

A Neuro-Linguistic Programming and Multiple Intelligences Based program to Develop Secondary Stage Students' EFL Oracy Skills, Argumentative writing and Critical Thinking

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ABSTRACT

This study investigated a Neuro-Linguistic Programming and Multiple Intelligences based program to Develop Secondary Stage Students' EFL Oracy Skills, Argumentative writing and Critical Thinking. The researcher adopted the quasi-experimental design. The participants were sixty second-year secondary school students from Rabee Fallah School, Derb Negm Directorate, Sharkia Governorate, Egypt, who were equally divided into two groups: an experimental group and a control group. The experimental group was taught by using a program based on a neuro linguistic programming and multiple intelligences and the control group received regular instruction. Data were collected through an EFL oracy skills test, an EFL oracy skills rubric, an EFL argumentative writing test, an EFL argumentative writing rubric and an EFL critical thinking scale. These instruments were pre – and post administered to both groups. The study material was designed and administered during the second term of the academic year 2024-2025. The results indicated that, a) the experimental group outperformed the control group as a result of adopting a program based on a neuro linguistic programming and multiple intelligences, and b) the experimental group did better in the post administration of the EFL oracy skills, the EFL argumentative writing, and the EFL critical thinking scale than in the pre administrations. Therefore, it can be concluded that using the program is effective in developing EFL oracy skills and EFL argumentative writing and critical thinking...

Keywords: The neuro linguistic programming, multiple intelligences, EFL oracy skills, EFL argumentative writing skills, critical thinking EFL secondary school education, Egypt...

INTRODUCTION

Language is a system of communication between different societies, so when people learn their native language, they normally start by listening, then speaking, then reading, and eventually writing. These are called the four language skills. People should develop the sub-skills that help them become good listeners and good speakers as well.

Oracy is an important part of the EFL curriculum. It serves as a foundation for all types of learning and broadens learners' understanding by allowing them to express and explore ideas in order to make connections between what they know and what they are about to learn (Nicholson, 1998). According to Lifford et al. (2000), Oracy skills are central components of the English language curriculum for they provide the basis for growth in reading and writing abilities as well as vocabulary development.

The Ministry of Education (2006) underlined the value of oral language development. Helal (2017) aimed at developing some EFL Listening comprehension and speaking skills of the sixth year primary pupils by using an interactive strategy.

El-Shehawy (2017) aimed at developing some EFL oracy skills and motivation of Saudi university students by using project

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- based digital storytelling. Mohammed (2018) aimed at developing some EFL oracy skills for preparatory stage students by using an integrative strategy based on community language learning, audiolingualism, direct instruction.

EL-Menshawry (2018) investigated the impact of using the integrative suggested strategy on developing the preparatory stage students' oracy skills..

Argumentative writing is one of the most important demands for growth among students, especially with openness and the flow of knowledge in the media. Argumentative writing helps to expand thinking, profit from knowledge and the skill to judge it (Dinsmore & Fryer, 2023). Argumentative writing is one of the most vital kinds of thinking that aids the student to access the correct information and analyze it, resulting from the tremendous research progress and the explosion of knowledge (Campo, Galindo-Domínguez, Bezanilla, Fernández-Nogueira & Poblete, 2023).

By enabling learners to reflect representations of reasoning, recording, examining, and assessing information. Writing plays an important role in learning and enhancing self-expression (Arroyo, Fernández-Lancho & Martínez, 2021).

According to Nejmaoui (2019), EFL argumentative writing helps develop critical thinking skills. Dang, Chau, Tra (2020) investigated the difficulties in writing argumentative essays, the study were 90 English-major sophomores of course 13, and two teachers who teach EFL at Tay Do University. The results of the study would show that English major sophomores met difficulties in term of linguistic competence, organization and development of an EFL argumentative essay, and they lacked of critical thinking.

There are other components of critical thinking such as; focusing on problems and questions, classifying various problems, concentrating on related topics, using abilities to state important statistics and data and checking the strength of the proof by using re-application (Zyhier, 2023). The outcome of the critical thinking process is accomplished through judgments, decisions and the like (Bariroh, Triyanto & Fitriana, 2023).

Neuro-linguistic programming (NLP) can be considered a tool for identifying and changing communication behavior. Neuro-linguistics is the branch of linguistics that analyzes the language impairments that follow brain damage in terms of the principles of language structure (Knight, 2020).

According to Marzouq (2016), the term refers to the three distinct areas that NLP has brought together: a)"Neuro: refers to our neurology, our thinking patterns; b) Linguistic: is language, how we use it and how we are influenced by it, and c) Programming: refers to the patterns of our behavior and the goals we set."

Rinvoluceri and Baker (2005) considered neuro-linguistic programming as a complex set of beliefs, skills and behaviors that could help individuals communicate more accurately, effectively and respectfully. Tosey and Mathison (2006) further explain that NLP stands for many models and techniques to describe the relationship between the mind and the language (linguistic), either verbal or non-verbal, and the way to organize the relationship between them (programming), to affect the learner's thinking (neuro). Pishghadam *et al.* (2011) introduced NLP as a model in which individuals build their unique experiences of life, thoughts, and communication. Thus, makes these techniques effective in EFL classroom settings (Zaharia *et al.*, 2015). Some NLP techniques, such as anchoring, modeling and rapport building, can be applied by instructors and learners in language classes and effectively enrich the learning environment (Lee & Wallace, 2018).

