aroused the researcher or scholar to put their work in this research. Gilakjani & Sabouri (2016) suggested that the L2 students had faced numerous problems such as sound speech systems in their L2 learning; most of them were not adapted with the L2 sound speech system. According to Plonsky & Gass (2011), the L2 learners' problems were the key factors that motivated and urged researcher or scholar to do a research in order to find out the solutions and perceptions for dealing with and established the new strategies to develop and adapt the L2 students' learning behaviors and outcomes.

1.2. Literature Review

This current article was assigned to examine the effects on L2 sound speech systems to improve learners' speaking production in proficiency to justify the significances of study. In this study, it will be offered the description and explanation of how theories in problems to learn second language included L2 sound speech systems (pronunciation errors, word stress, intonation, and accent). It also aimed to describe the theories and construct the appropriate solutions to improve learners' problematic sound speeches – pronunciation errors, word stress, accent and intonation.

1.2.1. Sound Speech Systems of Second Language Speaking/Learning

There are differences of L2 learning or speaking for the non-native language learners; in this context, the non-native language learners have also faced many problems of L2 learning or speaking. Second language has differential speech sounds (phonetics). According to Kimmo et al., (2017), the theories of non-native phonetic acquisition are established to emphasize the significance of the native sound system in the learning or speaking process. The mother tongue phonology has prevented the learners from perceiving redundant sound contrasts, which are the importance in the target language (Schroeder et al., 2017). A short of L2 learning was not enough to overcome the strength of the native language sound speech systems (Temel, 2015). However, a short of non-native language learning did not reduce deviation of formant frequencies, which implies that L2 learners found a homogeneous production pattern with L2 learning or speaking.

On accordance to Partanen's (2013) viewpoints, he argued that the speech sound perceptions and productions form the basis for L2 learning or speaking productions, in particular with the oral communication skills. The perception is altered in accordance with the ambient sound speech system and non-native speech sounds and their acoustic cues become required and superfluous. In addition, the production patterns start to develop and articulatory gestures acquired, and then the output matches the acoustic model provided by the mother tongue (native language) and the new production templates are constructed. In the other study, when non-native speech is encountered, the speech sound system needs to make adaptations and this may be the main challenges in acquiring non-native speech sounds (Saito et al., 2017). According to the unique contrastive

analysis hypothesis, the phonetic L2 learning difficulties resulted from the categorical differences between the native and target speech sound system.

Therefore, L2 speech sounds can have three main types of relations such as identical, new, and similar relations, with the native language (L1). The identical sounds of L2 speech sound system refer to the speech sound systems that are no learning or speaking difficulties. The new sounds of L2 speech sounds refer to the production difficulties that are at maximum in the first stage of learning or speaking a language, but they can be overcome with the effort (Kimmo et al., 2017). The final relation-sound speeches of the L2 speech sound systems can be the sort similar that emphasizes the relentless learning or speaking difficulties, since the target speech sound systems are misinterpreted as being the same as in the native language.

As a result, the relation between the native language (L1) and L2 speech sound system is in the core of theory and model, and the categories are described in terms of assimilatory patterns. The phonemes contrasting in the L2 sound speech systems are assimilated into two separate L1 phonemes in the same manner. In this case, the immediate difficulties have been seen in cases where the L2 phonemes do not assimilate to any native language (L1) categories. That's why; the identical type of relation is closely relevant to the new type of relation in L2 meaning. The last pattern is considered to result the key major learning or speaking difficulties, since the L2 learners do not comprehend category goodness differences between the two contrasting speech sound systems. According to Taimi et al. (2014b), L2 learners have been shown to modify their production patterns of speech sounds with a listen and repeat-training. As Singh (2015) suggested that the production instruction of L2 speech sounds were provided, and the result showed immediate production changes towards the acoustics target stimuli. The difficulties of L2 learning or speaking that the learners have faced are connected to learning new speech sound system included new vocabularies and various ways to denote the speech sounds system (Mu'in, 2017).

