



The Effect of Integrative Cognitive Linguistic Approach in Developing EFL Speaking Fluency and reducing speaking anxiety

Prepared by:

Dr/ Ahmed Abdelfattah Abdelhameed Mohamed

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Abstract:

This study explores the efficacy of the Integrative Cognitive Linguistic Approach (ICLA) in fostering speaking fluency among English as Foreign Language (EFL) learners. ICLA posits a fundamental link between cognition, language, and experience. The research investigates whether integrating ICLA principles into EFL speaking instruction enhances fluency compared to traditional methodologies. A quasi-experimental design is employed, assigning participants to ICLA instruction group and a control group receiving standard instruction. Preand post-tests evaluate speaking fluency in both groups. The study anticipates statistically significant improvement in speaking fluency for the ICLA group compared to the control group. This would suggest a positive influence of ICLA on EFL learners' fluency development.

Key Words: Cognitive linguistic Approach, Speaking skills Fluency, speaking anxiety.

Introduction:

With the recent growth of English as an international language of communication, there is a need for learners to speak and interact in a multiplicity of situations through the language. When one learns a language, this implies the learning of four skills, speaking, listening, reading, and writing. Among all skills, speaking appears to be the most important because people form judgments about our language competence from our speaking rather than from any of the other language skills.

According to English curriculum requirements, the objective of English is to develop students" ability to use English in an all-purpose way. Harmer (1991) suggested any of the skills cannot be performed without another. It is impossible to speak in a conversation if someone does not listen as well, and people hardly can write without reading.

Polsombat (2015) assured that to improve speaking skills, students should take into account its different aspects. Thus, EFL learners are required to use speaking skills for conducting conversations face to face, negotiating and discussing in a meeting, telecommuting, conducting conversations by phone, delivering a presentation in a meeting, and participating in a group discussion.

Additionally, Farr (2000:6) said that any opportunity the individual has to speak in front of an audience will give him more confidence to speak freely. So, the students need to speak English with confidence to be able to communicate successfully. Also, teachers should encourage their students to speak English freely and express themselves without hesitation. Teachers should direct teaching in a way that develops three main items: form, meaning and fluency.

Speaking fluency refers to the ability to communicate in a language smoothly, effortlessly, and at a comfortable pace (British Council, Learn English Teens: Exams: Speaking Exams: Fluency). It's about getting your message across clearly and effectively without constant hesitations, pauses, or fillers that disrupt the conversation.

There are four areas in the speaking module presented by the British Council (2009) concerning the most important speaking skills. The four areas are as follows:

- A. Pronunciation: the difficulty of understanding the speaker because of his way of pronouncing words. Using pronunciation features appropriately to communicate meaning. Pronunciation refers to the way a word or a language is spoken.
- B. Fluency and Coherence: speaking at a normal rate of speech (not too fast and not too slow), with normal effort, and without too many pauses or corrections. Presenting and linking ideas in an understandable and connected way.
- C. Lexical Recourse: presenting information, ideas and opinions. Using appropriate words. Getting around any lack of vocabulary by using other words.

The understanding and learning of information and concepts are known as the cognitive approach. It is an approach that maintains how a person feels and behaves. Integrative Cognitive learning is about developing true understanding and is a way of learning that helps learners use their brains more effectively. The configuration of thought processes and psychological activities like problem-solving and decision-making from early childhood to adulthood is called cognitive development. (Sreena. & Ilankumaran, 2018).

Boers (2011) defined Integrative Cognitive linguistics approach and its acquisition as reflecting the general cognitive abilities that operate in our interaction with the world" (p. 211). The Cognitive Linguistic Approach (ICLA) is an interdisciplinary field that examines language through the lens of cognition, language, and experience. It emphasizes the interconnectedness of these elements, suggesting that language is not merely a system of rules and structures, but rather a reflection of how we mentally categorize the world and make sense of our experiences (Langacker,1987). According to (Lin, 2011), ICLA focuses on how the social and physical environments we live in, the language we use, and the way our brains work all influence each other.