The administration of NLP could be applied to the different types of using sounds, pictures and emotions. It is a program that can be adapted to any learner and is a suitable technique for EFL classes (Moharamkhani *et al.*, 2016). Gardner (1999) differentiated between intelligence as a bio psychological potential. Gardner (2009) based his theory on a set of criteria that integrate a wide range of researches in psychology as follows includes potential isolation by brain damage; an identifiable core operation or a set of operations, a distinctive developmental trajectory, culminating in expert performance, support from experimental psychological tasks, and evidence from psychometric findings. So, MI is linked to different areas of psychological, physical, biological and social domains. People have more than one intelligence. Gardner added an eighth intelligence, the naturalist intelligence, and two years later a ninth intelligence, existentialist intelligence had been added (Gardner, 1999).

Linguistic intelligence is the ability to use words effectively either in an oral or verbal structure (Lunenburg, 2010). Linguistic intelligence provides people with opportunities to understand the world by the use of language (Fierros, 2004). Linguistic intelligence is not only related to sound, it can also be visible information when a person decodes any ext. Gardner (1983) for example, and the verbal-linguistic intelligence is used when students speak to each other whether through formal conversation or formal speech. Hoerr (2000) provided some activities to enhance linguistic Multiple Intelligence.

Interpersonal intelligence ("people smart" or "group smart") is the ability to understand the intentions, motivations, and desire of other people. It allows people to work effectively with others (Lunenburg, 2010).

Interpersonal intelligence is the possibility of identifying and understanding the mood, needs and motivations and intentions of man or woman (Davis *et al.*, 2009). Interpersonal intelligence is also known as the ability to distinguish between knowledge and feelings of others and to solve problems (Hanafiyeh, 2013). Hoerr (2000) listed some activities for enhancing interpersonal MI includes leading, sharing tasks; brainstorming, building consensus, helping other with their problems, and

being an active team member.

Intrapersonal intelligence ("self-smart" or "introspection smart") is the internal aspects of one's own feeling discriminate among them to guide behavior, knowledge of one's own strengths, weaknesses and desires. To Lunenburg (2010), it helps understand oneself and personal identity.

Bodily-kinesthetic intelligence is the ability to use one's whole body or parts of it to solve problems, make something, and perform mental abilities to coordinate bodily movements (Lunenburg, 2010).

Spatial intelligence is the capacities to perceive the visual- spatial world accurately and to perform transformations on one's initial perceptions (Woolfolk, 2013). Spatial intelligence helps people understand visual or spatial information, convert and re-image memory, and distinguish the great feelings of fantasy (Fierros, 2004). Utilizing this kind, students will be able to create mental images (Sparked, 1995).

Logical-mathematical intelligence is the ability to recognize patterns, work with abstract symbols, and discern relationships or see connections between separate and include categorization, classification, inference, generalization, calculation, and hypothesis testing (Armstrong, 2009). The logical intelligence in a larger process becomes clearer while demanding a solution or meeting the new challenge of problems (Wesman et al, 2004,). To Davis, et al. (2009,) showed the use of logical mathematical intelligence can be revealed through analyzing problems (Gardner, 2007). Students who have this kind of intelligence have the ability to recognize pattern, solve problem, reason and think about patterns, relationships, and numbers (Every Day with ADHD, 2011).

Musical intelligence is the capacity to perceive, discriminate, transform and express musical forms. musical piece (Armstrong, 2009). Fierros (2004) stated that musical intelligence enables students to create communication and understand the meaning of the outside sound. It helps to understand and appreciate the votes to get the rhythms and tunes, harmony and homogeneity with full sound and motion (Sparked, 1995). Musical intelligence can be observed in singers, composers, music producers and voice coaches (Davis et al., 2009).

Interpersonal intelligence ("people smart" or "group smart") is the ability to differentiate among living things (plants, animals) as well as to demonstrate sensitivity to the natural world (Lunenburg, 2010). Fierros (2004) stated that this intelligence is observed in the work of landscape architects, fishermen, environmentalists, farmers and archaeologists. It is a classification of different kinds of plants and animals to distinguish between the things of man-made. It helps to develop, organize, identify and classify lists, set up collections, and conduct scientific research (Phaneuf, 1999). This kind of intelligence aids in organizing the semantics map that contributes in improving the lexical knowledge of the learners of foreign language (Morgan and Fonseca, 2004). Hoerr (2000) provided some activities to enhance naturalistic intelligence includes spending time outdoors collecting plants, rocks, animals, and listening to outdoor sounds, as well as noticing relationships in nature.

2. Delimitations of the Study

The present research delimited to EFL oracy skills skills, argumentative writing skills and features of critical thinking approved by the jury members. Features of critical thinking approved by the jury members. Measuring the effect of a neuro linguistic programming and multiple intelligences based program on developing second year secondary stage students' EFL oracy skills, argumentative writing and critical thinking. Material of the study: A neuro linguistic programming and multiple intelligences based program. Two groups (experimental and control) of EFL second year secondary stage students. Place delimitation: Rabee Falah Secondary School in Diarb Negm, Diarb Negm Education Directorate, Sharkia Goveronate. Time delimitation: The academic year (2025).

