

*The Effect of Problem-Solving Strategy of on
Developing EFL Creative Speaking Skills for 2nd
Year of Secondary Stage Students*

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Abstract

The present study was conducted to investigate the effect of problem-solving strategy learning on developing EFL creative speaking for secondary stage students. The study followed a pre-post experimental one group design. The participants were 40 second year secondary stage students. To achieve the aim of the study, the researchers designed a creative speaking pre/posttest to measure the students' performance in creative writing. It was administered to the participants before and after the intervention. The mean scores of the pre / post administrations of the test were statistically calculated. Findings of the study revealed that there was a statistically significant difference at 0.01 in the pre- and post-assessment of EFL creative writing skills, in favor of the post-assessment. In the light of the findings, the researchers recommend the use of problem solving for developing EFL creative speaking.

Key words: problem solving strategy, creative speaking, Secondary Stage Students.

Introduction

The study of English has become a matter of great concern, as more than a quarter of the world's population

speak English which led to an accessible exchange of information and thoughts. Gradually, English has become a worldwide language that does not only belong to a specific country or state because the number of English speakers all over the world has exceeded the number of English native speakers. As a result, English has become the most widespread international language through the twenty-first century.

Due to the progress and the international events which the world witnesses currently, learning English throughout school stages has been an urgent need to remain in touch with the civilized progress (Nishanthi,2018). Speaking is one of the most important language skills which provides the learner with the ability to communicate with the world easily. One of the most important skills of languages is creative speaking, which designs speaking freely without fear as a stimulus of communications. Hence using strategies to improve creative speaking for secondary learners is essential particularly, the strategies which make students focus on the content to eliminate the fear of language mistakes. Problem solving is a strategy which facilitates using creative speaking skills indirectly through the problem. So, it was selected to urge students to indulge into problem which minimize the fear during speaking.

Problem solving

Definition of Problem solving

Problem-solving is considered as the most complex level of individual cognitive activities that requires an effort to solve problems which involve all the individual intellectual parts, particularly; memory, perception, reasoning, conceptualization, language, emotion, motivation, self-confidence, and ability to control situation (Caprioara,

2015). Hobri, Romlah, Prihandoko, Safitri and Nazareth (2018), defined the problem-solving as; an attempt to find solutions and to achieve objectives which may be accomplished on long or short run.

Furthermore, Numerous studies stated that problem solving is one of the most effective factors in dealing with stressful life events (Heppner, Pretorius, Wei, Lee, & Wang, 2002) Problem solving is defined as the process of finding solutions to definite problems and the state of finding creative ways to solve a problem by going deeper than the simple application of the rules learned through previous experiences (Korkut, 2002). Problem solving is used to face the difficulties, traumatic experiences and stressful life events that need to be coped with and to be solved by using problem solving skills (Li, Eschenauer, & Persaud, 2018).

Problem solving skills are enhanced by enabling students to cope with possible real problems more easily. Skills of problem solving strengthen not only students' beliefs and expectations about coping effectively with the problems they face every day, but also their self-efficacy beliefs. This indirectly enables students to have more meaningful goals, to plan to achieve these goals and motivates them to achieve their goals (ÇAM., EŞKİSU, KARDAŞ, Özkan,2020).

The effect of problem solving

Problem solving encourages students to acquire important life skill involving a range of processes including analyzing, interpreting, reasoning, predicting, evaluating, and reflecting (Anderson, 2009). Therefore, problem solving is considered as a necessary method which stimulates students to think. students should be given

chance to apply and adapt a variety of appropriate strategies to solve problems; and monitor and reflect on the process of problem solving.

Kilpatrick, Swafford, and Findell (2001) argue that problem solving provides an important context for students to learn how to simplify the complicated problems. Hence, students have opportunities to solve problems themselves and to see problems being solved. Thus, problem solving is important as a way of doing, learning, and dealing with difficulties.

Karatas and Baki (2013) state that problem solving settings that based on class discussion gives students the opportunity to analyze their thought, students can share and compare their thought with their peers, moreover, students are able to discuss different ideas. problem solving contributes to develop students' responsibility, and it directs them to searching, raise their interest in learning, provide students with permanent learning, increase students' motivation etc. Therefore, process of learning improves the sense of being responsible for their learning. An effective learning process also urges students to grow their interest in learning and promote students to share ideas to each other and finally make learning as stable as possible.

Problem solving in learning language.

Language is very necessary in the other subjects' classroom interaction, and in learning or teaching other subjects' conceptualization (Radford & Barwell, 2016). Language one of the main factors which contributing to understand mathematical, engineering, or technological problems and vice versa the problems which presented in the second language improves this language skills acquisition.