1.2.2. L2 Speaking Productions in Proficiency

The L2 speaking is learners' requirement and desire; L2 speaking refers to the non-native language, for example, English French, Chinese, etc. Besides speaking or learning native language, L2 learners are required to learn L2 for their higher educational studies. According to Nation (2014), L2 learners have to focus on the four main things included working out what their needs are and learning what is most important for them, balancing their speaking or learning across four strands (learning from meaning-focused input, learning from meaning-focused output, language-focused learning, and fluency development), applying conditions that help language learners using good language learning or speaking techniques, and keeping motivation themselves to learn or speak and working hard to do what needs to be done.

According to Darwish (2016), L2 learners should know how the language learning activities be constructed; in this case, it means that the L2 learners need to be clear why they are learning a language. There are many language learning techniques that the L2 learners might follow to achieve their L2 learning success. When the L2 learners start learning a language, they have always focused on the vocabularies, in particular the sound speech systems of second language. In this study, L2 learners need to spend their opportunities to focus on the four main strands of L2 learning. In this case, learning from meaning-focused input comprising listening and reading skills that require the L2 learners know how to listen and read the L2 learning concepts related to the active vocabularies that they had better focus on in order to ensure that what is the speakers' speech sounds. According to Gilakjani & Sabouri (2016), listening and reading skills refer to the receptive skills that help the L2 learners gather information from the articles presented. In the other study, learning from meaning-focused output refers to the productive skills included speaking and writing skills. Productive skills or speaking skills are the kinds of micro-skills that the L2 learners take time to produce their own productions relevant to the learning input that they have received from the texts presented (Mei & Nathalang, 2010). Without learning input, there is not the learning output. Language-focused learning is a type of language learning that the L2 learners learn the sound speech system such as pronunciation (Hismanoglu & Hismanoglu, 2013). So the target language is the key term that the L2 learners have to learn and identify those. Learning or speaking a second language, the learners have to realize the fluency development conducted; the fluency development conducted refers to getting good at using what L2 learners have already known.

Furthermore, the L2 learners might spend their opportunities regularly learning and practicing the target language, for example, pronunciation errors, accents, word stress, and intonation, preferably with a teacher who understands about the sounds of the language (Poonyapat, 2017). This is crucial if the non-native language learners are learning a language such as L2 sound speech system which uses various sounds from the first language of non-native language learners. There are two most important conditions that support language learning or speaking such as spaced repetition and quality attention given to items. Learning or speaking a language has involved a lot of work and even the most talented language learners work hard at learning or speaking a language (Reinhardt & Ryu, 2013). So the L2 learners should be extremely prepared to work hard, work regularly and keep their motivation high by denoting their L2 learning or speaking success in using the target language and in increasing their L2 knowledge like sound speech system (Ushioda & Dörnyei, 2017).

Particularly, if L2 learners' language course does not provide large amounts of input through listening and reading at the right level for them, they are missing a very necessary chance for learning a language (Hao & Yongbing, 2012). Similarly, if the L2 learners are not doing deliberate learning through using bilingual learning words, but instead are spending time to do a variety of vocabulary, in particular the sound speech systems related language learning or speaking, the L2 learners are likely to be learning vocabulary comprised with various sound speeches at less than half the rate that they could easily achieve. In the other study, if the L2 learners' course does not include fluency development conducted activities such as timed reading to construct their pronunciation errors, accents, word stress, and intonation, they will double their language learning or speaking like spending opportunities to learn or speak a language. That's why, learning or speaking a language has involved with both deliberate and incidental learning, and these both involve the conditions of repetition, recalled (retrieval), varied meetings and varied use, using visuals, and deliberate attention (Lucas, 2013).