Context of the problem

This study investigated the effect of A neuro-linguistic programming and Multiple intelligences Based Program to Develop Secondary Stage students' EFL Oracy skills, Argumentative writing and Critical thinking. The problem of the present research is emphasized through the following ways:

(a) Working as a TEFL teacher, the research observed a gross lack in oracy skills and argumentative writing as well as critical thinking among EFL second year secondary school students'.

(B) Reviewing the previous studies that tackled oracy skills El-Shehawy (2017), Mohammed (2018), EL-Menshawy (2018), Helal (2017). Argumentative writing (Awada, 2020; Tanko & Gsizer, 2018; Campbell & filimon, 2018). and critical thinking (Campo, Galindo- Domínguez, Bezanilla, Fernández-Nogueira & Poblete, 2023), Shubina and Kulakli (2019). These studies revealed that there is a profound weakness in oracy skills and argumentative writing as well as critical thinking among EFL second year secondary stage students'.

(C) The researcher noticed through his work as English teacher and to verify this problem the researcher conducted some personal interviews and a pilot study which aimed at assessing the existence of this problem and its effects.

(d) Conducting a pilot study on a group of 20 students enrolled in the second year of secondary stage students' at the beginning of the first term of the academic year 2025- 2026, (see Appendix A).

(e) The sample of the pilot study submitted to oracy skills test, there has been also an argumentative writing test and critical thinking scale.

Statement of the problem:

Based on the above discussion and the results of the pilot study, it could be concluded that EFL 2nd secondary stage students' English section had problems and low standers in oracy skills, argumentative writing, and critical thinking. To address such a problem, the current research investigated the effect of a neuro linguistic programing and multiple intelligences based program on developing secondary stage students' EFL oracy skills, argumentative writing, and critical thinking.

Questions of the Research:

The present research attempted to answer the following main question: "What is the effect of a neuro-linguistic programming and multiple intelligences based program on developing secondary stage students' EFL oracy skills, argumentative writing, and critical thinking"?

The main question is sub- divided into the following sub-questions:

- 1." What are the oracy skills needed for secondary language stage students?"
- 2." What is the argumentative writing skills needed for secondary stage students?"
- 3." What are the features of critical thinking needed for secondary stage students?"
4. " What are the features of neuro linguistic programming based on a program?
5. " What are the features of multiple intelligences based on program?
6. " What is the effect of a neuro linguistic programming and multiple intelligences based program on developing secondary stage students' EFL oracy skills?
- 7." What is the effect of a neuro linguistic programming and multiple intelligences based program on developing secondary stage students' EFL argumentative writing?
- 8."What is the effect of a neuro linguistic programming and multiple intelligences based program on developing secondary stage students' EFL critical thinking?

Purposes of the Research

This study aims at developing the EFL oracy skills, argumentative writing skills and critical thinking skills of the second year secondary stage students via a neuro linguistic programming and multiple based program.

Significance of the Research

Basically, the results of the present research would helpfully be expected to be beneficial to:

EFL second year secondary stage students in helping them: (a) identify the techniques and strategies of neurolinguistics programming and how the mind works and interact, (b) develop oracy skills, (c) promote argumentative writing and (d)enhance critical thinking.

EFL teachers in: (a) providing them with a practical description of an influential program that might be effective in enhancing students' oracy skills, argumentative writing, and critical thinking in a more constructive manner, and (b) helping them determine some the problematic areas that Arab readers and speakers of English encounter in learning English language and find solutions for them.

EFL curriculum designers in:(a) Paying their attention to adopt new methods of teaching that aim at changing the role of the student from a passive recipient to an active positive learning who is willing to participate in the classroom, and (b) motivating them to conduct training courses for EFL teachers to raise their awareness of neuro-linguistic and multiple intelligences.

EFL researches in opening new research avenues for regarding (a) neuro-linguistic programming, (b) multiple intelligences, (c) oracy skills, (d) argumentative writing, (e) critical thinking; neglected variables in TEFL studies in Egypt to the best of the researchers' knowledge.

It is recommended that EFL listening and speaking skills should be introduced to learners at an early age. Wilkinson (1965, p. 13) perceived EFL oracy as "the competence to use the EFL oral skills of speaking and listening", forming the term itself from the Latin syllable "*or-*" that means mouth and the syllable "*-acy*" on the pattern of literacy. For Wilkinson "Ninety-nine of times out of a hundred the speech situation is compulsory. Vygotsky (1978) asserts that children ability to talk boosts up their cognitive development and describes a teacher's linguistic support as a main aid that develops learners' competencies.

Later, Bruner (1983) drew the attention to the role of talk in structuring the process of learning as a whole. Linebarger (2001) explained that listening is the base for achieving learners' long – term goals and identifying the world around with enough experience.

Recently, it is confirmed that, learners can express themselves and create their own identity via classroom dialogic talk. Peers' talk develops learners' personal responses to different texts building their confidence and thinking abilities (Sutherland, 2006, 2015).

It is believed that oral talk affects learners' competency to build up both reading and writing skills (Powell & Kalina, 2009). Having a good command of argumentative writing skill would command readers' belief and trust, thereby benefitting the writers (Lam, Hew, & Chiu, 2018).