Consequently, problem solving, and language proficiency were moderately correlated; and learner's understanding of written problem depends on his perception to the language. Hence, receiving and producing language are interrelated and they are among the powerful factors that affect the problem-solving performance in different age groups (Paetsch, Felbrich & Stanat, 2015).

Additionally, during problem solving, language learners' development lingually might not occur in other situation for a long time and usually come from exchanging information between different cultural groups and their language use is naturally interrupted by moments of flexible use of languages (Moschkovich 2007). Similarly, success in solving problems in mathematics is influenced by language skills (Ambrose & Molina, 2014). In this respect, many questions have been raised regarding how a language learners' knowledge is represented in foreign language. the challenges and opportunities which the second language learners face in subjects' programs, improve their fluency in language skills (Durand-Guerrier, Kazima, Libbrecht, Ngansop, Salekhova, Tuktamyshov & Winsløw, 2016).

Social-cultural context expressed by language are among the factors influencing problem solving performance. knowledge acquisition and utilization, control, beliefs, and affective domain, which includes individual feelings, attitudes and emotions are reflected in language and they have a great deal in solving problems. Hence, students' real-word knowledge and life experiences have also an effect on solving problems (Voyer, 2010). the subjects taught in foreign language are discussed in verbal, non-linguistic and linguistic communication in foreign language

with touchscreen, dynamic technology for exploring calculus concepts (Ng, 2016).

Students discuss and speak about the problem, to understand it better and to clarify the methods of solving the problem. They may use expressions in speaking which they heard during discussion. learners use writing and speaking to describe and explain how the solution was reached. Furthermore, problem solving urges students' ability to communicate whether by writing or speaking indirectly. Hence, Learners can articulate understanding, to respond to probing questions, to explain concepts in English language, and to express the relevant concept to others (Beswick & Muir, 2004).

Williams (2003) mentioned that one of the benefits of problem solving in creative writing and speaking, is that it enhances the written and verbal ability to articulate their thinking indirectly. Students need to acquire language to be managed to speak about their experiences and test their new ideas with new words and concepts.

Creative speaking skill definition

Developing fluency and speaking competencies requires more than just producing memorized chunks of language, learners should practice language spontaneously which called 'real operating conditions', progress the learner's acquisition of the target language and to become truly communicatively competent (Thornbury,2005)

Engel and Groot-Wilken (2007) affirmed that using the target language creatively motivate learner and provide him with joy, enthusiasm and ambition, more opportunities to discover and experiment with the language. Creative speaking also sheds light on the creative and productive learning processes.

Creative speaking activities

According to Becker & Roos (2016) improving creative speaking goes through three levels as follows:

Level I: Reproductive language use

The first level integrates activities that foster reproductive language use, which is considered an essential foundation of creative speaking. At this level, the learners use fixed expressions which enable him to communicate successfully. Activities are guided as well as closely linked to the input given in class. Learners imitate what they listen including songs and retelling stories or parts of stories and scripted acting and speaking of dialogues, role plays and sketches.

Guided activities are very motivating because they allow learners to speak imitatively and to actively participate from a beginning level on. Moreover, repetition and imitation reduce the possibility of making mistakes, which may strengthen the learners' self-confidence. Furthermore, speaking at the first level provide learners with a means of controlling language Thornbury (2005), including pronunciation, and sentence stress. Activities that enhance reproductive language use, improve noticing, and help learners to memorize vocabulary and chunks of language as well as structures and discourse.

Level II: creative language use

The next level, according to Thornbury (2005) Creative speaking Use, allows learners to practice control their individual language repertoires. To practice and control language while speaking means to demonstrate progressive control of a speaking with the possibility of making mistakes, but learner can recognize the mistake and modify

it. The main goal of practicing control is to use target language appropriately. To achieve appropriation, the learners have to independently perform and creatively combine fixed expressions but can still rely on support through the provision of phrases or expressions they are provided with. This level requires challenge and an element of choice and self-determination, but it is still highly predictable.

This level encourages the learners to act independently. Successfully carrying out an activity with a reduction of the outer support, it also enhances the learners' sense of self-efficacy and confidence (Puchta, 2007).

Level III: Creative and productive language use

Level three promotes creative and productive language use and challenge learners to use the individual language repertoire which they own and using it in a meaningful context. This means that they are free to rely on rote-learned expressions, to creatively combine them or to use language totally creatively to find their own style of expressing meaning. In the third level, learners use non-scripted information, opinion-gap tasks, non-scripted storytelling, role play and improvisation tasks. They also need to spontaneously interact with peers without prior preparation, retrieve appropriate language structures, cope with unpredictability, anticipate and plan.