ICLA as a system shaped by our mental schemas, which are the cognitive structures we use to organize knowledge and experience.

These schemas influence how we perceive, categorize, and ultimately use language (Evans & Green, 2006). On the other hand, CLA emphasizes the embodied nature of cognition, arguing that our understanding of language is grounded in our physical experiences with the world. This approach also highlights the centrality of metaphor in structuring our language, suggesting that we use metaphors to understand abstract concepts by mapping them onto concrete ones (Fauconnier & Turner, 2002).

The last two definitions offer slightly different perspectives within the broad umbrella of ICLA. The first definition highlights the role of mental schemas in shaping language, while the second definition emphasizes the embodied nature of cognition and the importance of metaphor. Both definitions showcase the core principles of ICLA in understanding language as a product of our mental processes and experiences.

The cognitive perspective sees language learning as a multi-layered process that involves conscious thought, active use of learning strategies, and a focus on understanding. Learners are encouraged to practice language in a way that makes sense to them, building on their comprehension of the underlying rules.

Takimoto, Masahiro. (2020) conducted a study compared the effects of a cognitive linguistic approach on the development of Japanese EFL learners' pragmatic proficiency concerning degrees of politeness attached to English requests. The results demonstrated that the cognitive linguistic approach group outperformed the non-cognitive linguistic approach and control groups in a discourse completion test and an acceptability judgment test. They further suggested that the spatial concept-oriented approach using metaphors for awareness-raising is an effective mnemonic device for developing Japanese EFL learners' pragmatic proficiency, as it helps the participants facilitate deep processing of form-meaning-context connections and ensures their long-term retention.

Nga, Nguyen. (2023) examined the effects of Integrative cognitive linguistic approach in teaching English vocabulary at a public university in Vietnam. A total of 35 students participated in this study. The

instruments of the study were pre-test, post-test. The study showed that ICLA can give an effect on teaching Vocabulary because the score of students' vocabulary after being taught ICLA was higher than before applying ICLA in the class. It is hoped that this study would offer educators and researchers a practical teaching strategy for increasing students' vocabulary in language classes.

Context of the problem:

The ability to speak English fluently is a cornerstone of effective communication. However, achieving fluency remains a significant hurdle for many EFL learners. This problem is multifaceted:

- Cognitive Factors: EFL learners grapple with the complex interplay between their native language structures and those of English. This can lead to difficulties in formulating sentences and expressing themselves spontaneously.
- Affective Factors: Anxiety about grammatical accuracy and fear of making mistakes can hinder fluency development. Learners may hesitate to participate in spoken activities, limiting opportunities for practice and confidence building.
- **Pedagogical Factors:** Traditional EFL instruction may not prioritize the development of spoken fluency. While grammar and vocabulary are essential, a focus on these areas in isolation may not equip learners with the necessary skills for smooth, unscripted communication.

This research addresses this critical gap in EFL pedagogy by investigating the potential of the Integrative Cognitive Linguistic Approach (ICLA) to promote speaking fluency.

Research Ouestions:

Based on the context of the problem, here are some potential research questions for the study on the effect of the Integrative Cognitive Linguistic Approach (ICLA) in developing EFL speaking fluency:

1. What is the effect of Integrative Cognitive Linguistic Approach (ICLA) in Developing EFL Speaking Fluency?

- 2. Does the integration of ICLA principles into EFL speaking instruction, compared to a traditional approach, lead to statistically significant improvements in learners' speaking fluency?
- 3. How does participation in ICLA-based EFL speaking program influence learners' cognitive processing during speaking tasks?
- 4. To what extent does ICLA-based EFL speaking program impact learners' self-reported anxiety and motivation towards speaking English fluently?

Participants of the study:

The participants of the present study consist of 60 students from Elsalehia ElGadida University first year English section, thirty as experimental group and thirty as a control group.

Research Significance:

This research can significantly improve EFL pedagogy by:

- 1. Validating the effectiveness of ICLA in promoting speaking fluency.
- 2. Providing insights into how ICLA facilitates fluency development.
- 3. Informing the development of learner-centred and evidence-based EFL speaking instruction.
- 4. Bridging the gap between theory and practice.
- 5. Empowering EFL learners to achieve fluency and enhance their communication skills.