Creating an argument necessitates making an event to sustain a claim, identifying supporting evidence from numerous sources that links the claim reasonably, with warrants which support the relationship between the claim and assisting evidence, and backing the warrants with support (Hillocks, 2011, cited in Campbell and Filimon, 2018). The body paragraph where the writer actually proves the claim; and conclusion (Ramadhan, 2019).

An argumentative writer must be able to shift from knowledge-telling to knowledge-transforming, deliver the content to the audience, and have the content understood, all of which are rather daunting tasks, especially for learners (Morris et al, 2018). A language that is very discipline-specific in term of its vocabulary, grammar, and even punctuation (Taylor, Lawrence, Conner, & Snow, 2018).

To Newell et al. (2011) cited in Campbell and Filimon, (2018), argumentative writing involves identification of a thesis or a claim, supportive evidence (empirical or experiential), and assessment of warrants connecting the thesis, evidence, and situation constituting an argument.

Argumentation as a genre of writing presents specific challenges to learners, and it is viewed among the most complex and sophisticated genres (Jones, 2014). Writing an argumentative essay is different from other genres of writing because it has a different generic structure and language feature (Sari & Kaba, 2019). Since argument can be maintained within different points of view, not only the supported view but also the alternative views are presented or refuted (Ozdemir, 2018).

The intellectual basis of critical thinking, according to Paul et al (1997) highlighted the essentials of asking deep questions that let people think before accepting any opinion. Critical thinking began to trickle into English language teaching because non-native speakers who are studying at universities in English speaking countries were often even more deficient in these skills, Gardner & MacIntyre (1993). Due to the fact that native speakers require special instruction in critical thinking, it logically follows that non-native speakers need it as well. In fact, their need is even greater because critical thinking strategies in English are possibly culturally alien to them, King (1994).

According to Atkinson (1997), "Not only critical thinking is a culturally based concept, but many cultures endorse modes of thought and education that almost diametrically oppose it." Day (2003) observed that students from Taiwan, China, Korea and Japan were receptive to instruction in critical thinking. Not only they were receptive, they had no difficulty in engaging in the process, so critical thinking skills are required for students to succeed in academic English. Atkinson (1997) mentioned the sub-skills which were considered the most relevant to teaching English to non-native speakers.

Neuro-linguistic programming (NLP) was developed in the 1970s at the University of California, Santa Cruz. Their collaboration led to the Neuro-Linguistic Programming (Bandler and Grinder, 1982). The abbreviation "NLP" means: Neuro (N) denotes a human brain. Linguistics (L) studies language areas, both macro and micro language. Programming (P) is the mental process or structure that attracts humans to change their behavior and accomplish expectable aims (Rose & Abi-Rached, 2013).

The concept of intelligence has been the core of interest for scholars, scientists, through scientific research area as in a way that aims to understand the reality of human intelligence and its development (Legg and Hutter, 2007). Those tries have ended up in a countless number of researches, theories, and studies to reach a vivid perception about the nature of human intelligence in terms of its components, specifications, expressions and measurements (Steele 2010).

To Shekhar (2011), the idea of human intelligence has two extreme points of view the first refers to the mental abilities on the bases that there are an innate ability connected to genetics more than raising and education. Furthermore, Neuro-linguistic programming focuses on evolving psychological abilities for grasping and influencing people (Borg and Freytag, 2010).

Additionally, It deals with others and understands their thoughts and feelings (Patel, 2021). It is worth noting that it encourages the use of software means to interpret experiences (Bickerton, 2017). Borg and Freytag (2010) discussed reasons for holding NLP knowledge, such as; the wish for self/personal development, the need to improve one's knowledge about human interactions, enhancing one's interpersonal skills and the desire to change or impact another person's conduct. El-Basees (2007) proposed a program to develop Preparatory school students' reading and writing skills and their attitudes towards them by using multiple intelligences Strategies. El-Marsafy (2003) indicated that Multiple Intelligences theory is effective in monitoring EFL students' composition writing skills.

3. Design

The current study adopted the quasi-experimental design in relation to reviewing the related literature and previous studies. Moreover, there were two intact classes were deliberately selected to represent the experimental and the control groups. The experimental group students received treatment through a neuro-linguistic programming and multiple intelligences based program for developing oracy skills, argumentative writing, and critical thinking skills. At the same time, the control group continued to study with the prescribed method of the Teacher's Guide of the ministry. The pre-posttest was administered to both groups before and after the treatment. The results of the pre-test were analyzed by using a t-test for independent samples to investigate if there was any significant difference between the mean scores of the two groups in terms of oracy skills, argumentative writing, and critical thinking skills and their sub-skills.

Participants' Homogeneity

The participants were homogenous in terms of their academic level in English in general, and their oracy skills, argumentative writing skills, and critical thinking skills in particular. This was reflected from their scores in oracy skills, argumentative writing, and critical thinking skills' course in this year. There were no statistically significant differences between the two groups on the pre-test (see chapter 3 for the results of the pre-test).

Instructor of both groups

Participants of the study were sixty participants' second-year secondary stage students for girls in Deyarb Negm, in the first term of the academic year (2025) Educational Directorate, Sharkia Governorate. They were chosen /selected for the experiment because they are alike in age and their ages ranged from 17 to 18 years old, their grade, and their level of linguistic ability, their level of achievement in EFL oracy skills, argumentative writing, and their critical thinking. The participants were divided into two main groups, the first one is the experimental group of (30) students and the second one is the control group of (30) students. To make sure that both groups were equivalent.