Therefore, the learners communicate via speaking independently and can experience a very high degree of autonomy. Learner in this stage create his own script which reflects his own identity. Partly scripted activities from the previous level can easily be modified by removing the support to make them suitable for this. In this stage,

however, errors as evidence of learners' progress may be seen in the sense that they show that learners are trying to make creative attempts to use language beyond what they have been taught (Nicholas, Lightbown and Spada, 2001).

Puchta (2007) Mentioned that Learners' errors should be tolerated highly to emphasize that the learners depend on their own selves, and they can experience autonomy moreover, this tolerance gives them the opportunity to use their imagination and creativity, but also, they need to be provided with effective and sensitive feedback to improve their future performance. Feedback should therefore always be given after speaking activities at the third level. Instead of an overt correction, feedback should be confidential because public feedback is demotivating and inhibiting. feedback that focuses on improvement and which is given in decent indirect way may be very helpful. Speaking activities may be recorded while carrying out the task. In a feedback conference, learners and teacher watch the recording. The learners identify problems in the performance and areas they wish to improve. The teacher then makes suggestions for further improvement.

Speaking as a Creative Construct

Unintentionally, speakers constantly use imaginative skills in interactions with others. Moreover, speaker may employ idioms, adages, proverbs, similes metaphors whether in speaking or writing skills. It should be noted that all these are skilful expressions which belong to the province of creative writing and speaking.

In identifying some creative skills which are indispensable to effective speaking and employable for result-oriented communication, Oyeleye (2005) distinguished between three stages in creative speaking.

- The first stage was known as the ‘inventio’ which is finding a message to speak about, and the speaker has a desire to deliver this message to the listener. The first stage is common because to speak, speaker should have some messages or information to pass across before speaking.
- The second stage was the “dispositio” (which is the arranging, structuring, or plotting). Once one has a message to speak about and speaker need to deliver this message to listeners, speaker moves to the next stage. And start deciding, arranging structure, or plotting the message which the speaker wants to pass across.
- The third stage was the “elocutio” (which is the style).in this stage speaker choose the style in which information are represented. This naturally leads to the importance of style in creativity. An essential characteristic of creative writing which boosts the effectiveness speaking is style. Every individual has his own style of writing and speaking. The style that needs to be improved by employing creative writing or speaking skills.

& Martinez,2015) stated that there are two principles that organize language: open choice of words and idioms. The previous are elements that can be employed with diverse words with no big difference. On the other hand, the latter are combinations of words that give different meanings together. He shed light on idioms as the default mode in enhancing our language. He argued that "most normal text is largely delexicalized and appears to be formed by exercise of the idiom principle."

Mantyla (2004) distinguished between collocation and idioms about substitutability of items. He emphasized that the former permits the substitutability of at least one item of its constituent elements. The latter, on the other hand, cannot meet with any type of transformational processes of substitution, transposition, expansion, etc. Lien (2007) stated that the fundamental distinction between collocation and idiom is that, in contrast to idioms, the meanings of collocation can be expected or derived from the meanings of their parts. This differs from one idiom to another because some idioms are more frozen than others. To kick the bucket, for instance, that is more fixed according to transformational or substitutional processes than idioms such as spill the beans, which can undergo a process of passivation as follows: the beans have been spilt. Soori (2016) regards collocations as a scale at the end of which lie idioms.

- **Polysemy in creative speaking**

According to Hamlaoui (2010) polysemy can be characterized by all the possible senses that a word possesses. In dictionaries, polysemous words are given two separate entries for example, the word bank has multiple meaning the first is (one side of a river) while the second is a financial institution. creative speaker knows the multiple meanings of every word and can use them appropriately.

- **Figures of Expression and creative speaking**

Ighile(2010) stated that creative speakers have the ability of using or understand the following figurative language in communication with others:

- **Climax**

A climax is a figure of speech which contains a linked clause in a sequence like repetition through three or more clauses in ascending order of importance as in:

The angry man entered the house, saw his enemy, and killed him.

- **Hyperbole**

It is an exaggeration used for emphasizing a point. Meaning should not be taken literally.

The whole country came to participate the party and greet him.

The entire world stood to honour the new president.

In fact, the whole country did not attend the party neither did the entire world stood for new president. The point being made is that the events were well attended. This is a major tool of the creative speaker.

- **Irony**

A subtly humorous perception of inconsistency in which the clause has two meanings one is apparently straight-forward, but the speaker means the opposite meaning to criticize someone or something.

He is an honourable man.