1.2.3. Perspectives to Improve Students' L2 Problematic Sound Speeches of Speaking Proficiency

The L2 learners have faced numerous problems with their L2 learning in higher education such as L2 sound speech system because they are L2 learners (Unal & Ilhan; 2017). To develop and solve the L2 learners' problems, the language teachers are suggested to assign the lectures and problem-solving strategies to encourage L2 learners to improve their learning or speaking a language with challenges of the speech sound system of the L2 learning. Similarly, the problems-solving strategy (problems-solving competency) refers to an individual's ability to encourage in cognitive processing to understand and resolve problematic situations where a method of solution is not immediately obvious. In this case, it includes the willingness to encourage with such situations in order to achieve one's personal as a constructive and reflective learner or speaker. According to Unal & Ilhan, L2 learners have been suggested to start learning a language with more practice including more practice and communication by using the adequate tones (sound speeches) of a language, and they are motivated and prompted to revise repeatedly with their L2 learning speech sound system.

In addition, the L2 learners are encouraged to denote on the importance of getting proficiency in L2 learning or speaking. There are various challenges, difficulties and on-going problems that prevent the L2 learners to develop the solutions for producing outcomes for their L2 learning. In the language learning or speaking context, the learners may struggle to understand the relevance of learning a language such as sound speech systems (pronunciation errors, accents, word stress, and intonation). Tepav (2014) mentioned that one problem on the side of language learners is that they do not be aware of the importance of proficiency in learning or speaking a language; they only focus on the passing classes and/or receiving high scores instead of acquiring learning a language.

According to Dewi et al., (2017), L2 learners must have the problems-solving to be able to complete and contribute for their L2 learning in the higher education institutions. To support the curriculum of L2 learning in the higher education are required learning supports creativity that emphasizes individual and personal experience through the problems-solving process. Problems-solving strategies are regarded as the most complex intellectual function. Temel (2015) argued that the L2 learners need problems-solving strategies in order to complete globally, helping them make the right decisions, systematic, careful and logical, and consider the difficulties and problems from differential angles. The L2 learning model is expected to provide learners the opportunities to be able to improve problems-solving for their learning a language in the higher education institutions. As Popescu-Mitroi et al., (2015) suggested that the difficulties and problems happen when L2 learners are aware of the gap between whatever they wanted and that happened, but they did not know how to address these gaps well-done.

1.3. Limitation of Study

On accordance to the short time to do a research, the study only focused on some features of learners' problematic sound speeches of productive speaking. So, the evidences were not enough to offer the significance for this study; the results of data analysis getting from the statistics of paired sample t-test provided the significant variables between cognitive group and encouraged group were under the limitation of data research with L2 problematic sound speech systems. As a result, the significant variables of learners' problematic sound speeches were not enough. The researcher attempted to do a researcher more on the problematic speech sound factors in order to improve learners' learning or speaking productions in the future study.

2. Methodological Studies

2.1. Research Questions

To reflect and provide exact evidences of the significance for this study, the researcher has constructed the logical questions as shown below.

1. What are the effects of a study of L2 sound speech to improve learners' speaking proficiency?
2. What are the students' attitudes towards L2 sound speech to improve speaking proficiency?
3. How can learners improve and adapt L2 sound speech systems for their speaking proficiency?
4. What perspectives do learners carry out to improve their L2 speaking production in proficiency?

2.2. Research Tools

Three methods included test-taking, grouping-people discussions, and focus group Interview, were assigned to observe and receive data analysis for both qualitative and quantitative analysis. These observation and survey questionnaires are employed to investigate the L2 sound speech to improve learners' speaking proficiency. To observe and receive these data analysis, the researcher attempted to conduct a mixed method of quantitative and qualitative approaches. The two classes of undergraduate classes majoring in English literature in the second year at a university located in Cambodia were taken part in the data collection for both quantitative and qualitative analysis. The language lecturers were also involved with the interview to receive some cognitive perspectives for guidelines to improve L2 learners' problematic sound speech systems (such as pronunciation errors, accents, word stress, and intonation) of speaking proficiency.