Research Aims:

This research aims to

- Iinvestigate the efficacy of an Integrative Cognitive Linguistic Approach (ICLA)-based instructional program in enhancing speaking fluency among EFL learners.
- Evaluate the effectiveness of ICLA program in promoting statistically significant improvements in speaking fluency.
- Explore the influence of ICLA program on learners' cognitive processing during speaking tasks.
- Examine the impact of ICLA program on learners' self-reported anxiety and motivation towards speaking English fluently.
- Identify specific instructional techniques or activities within the ICLA program that demonstrate the strongest positive correlations with speaking fluency gains.

Procedures of the study:

The procedures of this research went as follows:

- 1-Reviewing literature and related studies of the efficacy of ICLA in enhancing speaking fluency.
- 2-Preparing material for writing and preparing fluency speaking test as a pre-test and as a post-test.
- 3-preparing program and promoting speaking fluency through reviewing related literature.
- 4-Administering the pre-test.
- 5-Applying the program in the participants of the study.
- 6-Administering the post test.
- 7-Evaluating the effectiveness of the program in promoting speaking fluency through submitting and analysing data statically.
- 8-Providing recommendations and suggestions of this research.

Hypotheses of the study:

Hypothesis one:

There would be a statically difference between control and experimental group in the post administration of speaking skills in favour of the experimental group.

To ensure the validity of this hypothesis, t.test was used to prove this difference as indicated in table (1):

Table (1): T.Test results of the control and experimental groups in the post administration of speaking skills.

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skills	Groups	No	Mean	SD	Df	T.Value	Sig
fluency	Control	30	2.07	0.640	58	14.08	0.000
	Experimental	30	4.33	0.606			

vocabulary	Control	30	3.74	1.04	58	19.20	0.000
	Experimental	30	8.10	0.805			
comprehension	Control	30	3.73	0.907	58	19.22	0.000
	Post adimist	30	7.00	0.947			
pronunciation	Control	30	3.57	0.728	58	19.22	0.000
	Experimental	30	7.80	0.961			
Overall	Control	30	15.32	3.08	58	20.31	0.000
speaking skills	Experimental	30	33.83	2.11			

Hypothesis two: There would be a statically difference of the mean scores of the experimental group in the pre-post administration of the speaking skills in favour of post administration.

To ensure the validity of hypothesis, t.test was used to prove this hypothesis. The following table (2) shows this:

Table (2): t.test of the mean scores of the experimental group in the pre-post administration of the speaking skill.

Skills	Test	No	Mean	S.D	Df	T. value	Sig
Fluency	Pre Post	30 30	2.47 6.60	0.0629 0.855	58	19.40	0.000
Vocabulary	Pre post	30 30	3.63 8.10	0.928 0.803	58	62.10	0.000
Grammar	Pre post	30 30	3.97 7.00	0.817 0.947	58	14.33	0.000

Comprehension	Pre Post	30 30	2.13 4.33	0.571 0.606	58	16.86	0.000
Pronunciation	Pre Post	30 30	3.83 7.80	0.699 0.961	58	20.37	0.000
Overall speaking skills	Pre Post	30 30	16.03 33.83	0.788 0.991	58	30.89	0.000

To ensure the significance, the effect size was calculated .The following table (3) shows this:

Table (3): The effect size of the speaking test (n²)

Skills	Test	No	Mean	S.D	Т	n ² eta square	The effect size
Fluency	Pre post	30 30	2.47 6.60	0.624 0.855	19.40	0.783	2.8 large
Vocabulary	Pre post	30 30	3.63 8.10	0.928 0.863	26.10	0.873	2.6 large
Grammar	Pre Post	30 30	3.97 7.00	0.718 0.947	14.33	0.771	1.8 large
Comprehension	Pre Post	30 30	2.13 4.33	0.573 0.606	16.86	0.783	1.7 large
Pronoun citation	Pre Post	30 30	3.83 7.80	0.699 0.951	20.37	0.852	2.3 large
Overall speaking skill	Pre Post	30 30	16.03 33.83	2.33 2.10	30.89	0.944	4.1 large