In fact, the speaker meant that he has not behaved honourably.

- **Metaphor**

In conformity with Teodora (2015) study, Metaphors are considered the most prevalent applied figure in speech in language and most other figure are regarded as "a metaphor prototype". It implicates breaking away from the fundamental sense of words such other figures of speech (except oxymoron). To add, a metaphor can be illustrated as " a figure of speech in which a word or phrase that ordinarily designates one thing is used to designate another, thus making an implicit comparison" (The American Heritage Dictionary of the English Language). In

such a case, we compare two objects by highlighting the non-fundamental sense of either part via analogy or sameness.

- **Metonymy**

To replace the name of one thing with the name of something associated with it.

We must respect the crown.

It means that royalty must be respected because the crown and royalty are associated.

- **Oxymoron**

It combines two conventionally contradictory terms. for examples:

This man is the wisest fool.

- **Paradox**

Paradox is a contradictory as to drive listener into seeking another sense or context in which it would be true.

A child is the father of the man.

- **Personification**

It gives human qualities to inanimate objects. Such as:

The leaves are singing.

The trees are dancing.

The human qualities in previous examples are given to leaves and trees.

- **Pun**

It gives humour by contriving an ambiguity. Pun plays on words whereby two distinct meanings are being suggested either by the same word or by two similar sounding word.

For instance: *It is a fool that fools but a double fool that thinks everyone is a fool.*

- **Rhetorical Question**

It is a question which is asked without seeking an answer. but it is asked to strengthen a point being made or to stress an instruction being given.

The expression: *Should we then abandon schooling because the fees are high?* Is not meant to be answered but to stress the importance of education.

- **Simile**

It is used to compare two things, ideas, concepts, and situations. This comparison is done with the use of 'as' or 'like'. For Example: *Water as clear as crystal.*

The Creative speaking Skills Checklist:

The checklist aimed at identifying the required EFL creative speaking skills for secondary stage students. Validity of this checklist was used to determine the required English creative speaking skills for first secondary year 40 students. It includes 8 skills. The checklist was submitted to a panel of jury members to assure its validity. The content of the checklist: Having reviewed the related literature on developing students' creative speaking skills, the researchers designed a creative speaking skills' checklist and submitted it to specialized jury members in the English Language Teaching (ELT) to determine the degree of importance of each skill to students. The list consisted of 8 skills. Jury panel suggested 5 skills only which are Fluency: opinion-gap tasks, competent pronunciation, Grammar, and originality and using figurative speech. The jury members stated that the skills in the checklist would be generally adequate and appropriate to its purpose, after deleting three skills.

Context of the problem

First: Observation:

The researcher noticed that her colleagues of English language teachers in Elsheikh Gharib School complain of the weakness of the secondary students in speaking skills in general and creative speaking skills particularly.

Moreover, the researcher, in her PhD research regarding STEAM system, studied Problem solving learning as one of STEAM strategies and she found out that Problem solving learning has a great effect on developing creative speaking. Consequently, problem solving is used in this research to develop creative speaking.

Second Informal interview:

Interviewing nine teachers who taught English to the second year, secondary stage students and posing the following questions:

1. Are creative speaking skills important for second-year secondary stage students? Why or why not?
2. Do first year secondary stage students lack creative speaking skills?
3. What are the methods/techniques that teachers use to teach creative speaking skills for secondary stage students?
4. 4. How can creative speaking skills be developed for second year secondary stage students?

Most of the teachers emphasized that second -year secondary stage students lack creative speaking skills, despite their importance for students in different educational stages in general and for secondary stage students in particular. Most of the teachers use the regular instruction in teaching writing skills, and so do not develop students' creative speaking skills. They do not care about developing these skills, as they are usually obliged to finish the long and difficult syllabus they have to teach before the end of each semester.

Third previous studies:

The existence of the problem of the study was further supported by reviewing previous related studies. Recent related studies such Chun (2014) and Demir (2017) assured the weakness of EFL students in creative speaking and recommended finding new methods and techniques to develop these skills. In the Egyptian context, because most teachers do not provide students with opportunities to practice EFL creative speaking skills in the communicative contexts. Previous researchers showed that EFL students face some serious creative speaking problems. Those problems might hinder their ability to express themselves freely, in a creative way. Most of the students can't speak creatively and fluently specially in front of others. Also, they can't express opinion freely or comment on artistic piece.

Study Problem:

There is a serious lack in creative speaking skills among the majority of second year, secondary stage students. Hence, this study applies problem- solving strategy as one of STEAM system strategies to develop the necessary skills of creative speaking.