The researcher taught the experimental group students himself for the following considerations: he could have better control of the instructional variables. The regular classroom teacher was accustomed to the prescribed textbook "Hello for English 2nd secondary series. Therefore, there was no enthusiasm for teaching a neuro linguistic programming and multiple intelligences based program as the ideas seemed to be unfamiliar.

Instruments

Regarding the participants' EFL oracy skills: An EFL oracy skills checklist as a prerequisite procedure to identify the suitable sub-skills for (2nd) year secondary stage students' for scoring the test. An EFL oracy skills test as the real instrument to assess the participants' level. An EFL oracy skills Rubric as a post-requisite procedure for scoring the test

Regarding the participants' argumentative writing: An EFL Argumentative writing skills questionnaire as the real instrument. An EFL Argumentative writing test as the real instrument to assess the participants' level. An EFL argumentative writing skills rubric as a post requisite for correcting the argumentative writing skills test.

Regarding the participants' critical thinking: A critical thinking questionnaire as a prerequisite procedure for designing the scale. A critical thinking scale as the real instrument.

A semi-structured interview was designed and administrated to the research's participants before and after the treatment to gain greater insight on participants' EFL oracy skills, argumentative writing, and critical thinking and their opinions concerning their program and the treatment.

4. Results & Discussion

Hypothesis One

It has been hypothesized that "There would be a significant difference between the mean scores of the experimental group and the control one in the post-test of the EFL oracy skills test, in favor of the experimental group". To verify this hypothesis, data were treated statistically. Means, standard deviation, t-value were computed for the difference between the mean scores of the two groups (**Table 1**). The computed value of "t" (=11.212) which is higher than the tabulated value of "t" with 58 degrees of freedom and significant level "0.01". This reflects that the difference between the mean scores of the two groups reached the level of statistical significance. Thus, the hypothesis was accepted which indicated that "There is a statistically significant difference between the mean scores of the experimental group and the control group on the post test of EFL Oracy skills in favor of the experimental group".

Hypothesis Two

It has been hypothesized that "There would be a significant difference between the mean scores of the experimental group in the pre/post administrations of the EFL oracy skills test, in favor of the post-administration ". To test this hypothesis, the data obtained from the post test results of the EFL Oracy skills were treated statistically using the descriptive (Means and Standard Deviations) and (Paired Samples Test : t-test) statistics (**Table 2**). The value of EFL Oracy skills mean score of the post test was (35.1) which is higher than that of the pretest which was (21.67). the posttest' results were higher than those of the pretest in the Oracy skills. There is a significant difference between the mean scores of the pre-posttest results of the EFL Oracy skills test in favor of the post-administration.

Hypothesis three

It has been hypothesized that "There would be a positive effect of a neuro linguistic programming and multiple intelligences based program on developing the EFL oracy skills of the experimental group".

To investigate the effect of the study program, the value of η^2 (ETA squared) and the effect size (Cohen's d) were calculated, using the following equations. ETA squared was 0.68, reflecting its practical significance. In the light of this, It can be said that 68% of the variations between the scores of the participants could be due to using A neuro linguistic programming and multiple intelligences based program, and the effect size (d) = 2.94 and that there was a large effect and educational importance for improving and developing the EFL Oracy skills. The effect size d is large as it is more than 0.80. These gains confirm that the using of the neuro linguistic programming and multiple intelligences based program was effective in developing EFL Oracy skills (**Table 3**). Thus, the hypothesis was accepted which indicated that "The neuro linguistic programming and multiple intelligences based program would have a positive large effect on developing the experimental group EFL Oracy skills ".

Table (1) Comparing both groups post results in EFL Oracy skills

Skills	Group	N	Mean	Std. Deviation	t-value	d.f	Sig
Oracy skills	Experimental	30	35.10	2.84	11.212	58	(0.01)*
	Control	30	24.00	4.62			

Table (2): Comparing the experimental group pre to post results in the EFL Oracy skills

					Paired Differences			
Oracy skills	Application	N	Mean	Std. Deviation	Mean	Std. Deviation	t. value	Sig. Value
	Post- test	30	35.10	2.84	13.43	4.47	16.46	0.00
	Pre-test	30	21.67	2.95				

Table (3) Results of Cohen's Equation comparing the pre to post administrations of the experimental group EFL Oracy skills test

Skill	t. value	d.f	Sig	η^2	d	Effect size
Oracy skills	11.212	58	at (0.01)	0.68	2.94	Large

Hypothesis 4:

It has been hypothesized that "There would be a significant difference between the mean scores of the experimental group and the control one in the post-test of the EFL argumentative writing skills test, in favor of the experimental group". To verify this hypothesis, data were treated statistically. Means, standard deviation, t-value were computed for the difference between the mean scores of the two groups (**Table 4**). The calculated value of "t" (=14.528) is higher than the tabulated value of "t" with 58 degrees of freedom and significant level "0.01". This reflects that the difference between the mean scores of the two groups reached the level of statistical significance. Thus, the hypothesis was accepted.