Table (4) shows speaking anxiety:

Overall	101.70	10.50	63.77	5.77	58	17.34	0.01	4.60
Scale								

In order to assure that the results obtained from the t-tests are reliable and to measure the effectiveness of the integrative strategy on reducing students' speaking anxiety, the effect size was calculated using Cohen's Formula as follows:

(Eta Square)
$$n^2 = \frac{t2}{t2+df} = \frac{(17.34)2}{(17.34)2+58} = \frac{300.67}{358.67} = 0.84$$

$$ES = d = \sqrt[2]{\frac{n2}{1-n2}} = \sqrt[2]{\frac{0.84}{1-0.84}} = 4.6$$

The calculated effect size value of the integrative strategy on speaking anxiety overall scale was (4.6), which means that the integrative strategy had a huge effect on reducing the experimental group students' anxiety on the post-test compared to that of the control group students .This anxiety reduction is attributed to the integrative strategy .Thus, it can be concluded that this hypothesis is verified and the integrative strategy had a positive effect on reducing students' speaking anxiety .

Hypothesis three: " There would be statically significant differences between the mean scores of the experimental group exposed to the integrative cognitive linguistic approach and the control group receiving regular instruction on the post anxiety scale in favour of the experimental group ".

T- test for independent samples was used to compare the mean scores of the two groups in the post-speaking anxiety scale. The results of the t-tests proved to be statically consistent with the above stated hypothesis. Thus, this hypothesis was confirmed. The following table (5) shows that the obtained t-value in overall the scale factors (17.34) is statically significant at 0.01 level. This means that there are statically significant differences between the mean scores of the experimental and control groups on the post-speaking anxiety scale in favour of the experimental group. Table (5) shows also, that there are statically significant differences between the mean scores of the experimental and control groups on the post speaking anxiety scale in each separate factor included in the scale in favour of the experimental group. The estimated t-value of each factor varied from 11.89 to 15.52 which are statically significant at 0.01 level.

Table (5) .T-test of the post –test comparing the experimental and control groups in speaking anxiety scale.

Factors	Exp		Cont		DF	T-	Sig	ES
	M	SD	M	SD		value		
Factor1	19.90	1.63	12.90	1.86	58	11.89	0.01	3.13
Factor2	20.10	2.55	13.00	1.53	58	13.07	0.01	3.39

Factor3	20.20	2.69	12.50	1.90	58	12.77	0.01	3.17
Factor4	21.37	2.40	12.70	1.90	58	15.52	0.01	4.01
Factor5	20.13	2.60	12.67	1.51	58	13.60	0.01	3.56

Discussion of the results:

In the light of the significant results of the study mentioned above, it can be concluded that the integrative strategy proved to be effective in developing the experimental group students' speaking skills and reducing their speaking anxiety. Consequently, the study problem and questions were tackled through following specific procedures: surveying the literature and previous studies related to the study variables and formulating the study hypotheses.

Answering the study questions is highly related to proving the hypotheses of the study .The results of the study and the following discussion of these results make the answer to these questions clear .Hypothesis two and four proved that the integrative strategy was effective in developing students' speaking skills and reducing their speaking anxiety and this is attributed to a number of factors:

- 1-The integrative strategy which incorporates both the communicative and affective domains of language teaching.
- 2-The communicative activities which were presented to the students throughout the sessions of the experiment. These activities brought innovation and change in the classroom environment.
- 3-The speaking skills which students learned and acquired were highly contextualized as they learned to communicate in different situations without experiencing anxiety.
- 4-The authentic materials were also very useful and effective as they offered students opportunities to know how to practice language communicatively on real life situations.
- 5- Students throughout the sessions got more active and enthusiastic that they have enjoyed the communicative activities as they felt more responsible for their own learning.

6-Group work activities gave students the opportunity to perform in front of each other and helped reluctant and anxious students to participate in the activities .

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