Questions of the study:

To tackle this problem, this study attempted to answer the following questions:

- 1-What is the effectiveness of using problem- solving learning on developing the necessary EFL creative speaking skills for second year of secondary stage students?
- 2-What are the necessary EFL creative speaking skills for second secondary stage students?

3-What is the proposed framework for using problem-solving learning to develop the necessary EFL creative speaking skills for second year of secondary secondary stage students?

Hypothesis of study:

There is a statistically significant difference between the mean scores of the experimental group on each of the EFL creative speaking skills required for the second year, secondary stage students on the pre- and post-administration of EFL creative speaking skill test.

Variables of the Study:

Independent Variable:

- Problem-solving strategy learning.

Independent Variable:

Developing EFL creative speaking Skills for second year, secondary stage, students.

Aim of study:

This study aimed basically at the following:

- The development of EFL creative speaking skills of second year of secondary stage students, via the usage of problem solving.

Significance of the Study:

- The present study is expected to be useful in the following areas:
- Helping the Ministry of Education to develop the outcomes of the EFL teaching/ learning process in Egypt.
- Helping teachers use problem-solving for developing students required EFL creative speaking skills in the secondary stage.

- Paving the way for other researchers to conduct further researches on developing students' creative speaking skills using problem solving learning in the other educational stages.

Delimitations of the study

- The study was abided by the following delimitations:
 - 1- A sample of 40 2nd year of Secondary Stage Students, Elshiekh Gharib Galal school.
 - 2- The second semester of the academic year of 2021-2022.
 - 3- Problem solving strategy was applied for the purpose of developing the creative speaking skills necessary for 2nd year of Secondary Stage Students, Elshiekh Gharib Galal school.

Instruments of study

In order to achieve the study objectives and answer its questions, the researcher used the subsequent instruments:

It is worth noting that before designing pre and post creative speaking skills test, a checklist was prepared to be validated to determine the required creative speaking skills to be tested. It consisted of 8 skills in its primary form but the jury members suggested omitting 3 skills to be 5 skills only in its final form; fluency, opinion gap tasks, competent pronunciation, grammar, and originality & figurative speech. Having done this modification, it becomes valid and was used in designing the creative speaking skills test. Thus, the first sub question of the study about the required creative speaking skills for second year of Secondary Stage Students, was answered.

- 1- A pre-post administration test conducted on the experimental, to measure the development of creative speaking for 2nd year of Secondary Stage Students.
- 2- Creative speaking observation card.

Statistic calculations

Table (1): t-test difference between the participants' mean scores in the pre- and post-assessment of the overall EFL creative speaking skills

Skills	assessment	Std. Deviation	Mean	t-value	df	Sig at	η^2	Black eq. Result
overall EFL creative speaking skills	Pre	7.90975	20.5000	29.485	39	Sig at 0.000	0.957	1.3 The effectiveness is very large because it is larger than 1.2
	Post	5.47576	44.625					

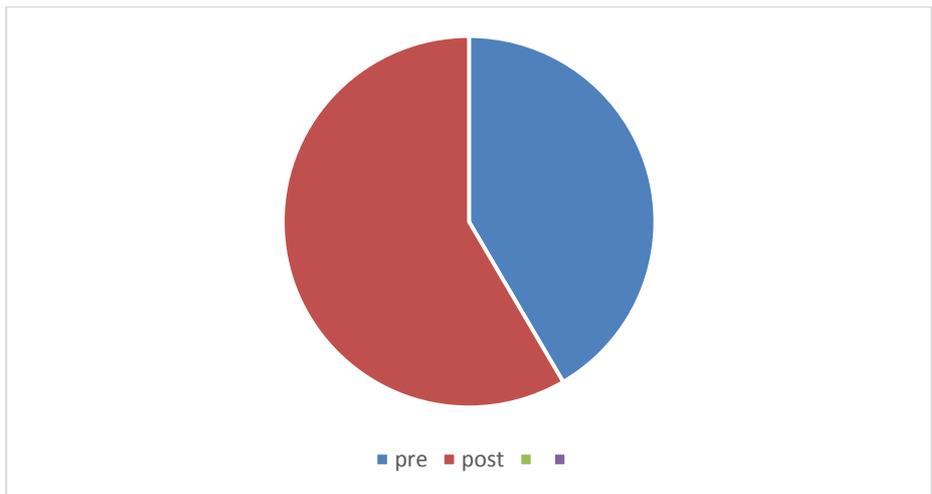


Table (2): t-test difference between the participants' mean scores in the pre- and post-assessments on each EFL creative speaking skills