Hypothesis 5:

It has been hypothesized that "There would be a significant difference between the mean scores of the experimental group in the pre/post administrations of the EFL argumentative writing skills test, in favor of the post-administration". To test this hypothesis, the data obtained from the pre posttest of the Argumentative writing skills were treated statistically using the descriptive (Means and Standard Deviations) and (Paired Samples Test: t-test) statistics. The value of the EFL Argumentative Writing Skills mean score of the post test was (30.13) which is higher than that of the pretest which was (19.93). The posttest results were higher than those of the pretest in the EFL Argumentative Writing Skills. There is a significant difference between the mean scores of the pre- posttest administrations of EFL argumentative writing skills, in favor of the post test. t-value was (25.54) which is significant at the (0.01) level in favor of the posttest (**Table 5**).

Hypothesis 6

It has been hypothesized that "The neuro linguistic programming and multiple intelligences based program would have a positive large effect on developing the experimental group Argumentative Writing Skills"

To investigate the effect and educational importance of the results, the value of ETA squared (η^2) and the effect size (Cohen's d) were calculated. ETA squared was 0.78 reflecting its practical significance. And in the light of this, it can be said that 78% of the variations between the scores of the participants could be due to using A neuro linguistic programming and multiple intelligences based program, and the effect size (d) is 3.82 and that there was large effect and educational importance on improving and developing EFL Argumentative Writing Skills. The effect size d is large as it is more than 0.80. These gains confirm that the using of the neuro linguistic programming and multiple intelligences based program was effective in developing Argumentative Writing skills (**Table 6**). Thus, the hypothesis was accepted which indicated that "The neuro linguistic programming and multiple intelligences based program would have a positive large effect on developing the experimental group Argumentative Writing Skills".

Table (4): Comparing both groups post results in EFLArgumentative Writing

Skills	Group	N	Mean	Std. Deviation	t-value	d.f	Sig
Argumentative Writing Skills	Experimental	30	30.13	2.18	14.528	58	Significant at (0.01)
	Control	30	21.80	2.27			

Table (5): Comparing the experimental group pre to post results in the EFL Argumentative Writing

Skill					Paired Differences			
EFL Argumentative Writing Skills	Application	N	Mean	Std. Deviation	Mean	Std. Deviation	t. value	Sig. Value
	Post- test	30	30.13	2.18	10.20	2.19	25.54	0.00
	Pre-test	30	19.93	1.66				

Table (6): Comparing the pre to post results of Results of Cohen's Equation the experimental group in Argumentative Writing skills test.

Skill	t. value	d.f	Sig	² η	d	Effect size
EFL Argumentative Writing Skills	14.528	58	at (0.01)	0.78	3.82	Large

Hypothesis 7:

"There would be a significant difference between the mean scores of the experimental group and the control one in the critical thinking scale, in favor of the experimental group." To verify this hypothesis, data were treated statistically. Means, standard deviation, and t-value were computed for the difference between the mean scores of the two groups. The calculated value of "t" is 13.795 which is higher than the tabulated value of "t" with 58 degrees of freedom and significant level "0.01". This reflects that the difference between the mean scores of the two groups reached the level of statistical significance. Thus, the hypothesis was accepted (**Table 7**).

Hypothesis 8:

"There would be a statistically significant difference between the mean scores of the experimental group in the (pre-post) results of critical thinking scale in favor of the post-administration". To test this hypothesis, the data obtained from the pre posttest results of the Critical thinking were treated statistically using the descriptive (Means and Standard Deviations) and (Paired Samples Test: t-test) statistics (**Table 8**). The value of the EFL Critical thinking scale mean scores of the post results was (53.07) which is higher than that of the pretest ones (31.37). the posttest results were higher than those of the pretest in EFL Critical thinking. There is a significant difference between the mean scores of the pre- posttest results of the Critical thinking results in favor of the posttest ones, t- value being (24.58) which is significant at the (0.01) level in favor of the posttest results.

Table (7) Comparing both groups post results in EFL critical thinking scale

Skills	Group	N	Mean	Std. Deviation	t-value	d.f	Sig
EFL Critical thinking	Experimental	30	53.07	4.03	13.795	58	Significant at (0.01)
	Control	30	33.87	6.47			

Table (8): Comparing the experimental group pre to post results in the EFL Critical thinking scale

					Paired Differences			
	Application	N	Mean	Std. Deviation	Mean	Std. Deviation	t. value	Sig. Value
EFL Critical thinking	Post- test	30	53.07	4.03	21.70	4.84	24.58	0.00
	Pre-test	30	31.37	4.26				

Hypothesis 9:

"The neuro linguistic programming and multiple intelligences based program would have a positive large effect on developing the experimental group EFL Critical thinking skills".

To investigate the effect and educational importance of the results, the value of ETA squared (η^2) and the effect size (Cohen's d) were calculated. ETA squared was (0.77) reflecting its practical significance. In the light of this, it can be said that 77% of the variations between the scores of the participants could be due to using A neuro linguistic programming and multiple intelligences based program, and the effect size (d) is 3.62, and there was large effect and educational importance on improving and developing Critical thinking. The effect size d is large as it is more than 0.80. These gains confirm that the using of the neuro linguistic programming and multiple intelligences based program was effective in developing Critical thinking (**Table 9**). Thus, the hypothesis was accepted which indicated that "The neuro linguistic programming and multiple intelligences based program would have a positive large effect on developing the experimental group Critical thinking skills"

Table (9): Results of Cohen's Equation comparing the pre -post results of the experimental group in the Critical thinking skills

Skill	t. value	d.f	Sig	η^2	D	Effect size
EFL Critical thinking	13.795	58	at (0.01)	0.77	3.62	Large

5. Conclusion:**For EFL oracy skills, it can be concluded that:**

The use of a neuro linguistic programming and multiple intelligences based program develop the participants 'FL oracy skills and argumentative writing skills.