2.3. Participants

To have the implications and reflect the significance of this study, seventy-three undergraduate students who have taken classes majoring in English Literature in the second year at a university located in Cambodia, were the main stakeholders of resources to observe and receive data analysis for this scientific study. There were twenty-three schoolgirls among the seventy-three graduates. They were not the native language learners and had extensively studied English in the higher education institutions. The participants were assigned as the two groups; the CG refers to the cognitive group of the L2 learner-groups, and the EG refers to the encouraged group of the L2 learner-groups, were assigned to observe and receive data collection. The language instructors in higher education institutions were also involved to interview of data gathered for this study because the instructors taught the L2 lectures in higher education institutions.

2.4. Research Procedures

The participants were assigned to take the tests, and interview lasted four weeks; the practitioners who have taken the classes majoring English literature in the second year were randomly assigned to the appropriate conditions for test-taking and interview to receive information for both qualitative and quantitative analysis. Each participant was allowed to work on his/her own phase with the pre-test and post-test, grouping-people discussions and interview. Those practitioners were prompted and encouraged to practice sound speech system that focused on pronunciation errors, accents, word stress, and intonation. After taking the tests, the practitioners denoted on difficulties and problems-solving strategies themselves to improve their L2 speaking, and the researcher took opportunities to identify and denoted on the key factors that affect the undergraduates' problems of L2 speaking. After observation and sample were completed, the researcher conducted the notes on the problems-solving strategies and perspectives to improve learners' L2 sound speech systems of speaking proficiency.

2.5. Data Analysis

To construct the empirical study and offer significant evidences, the data collected from the questionnaire-surveys (test-taking, grouping-people discussion and focus group interview) and students' scores in the two types of tests were gathered and analyzed by IBM SPSS 21. Both qualitative and quantitative data were collected, and the mixed method of quantitative and qualitative approaches was involved in countless procedures to observe and collect data analysis. The descriptive statistics, practicality analysis and paired-sample t-test analysis were constructed to analyze data receiving from the participants to make sure that how and what variables of significance occurred.

3. Results and Findings

The results of the statistical assumptions were done to test the homogeneity and normality of the data gathered. This study resulted that the students' problems were solved by encouraging the students to repeatedly practice speaking with L2 sound speech system such as pronunciation errors, accent word stress, and intonation regularly. The results of data collection were illustrated in the tables below.

3.1. Students' Abilities towards L2 Sound Speeches to Improve Speaking Proficiency

According to the results of the factor analysis of the data collected by using questionnaires in the pre-survey and post-survey as shown in table 1 and 2, there were three factors that were extracted from the students' responses of awareness and confidence manage their own learning, self-motivation and self-assessment, and attitudes towards own responsibility initiative in second language learning with the L2 sound speech systems.

Table 1: Students' Abilities towards L2 Sound Speech to Improve Speaking Proficiency by Using Pre-survey

Factor	G	N	Responses of Pre-Survey			
			Pronunciation Error Mean (SD)	Accent Mean (SD)	Word Stress Mean (SD)	Intonation Mean (SD)
Awareness & Confidence	CG	35	78.5636 (3.19633)	74.1455 (4.02153)	80.4818 (3.83974)	73.2636 (6.71659)
	EG	38	78.0455 (2.39598)	72.7818 (4.47925)	72.1727 (5.37738)	69.0545 (10.32922)
Self-Motivation & Assessment	CG	35	79.4727 (2.87753)	75.5091 (3.03165)	81.2091 (2.99181)	74.6273 (6.91926)
	EG	38	78.4091 (2.05400)	74.1455 (4.05866)	74.0818 (3.97261)	73.6000 (3.92683)
Attitudes	CG	35	80.0182 (2.88888)	76.1455 (3.49753)	81.4818 (2.66901)	75.9000 (5.87690)
	EG	38	78.8636 (1.51081)	75.0545 (3.77793)	74.9909 (3.42183)	74.5091 (3.78298)