Skills	Assessment	Std. Deviation	Mean	t-value	df	Sig.	η^2	Black eq. Result
Fluency	Pre	0.4641	1.300	27.912	39	Sig. at 0.000	0.952	1.5
	Post	0.4522	3.725					
opinion-gap tasks	Pre	0.46410	1.300	25.650	39	Sig. at 0.000	0.944	1.47
	Post	0.52563	3.675					
Competent pronunciation	Pre	0.38481	1.175	21.539	39	Sig. at 0.000	0.922	
	Post	0.54538	3.600					1.46
Grammar	Pre	0.75107	1.275	17.585	39	Sig. at 0.000	0.888	
	Post	0.4522	3.500					1.37
Originality and figurative speech	Pre	0.43853	1.25	22.481	39	Sig. at 0.000	0.928	
	Post	0.59574	3.525					1.39

The above table (2) indicates that:

1- The mean scores in the fluency skill are 1.3 for the pre assessment and

3.7 for the post-assessment. Where $t = 27.9$, $p < 0.01$ which is statistically significant at 0.01.

2-The mean scores in the opinion gap tasks skill are 1.3 for the pre assessment

and 3.6 for the post-assessment. Where $t = 25.6$, $p < 0.01$ which is statistically significant at 0.01.

3-The mean scores in the competent pronunciation skill are 1.17 for the pre assessment and 3.6 for the post-assessment. Where $t = 21.53$, $p < 0.01$ which is statistically significant at 0.01.

4-The mean scores in the grammar skill are 1.27 for the pre assessment and 3.5 for the post-assessment. Where $t = 17.585$, $p < 0.01$ which is statistically significant at 0.01.

5-The mean scores in the originality and figurative speech skill is 1.25 for the pre assessment and 3.52 for the post-assessment. Where $t= 22.48$, $p<0.01$ which is statistically significant at 0.01.

Discussion and Interpretation of the Study Findings:

Displaying the results of the study, the researchers presented an account of the development of the study group students' creative speaking skills due to the use of the problem- solving strategy. This is shown in the difference between the pre, and post administrations of the creative speaking skills test mean scores of the study group students. The difference between the students' mean scores in the pre and post administrations of the test was statistically significant. which might be due to the following factors

- 1- The very good practice on the required 5 creative speaking skills: fluency, opinion-gap tasks, Competent pronunciation, Grammar, and originality & figurative speech.
- 2- The use of problem-solving strategy provided an opportunity for cooperative learning, it upgraded and refined students' use of language and involved them in collaborative reconstruction of creative spoken language. They became more engaged in showing their competence to the members of the team and were responsible for the achievement of the group.
- 3- The collaborative nature of role work allowed the students to scaffold what they did not know so, they collectively learnt with their peers. Additionally, creative speaking throughout problem solving gave students an opportunity to interact with each other's

to examine the problem, discuss the topic, work out the meaning, and discuss the words, in a meaningful and purposeful way.

- 4- Using the problem- solving provide the students with longer significant speaking time that student-centered classroom than in a traditional teacher-centered classroom.
- 5- Furthermore, the use of self-assessment and peer assessment helped the students greatly to confront their own strengths and weaknesses in their English language use.
- 6- In the small group discussion, students learnt to share opinions and contribute by practicing the roles that they were responsible for.
- 7- Students had an active learning role as they started to read independently to know more about the problem that they study. Arguments between students to note for the coming discussion.
- 8- The findings of the current study provide interesting conclusions and recommendations for classroom teachers and researchers who are interested in the implementation of problem solving in creative speaking skills.

Recommendations of the study:

The results of the current study offer several recommendations for EFL classroom teachers and researchers who are eager to improve their instruction, as follows:

- English language teachers should be trained on using different types of collaborative strategies in EFL creative speaking skills.

- EFL student teachers should practice collaborative learning strategies.
- Curriculum designers must take into their account the importance of embedding collaborative learning strategies in the syllables of different stages.

Suggestions for further Research:

Within the limitations of the present study as well as the findings being achieved, the following areas are suggested for further research:

- Using problem solving to develop students' linguistic competence.
- Using problem solving to develop oral communication skills for EFL students in other stages of education.
- Developing other language creative language skills among secondary stage students.