The proposed program was effective in stimulating most students, even shy ones, to participate in almost all listening and speaking tasks.

Oracy skills, listening and speaking, are the first main two language skills that learners acquire and practise in order to learn, well.

Oracy skills need to be developed and even the way of teaching them inside the classroom is not sufficient enough to build an excellent speaker. To the best knowledge of the researcher, no study was conducted on Oracy skills of second year secondary stage students in Egypt through using "a neuro-linguistic programming and multiple intelligences based program". Therefore, this study suggested using a neuro-linguistic programming and multiple intelligences to develop EFL secondary stage students' oracy skills.

Helping EFL learning listen to construct ideas, and consequently respond and speak appropriately and exchange ideas with their peers is effective in enhancing their performance. It helps them also ensure that any change occurring in the language system can be drawn upon during listening and speaking.

The change in the teacher's role from an authoritarian to a discussion organizer, a facilitator and a language adviser allows learners share more responsibilities for their learning, express themselves freely and become the center of the learning process.

Discussion is a powerful and essential technique to evoke learners' EFL critical thinking and reading in which they should take the leading role and time to express their ideas and interact as well as exchange questions with their teachers and peers.

Activating learners' prior knowledge helps them make connections between their own experience and new information. In doing so, teachers can utilize brainstorming, discussions, and visual or graphic organizers that are proved to be practical tools for developing EFL oracy skills.

Summarizing is an important technique for foster EFL oracy skills which includes focusing on the core of listening and speaking content, deleting trivial and redundant material, and selecting what interest learners rather than what is a good organizer for information that is to be summarized.

Classifying enhances learners' higher thinking and EFL oracy skills by which they analyze the content and categorize information in different ways to reflect their own understanding. Similar to classifying is ordering or sequencing ideas and entities.

Prediction could improve learners' EFL critical reading and comprehension, wherefore it prepares them before reading a text by activating their prior knowledge and engaging them from the outset. It is a powerful technique that increases their interaction and understanding of a reading text by which they come up with different interpretation, analysis, and understandings.

Questioning is also another significant technique that could be divided into before, while, after questions that can be develop different levels of thinking, evoke deeper understanding, and foster learners' EFL oracy skills. It is worthy to mention here that literal questions that have answers stated directly can't only develop their oracy skills and thinking but also indirect and inference questions or what are called construction questions that have a big role in developing EFL oracy skills by which learners search for information, describe, compare, analyze, organize, and explain ideas. Sometimes it is required that learners look back in their own thought, experiences and knowledge, reflect on them, and look within themselves to find suitable answers.

Learners' misunderstanding and blunder arises because many of them are sometimes not aware of the fact that their trends of thoughts, and thus their communication processes, are frequently muddled. Illogical and fallacious.

The first step EFL teachers should do to help learners is to make them familiar with EFL oracy skills, sub-skills and assign them to recognize these sub-skills.

For EFL argumentative writing, it can be concluded that:

Written argumentation helps learner- writers acquire knowledge, promotes thinking skills and enhance comprehension. Good EFL argumentative essays are logic, reasonable, well-planned ideas, the content of the ideas and information are enough, related to the topic and persuasive.

The material used for EFL argumentative writing shouldn't only be taken from the learner's natural interests, but also related to their daily experiences.

Argumentation can be judged as the process that uses reasoned discourse in advancing, examining and responding to claims. EFL argumentative writing helps learners reach many purposes including persuasion negotiation, debate, and conclusion and resolving differences of opinion.

Learners have to learn EFL critical thinking, logical analysis, supporting facts, using examples and a variety of ideas and opinions through EFL argumentative writing skills.

EFL argumentative writing allows learners to act as discoverers. It plays a role of increasing their understanding and democracy in classrooms.

When EFL learners argue in writing, they can convince others easily, defend opposing positions and prove their point of view, so they can be good leaders in other situations.

Learners can enhance through argumentation their EFL writing and speaking skills such as how to make dialogue with others, put conclusions, introductions and make good sequences in their discourse.

Argumentation provides teachers with the power for working with their learners; it enables them to have great skills in education, speaking and activities.

Reasonableness is important in EFL argumentative writing through logic, proof and coherence in order to get true conclusion.

Before starting writing an argument, it is known what is wanted to be achieved and think about the goal carefully, then write it in clear sentences. The goal is realistic when an argument presented or prepared. The secondary goal is also identified.

For EFL critical thinking, it can be concluded that:

- 1-After the implementation of the program, students felt an improvement in their EFL higher level critical thinking skills.
- 2-Learners got a deeper understanding for critical thinking through the simple and clear instruction of the teacher, and the continuous feedback and scaffolding that the teacher has presented during the period of implementing the program.
- 3-The results of the program were not only obvious in improving critical thinking skills, but also in developing students' sense of involvement; students became more active inside the class and were keen on attending and participating in every English session.
- 4-Critical thinking is another important issue in language teaching. It is basic for students to be good critical thinkers. It is the art of using reason to analyze ideas and dig deeper to get to the potentials.