Table 1 resulted that the means of the pre-survey score of the cognitive group (CG) were differed from the means of the encouraged group (EG). For students' awareness and confidence, the means of the cognitive group (CG) were pronunciation error = 78.5636, accent = 74.1455, word stress = 80.4818, and intonation = 73.2636, while the mean of the encouraged group (EG) were pronunciation error = 78.0455, accent = 72.7818, word stress = 72.1727, and intonation = 69.0545. In this result, the means of the CG were better than the mean of the EG. For the self-motivation and self-assessment, the results showed that the means of the CG were different of significance from the means of the EG. It meant that the means of the CG were pronunciation error = 79.4727, accent = 75.5091, word stress = 81.2091, and intonation = 74.6273, while the means of the EG were pronunciation error = 78.4091, accent = 74.1455, word stress = 74.0818, and intonation = 73.6000. The means of CG of students' attitudes were differentiated from the means of EG. This meant that the CG's means were pronunciation error = 80.0182, accent = 76.1455, word stress = 81.4818, and intonation = 75.9000, while the EG's means were pronunciation error = 78.8636, accent = 75.0545, word stress = 74.9909, and intonation = 74.5091. In table 1, the results showed that means of CG were higher than the means of EG.

Table 2: Students' Abilities towards L2 Sound Speech to Improve Speaking Proficiency by Using Post-survey

Factor	G	N	Responses of Post-Survey			
			Pronunciation Error Mean (SD)	Accent Mean (SD)	Word stress Mean (SD)	Intonation Mean (SD)
Awareness & Confidence	CG	35	79.0182 (2.81525)	75.3273 (3.65488)	81.2091 (3.55962)	75.0818 (5.51558)
	EG	38	78.6818 (1.67082)	74.6000 (3.65488)	74.2636 (4.01404)	73.6000 (3.92683)
Self-Motivation & Assessment	CG	35	79.6545 (2.71932)	76.4182 (2.61985)	81.5727 (2.54523)	74.9909 (4.97300)
	EG	38	79.0455 (1.52994)	75.0545 (3.77793)	74.9909 (3.80906)	74.5091 (3.78298)
Attitudes	CG	35	80.3818 (2.43837)	77.5091 (2.48010)	81.7545 (2.39431)	76.8091 (4.88149)
	EG	38	79.2273 (1.02283)	75.9636 (2.87307)	75.9000 (2.93564)	75.4182 (3.06327)

Table 2 also resulted that the means of the post-survey score of the cognitive group were differed from the means of the encouraged group. For students' awareness and confidence, the means of the cognitive group (CG) were higher than the means of the encouraged group (EG). As the self-motivation and self-assessment contexts, the results showed that the means of the CG were different of significance from the means of the EG. The means of CG of students' attitudes were also differentiated from the means of EG. As a result, table 2 resulted that the means of CG were higher than the means of EG.

3.2. The Effects of a study of L2 Sound Speech to Improve Learners' Speaking Proficiency

According to the results of the pre-test, focus group interview, and post-test questionnaires, table 3 showed that the means of the CG were greater than the means of EG shown in the results of the pre-test, focus group interview, and post-test scores. So, the CG learnt and improved their L2 sound speeches of speaking proficiency faster than the EG did. The results of the study had shown as in table 3 below.

Table 3: Results of Paired Sample Test of Pre-Test, Focus group Interview, and Post-Test of the CG and EG

Factor	G	N	Responses of CG and EG			
			Pronunciation Error Mean (SD)	Accent Mean (SD)	Word stress Mean (SD)	Intonation Mean (SD)
Pre-test	CG	35	79.3818 (2.51508)	76.5091 (3.34229)	81.8455 (2.34366)	75.9909 (4.62049)
	EG	38	78.9545 (1.51681)	75.5091 (3.03165)	75.1727 (3.41704)	74.5091 (3.78298)
Focus group Interview	CG	35	80.6545 (2.16211)	77.8727 (2.36605)	82.0273 (2.31909)	77.7182 (4.13541)
	EG	38	79.3182 (1.09162)	76.8727 (2.24013)	76.8091 (2.34711)	76.3273 (2.69039)
Post-test	CG	35	80.0182 (2.29905)	76.7818 (2.68023)	82.3000 (2.42074)	77.3545 (4.32790)
	EG	38	79.4091 (.97924)	75.9636 (2.87307)	77.5364 (1.89540)	75.4182 (3.06327)