References

- Ambrose, R., & Molina, M. (2014). Spanish/English Bilingual Students' Comprehension of Arithmetic Story Problem Text. *International Journal of Science and Mathematics Education*, 12 (6), 1469-1496.
- Anderson, J. (2009) Mathematics Curriculum Development and the Role of Problem Solving. The University of Sydney. ACSA Conference 2009. <https://www.acsa.edu.au/pages/images/judy%20anderson%20-%20mathematics%20curriculum%20development.pdf>.
- Bartsch, S. & Evert, S. (2014) towards Fithian notion of collocation
- Becker,C. & Roos,J.(2016) An approach to creative speaking activities in the young learners' classroom. , *Education Inquiry*,

- 7:1, 27613, DOI: 10.3402/ edui.v7.27613. <https://doi.org/10.3402/edui.v7.27613>.
- Beswick ,K.& Muir,T. (2004) Talking and Writing About the Problem Solving Process Conference Paper • January 2004. See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/255616647>.
 - Caprioara, D. (2015). Problem Solving-Purpose and Means of Learning Mathematics in School. *Procedia-Social and Behavioral Sciences*, 191, 1859-1864, 2 June 2015.
 - ÇAM, Z., EŞKİSU, M., KARDAŞ, F., Özkan (2020) The Mediating Role of Self-Efficacy in the Relationship between Problem Solving and Hope. *Participatory Educational Research (PER)* Vol. 7(1), pp. 47-58, March 2020 Available online at <http://www.perjournal.com> ISSN: 2148-6123 <http://dx.doi.org/10.17275/per.20.4.7.1>
 - Castro, M.& Faber, P. (2014) collocation dictionaries: comparative analysis. *Verb collocations and phraseology in EcoLexicon. the journal Yearbook of Phraseology*[https:// doi.org/10.1515/phras-2014-0004](https://doi.org/10.1515/phras-2014-0004).
 - Chanturia, A. & Martinez, R. (2015). The Idiom Principle Revisited. *Applied Linguistics* 36(5):549–569.DOI: 10.1093/applin/amt054.
 - Chun, S. (2014). EFL learners’ beliefs about native and non-native English-speaking teachers: Perceived strengths, weaknesses, and preferences. *Journal of Multilingual and Multicultural Development*, 35(6), 563–579. <https://doi.org/10.1080/01434632.2014.889141>.
 - Demir, Y. (2017). What, how and why? A multi-dimensional case analysis of the challenges facing native and non-native EFL teachers. *Pasaa*, 54(December), 141–176. Retrieved from <http://ezproxy.lib.uconn.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1171211&site=ehost-live>.
 - Durand-Guerrier, V., Kazima, M., Libbrecht, P., Ngansop, J., Salekhova, L., Tuktamyshev, N., & Winsløw, C. (2016). Challenges and Opportunities for Second Language Learners in Undergraduate Mathematics. In *Mathematics Education and*

- Language Diversity (pp. 85-101). Springer International Publishing.
- Elewa, Abdel Hamid. (2016). Levels of Translation. Cairo, Egypt: Albayan.
 - Engel, G. and Groot-Wilken .B.(2007). English in primary schools in North Rhine-Westphalia (NRW). Cidree report – English in primary education in the Netherlands, North-Rhine Westphalia (NRW) and Norway. (2007). Gaby Engel, Bas Trimbos, Ion Drew and Bernd Groot-Wilken (eds.), http://www.cidree.org/publications/reports_and_studies (Accessed 2015-01-20). [[Google Scholar](#)].
 - Florida, R. (2004). The Rise of the Creative Class. New York: Basic Books.
 - Freire P (2003). Ezilenlerin pedagojisi (Çev. D. Hattatoğlu, E. Özbek). İstanbul: Ayrıntı Yayınları.
 - Kilpatrick, J., Swafford, J., & Findell, B. (Eds.) (2001). Adding it up: Helping children learn mathematics. Washington, DC: National Academy Press.
 - Fuller, S. (2007). Creativity in an Orwellian Key. In A. Sales, & M. Fournier (Eds.), Knowledge, Communication and Creativity. London: Sage.
 - Hamlaoui, H. (2010) ambiguity of polysemous English words in translation. People's Democratic Republic of Algeria Ministry of Higher Education and Scientific Research Mentouri University of Constantine Faculty of Letters and Languages Department of English. <https://bu.umc.edu.dz/theses/anglais/HAM1166.pdf>
 - Heppner, P., & Lee, D. (2002). Problem-solving appraisal and psychological adjustment. In S. J. Snyder, C. R., & Lopez (Ed.), Handbook of positive psychology (pp. 288–298). Oxford University Press.
 - Hobri. S., Prihandoko, A., Safitri, J., & Nazareth, E. (2018). Students' metacognitive ability in mathematical problem-solving learning based on lesson study for learning community (LSLC). Journal of Physics : Conference Series. 1088 (2018) 012064.
 - Ighile, M. (2010). Exploring the Creative Resources of Language in Speaking. Benson Idahosa University