For a neuro linguistic programming and multiple intelligences based program, it can be concluded that:

A neuro linguistic programming (NLP) gives teachers a chance to build positive relationships with their learners, which ultimately improves their satisfaction as teachers.

NLP is now emerging as an emotional bridge that help teachers build and maintain functional rapport with learners and motivate them throughout their learning journey towards success.

To eliminate stress for learners, neuro linguistic programming techniques should be implemented daily, as they play an important role in the improvement of learners' skills, learning and achievement of success.

NLP is both a science and an art of self-improvement. It is an art because everyone thinks and acts differently, and any depiction especially of sentiments, attitudes, and beliefs is bound to be subjective. A science because it employs well-researched approaches for discovering effective behavior patterns.

When multiple intelligences are used in the classroom, students are inspired to think critically and creatively while also developing knowledge and abilities that will benefit them both inside and outside of the classroom.

Multiple intelligences enable educators to correctly assess students' using non-restrictive ways while giving them a sense of ownership over their education. There has been a resounding consensus among academics and educators that multiple intelligences theory-based instruction benefits students.

Adopting multiple intelligences seek learners to progress towards the accomplishment of the target task by making use of previous experiences and requirements employing appropriate performances for the situation in an effective manner.

8-Teaching by multiple intelligences help learners acquire knowledge according to their preferred intelligence.

6. Recommendations:

-For developing EFL oracy skills:

There is a need for training EFL secondary teachers to use and design proper activities and techniques while teaching EFL oracy skills.

More time in English language teaching should be develop the learners' EFL oracy skills.

Supervisors should encourage EFL secondary teachers to pay attention to the learners' EFL oracy skills.

Teacher's Guide should contain checklists of the necessary EFL oracy skills and guidelines for hands on activities to foster them.

A teacher's role should change from being the only source of information to be a facilitator, guide, monitor, and consultant; this can be applied by utilizing a neuro linguistic programming and multiple intelligences.

In EFL classroom setting, learners should be grouped in different ways based on individuals, pairs, small group or whole class mode.

EFL secondary teachers should be trained to vary assessment methods such as self-assessment, presentations, speech, group-activities and participation.

- For developing EFL argumentative writing

The EFL argumentative writing skills should receive appropriate attention in order to be developed especially at preparatory and secondary stages.

Not only EFL argumentative writing skills should be tackled inside classroom, but also evaluating them regularly in order to identify learners' needs and problems.

Teachers of EFL should concentrate on real-life situations and daily issues as sources for classroom EFL writing to motivate learners to participate in EFL argumentative writing tasks.

Learners should be provided with training session to be engaged in fruitful tasks and work as members of a large group or sub-groups to enhance EFL argumentative writing skills in particular and communicative skills in general.

It is advisable to use online designed lessons in teaching the grammar related to argumentative writing rather than traditional methods.

- For developing EFL critical thinking

1-Developers of English language curriculum should make use of a neuro linguistic programming and multiple intelligences based program to develop critical thinking.

2-Teaching and learning critical thinking skills through a neuro linguistic programming and multiple intelligences based program should be emphasized.

3-Supervisors should encourage EFL secondary teachers to pay attention to the learners' EFL critical thinking.

4-Critical thinking skills should be a major concern and an important part of any lesson in teaching English as a foreign language.

5-Higher level critical thinking skills should be a major concern in EFL classes as they are very dominant to stimulate the higher levels of thinking among students.

6-More time in English language teaching should be developing the learners' EFL critical thinking.

7-EFL teachers should not provide students information in a direct way. They should encourage students to use their experience and prior knowledge to ask them questions with various answers to enhance their critical thinking.

8-EFL teachers are recommended to integrate different techniques and activities into their classes for promoting the students' critical thinking.

9-Students should have the opportunity to practice critical thinking skills regardless of time and effort needed to master these skills.

- For implementing a neuro linguistic programming and multiple based program:

The Ministry of Education should enhance EFL textbooks proper activities of the program and suggest procedures for implementing them in EFL classrooms.

A neuro linguistic programming and multiple intelligences techniques should be used in EFL textbook and language materials in the form of reading practices and exercises

EFL educational experts should familiarize their secondary teachers and instructors with the importance of utilizing some neuro linguistic programming and multiple intelligences techniques such as (applying past knowledge to new situations, questioning and posing problems, thinking about thinking and communicating with clarity and precision).

Lengthening the time of the study is recommended. Hence, a neuro linguistic programming and multiple intelligences based program could be administered to 2nd year secondary stage students during the second as well as the first term for completing academic progress.

It is recommended to pay more attention to reluctant and slow learners by asking them more questions and giving them more activities.

It is preferable for learners to get feedback on their oracy skills, argumentative writing and critical thinking without the threat of face- to – face confrontation. This can be done through the program.

It is preferable to vary the activities and use activities that support working cooperatively.

It is recommended to use youtube educational videos in teaching EFL oracy skills and presenting the intended argumentative writing as they proved to be effective in this respect.

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