As shown in table 3, there were significant variables of the means between the CG and EG. For the pre-test scores, the means of the CG were pronunciation error = 79.3818, accent = 76.5091, word stress = 81.8455, and intonation = 75.9909, while the means of the EG were pronunciation error = 78.9545, accent = 75.5091, word stress = 75.1727, and intonation = 74.5091. For the focus group interview scores, the means of the CG were pronunciation error = 80.6545, accent = 77.8727, word stress = 82.0273, and intonation = 77.7182, while the means of the EG were pronunciation errors = 79.3182, accent = 76.8727, word stress = 76.8091, and intonation = 76.3273. For the post-test scores, the means of the CG were pronunciation error = 80.0182, accent = 76.7818, word stress = 82.3000, and intonation = 77.3545, while the means of the EG were pronunciation error = 79.4091, accent = 75.9636, word stress = 77.5364, and intonation = 75.4182. The results of paired sample t-test of the pre-test, focus group interview, and post-test between the CG and EG, showed that the means of the CG were higher than the means of the EG. As a result, the results were identified that the means of the CG and EG were different in pre-test, focus group interview, and post-test through the statistics of paired sample t-test data analysis. According to result of this study, it resulted that there were statistical variables of significance between the two groups observed and researched of the effects on a study of L2 sound speech to improve learners' speaking proficiency.

3.3. Students' attitudes towards L2 Sound Speech to Improve Speaking Proficiency

According to the questionnaire of surveys and tests, table 4 was reported and summarized that the cognitive group students' responses towards L2 sound speech systems of speaking or learning Improvement based on the factors shown in table 4 below.

Table 4: Students' attitudes towards L2 Sound Speech to improve Speaking Proficiency

Factor	Responses	Agreement %	Disagreement %	Neutrality %
Achievement	My L2 learning abilities to solve problems have been improved.	85.60	5.30	9.10
	My abilities of L2 speaking or learning have been enhanced.	80.50	10.20	9.30
	My L2 learning or speaking had been improved.	86.40	8.50	5.10
Attitude towards L2 Speaking	I like the new L2 speaking strategies to develop learning capacities.	88.30	4.50	7.20
	I have more opportunities to develop my second language learning in challenges.	87.50	5.20	7.30
L2 Speaking development	I would like to be active in L2 speaking to improve my pronunciation error, accent, word stress, and intonation.	86.40	6.10	7.50
	The L2 speaking development is more adapted and appropriate to carry out L2 speaking proficiently.	79.60	11.20	9.20
Teacher's roles	The teacher's roles are challenged towards teaching, facilitating, and encouraging students to be more active with their L2 speaking or learning.	95.40	2.40	2.20
Student's behaviors and outcomes	I have more opportunities to develop my second language learning or speaking behaviors and outcomes.	94.50	3.30	2.20
	I have chances to improve my L2 sound speech included pronunciation error, accent, word stress, and intonation of second language speaking or learning.	83.50	7.20	9.30
Attitude towards Activities	The activities have been raised and promoted my awareness and confidence of L2 learning or speaking with sound speech systems.	86.40	8.20	5.20
	The activities have appropriately adjusted and assigned my confidence of managing my own L2 speaking.	78.60	9.10	12.30

On accordance to table 4, the study indicated that most of the L2 students have behaved with the positive attitudes towards the L2 sound speeches of speaking improvement with self-motivation and self-assessment to achieve and develop their L2 learning or speaking behaviors and outcomes, and have adapted their problems of L2 speaking with sound speech systems. As the achievement of L2 speaking improvement, most of the L2 students had focused on the L2 speaking strategies and techniques to develop their L2 sound speech systems (such as pronunciation errors, accent, word stress, and intonation) of speaking proficiency. They also suggested that practicing with productive conceptions of L2 speaking or learning will provide them the cognitive perspectives and developmental features to improve their L2 sound speeches of speaking improvement with high creation and critical thinking. As a result, the study also showed that the learners will have opportunities to improve their L2 sound speeches included pronunciation errors, accent, word stress, and intonation. So, L2 learners have enough opportunities to improve their language skills and language comprehension and competency with high cognition of L2 sound speech systems.