- Korkut, F. (2002). Lise öğrencilerinin problem çözme becerileri [Problem solving skills of high school students]. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi [Hacettepe University Journal of Faculty of Education], 22, 177–184.
- Li, M., Eschenauer, R., & Persaud, V. (2018). Between avoidance and problem solving resilience, self-efficacy, and social support seeking. *Journal of Counseling & Development*, 96(2), 132–143. <https://doi.org/10.1002/jcad.12187>.
- Lien, C. (2007) idioms in verb-object constructions. In: [Bulletin of Chinese Linguistics](#) Online Publication Date: 24 Jan 2007. https://brill.com/view/journals/bcl/2/1/article-p187_6.xml.
- Maisa, S.& Karunakaran, T. (2013) importance of teaching idioms to ESL students: a study on teachers' beliefs. *Asian Journal of Humanities and Social Sciences (AJHSS)* Volume 1 – Issue 1, May 2013 ISSN: 2320-9720. <http://ajhss.org/pdfs/Idioms%20and%20Importance%20of%20Teaching...pdf>
- Mantyla, K. (2004). Idioms and language users: the effect of the characteristics of idioms on their recognition and interpretation by native and non-native speakers of English. University of Turku. https://www.researchgate.net/publication/277872357_Idioms_and_language_users_the_effect_of_the_characteristics_of_idioms_on_their_recognition_and_interpretation_by_native_and_non-native_speakers_of_English
- Mertz, E. (2013), *Semiotics: Theory in Social and Cultural Anthropology: An Encyclopedia* (edited by R. Jon McGee and Richard L. Warms).
- Moschkovich, J. (2007). Using two languages when learning mathematics. *Educational studies in Mathematics*, 64(2), 121-144.
- Ng, O.(2016). The interplay between language, gestures, dragging and diagrams in bilingual learners’ mathematical communications. *Educational Studies in Mathematics*, 91, 3, 307-326.
- Nishanthi,R.(2018) Important of learning English in today worl, **December 2018**, DOI:[10.31142/jtsrd19061](#)
- Nicholas, H. Lightbown, P. and Spada, N. (2001).Recasts as Feedback to Language Learners.First published: 28 June 2008. <https://doi.org/10.1111/0023-8333.00172>.

- Ogunbayo, O (2009) Speechmaking! In Ibitoye, C and A (eds) use of English and communication skills for Tertiary Education Department: Polar World Consult ltd. Pg 77-95
- Oyeleye, L (2005) “The power of words and the techniques of Public Communication. In Oyeleye (ed) Language as Discourse in Society. Ibadan: Hope Publication ltd: Pg 168-178
- Paetsch, J., Felbrich, A. & Stanat, P. (2015). Der Zusammenhang von sprachlichen und mathematischen Kompetenzen bei Kindern mit Deutsch als Zweitsprache. Zeitschrift für Pädagogische Psychologie 29, pp. 19-29. DOI: 10.1024/1010-0652/a000142.
- Puchta, H. (2007). More than little parrots. Developing young learners’ speaking skills. http://www.herbertpuchta.com/wp-content/files_mf/1337800529YL_Speaking.pdf (Accessed 2015-01-20).
- Sak, U. (2016). Yaratıcılık, gelişimi ve eğitimi.(2. Baskı). Vize: Ankara.
- Soori, H. (2016) verb noun collocation in Arabic and their patterns. JSASS VOL.2 BIL. http://journal.kuis.edu.my/jsass/images/files/02_VerbNounCollocation.pdf
http://journal.kuis.edu.my/jsass/images/files/02_VerbNounCollocation.pdf
- Teodora. (2015) translation of metaphors and idioms- mission impossible. The World Bank. Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/ESSU/EducationStrategy_4_12_2011.pdf.
- Thornbury, S. (2005). Awareness, appropriation, and autonomy. English Language Teaching Professional, 40, 1113.6_8
- Voyer, D. (2011). Performance in mathematical problem solving as a function of comprehension and arithmetic skills. International journal of science and mathematics education, 9(5), 1073-1092.
- Williams, K. (2003). Writing about the problem-solving process to improve problem-solving performance. The Mathematics Teacher, 96(3), 185-187.
- Zafeiriadou, N. (2009) Drama in language teaching: a challenge for creative development. ISSUES Vol. 23, March 2009. https://d1wqtxts1xzle7.cloudfront.net/32314924/article_14-with-cover-page-

[v2.pdf?Expires=1656264630&Signature=hSPYK4AX8QNiQdwo
bxqLIHmW294S3V4N7eTsy4k1B6X6nZaHaUpUFEsj-
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