3.4. Cognitive Perspectives towards L2 Sound Speech to Improve Speaking Proficiency

According to the interviewed questionnaires with language lecturers of this study, table 5 had shown and reported the cognitive and developmental conceptions to improve students' L2 problematic sound speech systems of speaking production in proficiency that received from the language lecturers. Problems such as pronunciation errors, accent, word stress, and intonation that the students have faced were the key factors and terms to establish the cognitive and developmental perceptions and strategies to solve the students' problems of L2 speaking or learning. These perceptions were the responses received from the lecturers lectured second language or foreign language having been shown and summarized in table 5.

Table 5: Perspectives to Improve Learners' L2 Sound Speech of Speaking Proficiency

Factor	Responses	Agreement %	Disagreement %	Neutrality %
Pronunciation Errors	Pronunciation errors are the barriers for the L2 learners. So, they are motivated to practice L2 pronunciation again and again.	88.40	5.30	6.30
	L2 sound speech is an obstacle for L2 learners. L2 learners might identify on the developmental strategies of L2 sound speech during learning or speaking.	79.50	9.30	11.20
	L2 phonetics makes the L2 learners faced the problems during learning. L2 learners also have to focus on this point.	92.40	3.50	4.10
	Practice pronunciation is better for L2 learners. It is very useful for L2 learners to be aware of	85.60	6.30	8.10
Accent	L2 accents in order to use them as in intelligibility and ambiguity.	84.30	8.50	7.20
	The learners are motivated to denote on connected speeches or sound speech connection because these help learners to challenge their L2 learning or speaking with others.	78.60	9.20	12.20
Word Stress	The students are encouraged to notice on L2 word stress that draws them to understand the speakers' speeches well.	83.40	8.30	8.30
	The learners are provided opportunities to be challenged with word stress such as content words and function words within the L2 learning or speaking contexts.	75.40	11.30	13.30
Intonation	Intonation is very crucial for L2 speakers to construct and attract the listeners to get involved their statements that that have emphasized.	84.60	7.30	8.10
	L2 learners are encouraged to have self-motivation and self-correction of intonation usages to construct the well-gone productions of speaking proficiency.	79.50	10.30	10.20

Based on table 5, the study was indicated and shown that the language instructors have encouraged their students to focus on L2 sound speech system included pronunciation errors, accents, word stress, and intonation because L2 sound speech system is very important and complicated for the L2 learners to understand how to use the appropriate languages for both language functions and speaking contexts. The study suggested that the students are motivated to think off and denote on the second language sound speech systems and accents. To know the L2 accents and sound speeches, the language learners could develop and adapt their speaking outcomes proficiency fast. As a result, the study suggested that the learners are prompted and encouraged to reduce their shyness of L2 learning or speaking behaviors in order to develop their L2 learning outcomes. The lecturers' cognitive conceptions were raised that the learners are motivated and prompted to conduct their L2 learning with effective perspectives in order to produce the conductive skills like speaking proficiency. The L2 learners were guided and motivated to use self-motivation and self-correction to be challenged during learning or speaking with L2 sound speech systems.

4. Discussion

The results of this study showed that the effects of a study of L2 sound speech to improve learners' speaking proficiency could improve and adapt L2 learners' speaking behaviours and outcomes. To solve the L2 learners' L2 problematic sound speech systems (such as pronunciation errors, accents, word stress, and intonation) in speaking proficiency is very important to provide them opportunities to develop and adapt their speaking or learning behaviours and outcomes, especially encourage them to identify on the language sound speech systems. Similarly, the study indicated that teaching the L2 learners to enable their L2 learning with the sound speech systems is a difficult task for the language teachers because the L2 learners are not familiar with the new sound speech system (Sujannah & Cahyono, 2017). Furthermore, the study also resulted that the L2 learners have faced

numerous problems such as pronunciation errors, accents, word stress and intonation in their L2 learning or speaking productions; most of them are not adapted quickly with the L2 sound speech system (Gilakjani & Sabouri, 2016). In this case, the L2 learners' problems are the key factors that require the researcher to investigate and conduct the cognitive perceptions and strategies, and best solutions to solve learners' L2 problematic sound speeches of speaking production in proficiency, in particular, learning or speaking behaviours and outcomes.

Besides, the theories and models of non-native phonetic acquisition are established to emphasize the significance of the native sound-speech systems in the learning or speaking process (Kimmo et al., 2017). On the other word, the study showed that the native sound system of second language was differential from other language sound system. In this study context, the research resulted that the L2 learners need to have problems-solving for their L2 sound speech systems of speaking proficiency. The language instructors were motivated and promoted to construct the cognitive and developmental solutions and perspectives to deal with students' learning or speaking problems in order to reduce their difficulties facing during L2 learning or speaking in the classroom performance (Mallik, 2017). In this context, Unal & Ilban (2017) identified that the non-native language learners are encouraged to challenge in L2 sound-speech system with various problems-solving conceptions and cognitive perspectives.

Overall, the results of data analysis based on the statistics of paired sample t-test showed that the challenges between the CG and EG in pre-test, focus group interview, and post-test were differentiated. The statistical variables of significance in this study showed that the means (scores) of CG were greater than the EG's means. According to the results of this study, the L2 learners must have the problems-solving to be able to complete and contribute their L2 learning or speaking with effective and proficient sound speeches in the classroom performance (Dewi et al., 2017). As a result, the L2 learning models are expected to provide L2 learners opportunities enough to enable to improve their L2 problematic sound speech of speaking proficiency in the classroom performance.

5. Conclusion

The objective of intensive research was to examine how can learners improve and adapt their L2 speaking productions in proficiency with sound speeches. The study showed that there were many factors which made the L2 learners faced problems during learning or speaking L2 to be proficient – included the pronunciation errors, accents, word stress, and intonation, in particular with the L2 sound speech systems – preferred to language speaking accuracy and fluency. In addition, the study resulted that there were significant differences between the CG and EG for both qualitative and quantitative analysis of L2 sound speeches to improve learners' speaking productions in proficiency. On accordance to the results of data analysis with a paired sample t-test, the means of CG were higher than the EG's means; this meant that the CG learnt the L2 sound speeches faster than the EG did. Particularly, the study showed that L2 learners are encouraged to enable the challenges for development and adaptation of L2 speaking behaviors and outcomes with L2 problematic sound speeches. Thereafter, to solve these factors, L2 learners are motivated and prompted to improve their L2 problematic sound speeches of speaking productions – to have self-motivation and self-correction of their learning and speaking with L2 sound speech systems in order to develop and adapt their learning and speaking behaviors and outcomes. The study also suggested that the cognitive and developmental perspectives and solutions of problems-solving were important to construct for dealing with students' problematic sound speeches (such as pronunciation errors, accents, word stress, and intonation) of L2 speaking proficiency, and they played the main roles on the L2 learners' understanding information and solving problems for their L2 learning or speaking (Kalati, 2016). The research suggested that this study did not provide evidences enough for the study significance. So, the L2 sound speech systems will study and find out more evidences in the future study in order to improve learners' speaking productions be efficient and proficient.

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Appendix: List of Abbreviation of words used in the study

CG = Cognitive group
EG = Encouraged group
L2 = Second Language
SLA = Second Language Acquisition

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Brief biography: Since 2010, I was an associated teacher of English taught at Samdach Heng Samrin Anlungchrey High School. From 2015 – 2016, I was a Higher Educator of English taught at Samdach Heng Samrin Anlungchrey High School. I had also taught English at the Cambodian University For Specialties (CUS). From 2016 to 2017, I have been a Higher Educator of English and have taught English at UHST. But, now I am a PhD Student majoring in Foreign Linguistics and Applied Linguistics at the School of Foreign Languages and Literature (SFL) of Shandong University (SDU) located in Jinan City, Shandong Province of China.