
Using a program Based on Integration of Flooding and Enhancement Input for the Acquisition of Grammatical Structures of First Year Preparatory School Students

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Abstract

The aim of this study was to investigate the effect of an integration of flooding and enhancement input program on the acquisition of grammatical structures of first year preparatory school students. The participants were sixty students. They were randomly assigned into a treatment group and a non-treatment group (30 students each). The instruments of the study included: a test in vocabulary items.

The treatment group was taught using the integration of flooding and enhancement input program while the non - treatment group was taught following the plan of the Ministry of Education in Egypt. The participants were pre and post tested. Results revealed that the integration of flooding and enhancement input program had positive results. Suggestions for further research were presented.

Key words: input flooding, input enhancement; grammar.

ملخص باللغة العربية

كان الهدف من هذه الدراسة هو معرفة تأثير برنامج قائم على التكامل بين تدفق المدخلات وتعزيزها على اكتساب التراكيب اللغوية لدى طلاب الصف الأول الإعدادي. كان المشاركون ستون طالباً. تم تقسيمهم بشكل عشوائي إلى مجموعة تجريبية ومجموعة ضابطة (٣٠ طالباً لكل منهما). تضمنت أدوات الدراسة: اختبار التراكيب اللغوية. تم تدريس المجموعة التجريبية باستخدام برنامج قائم على التكامل بين تدفق المدخلات وتعزيزها بينما تم تدريس المجموعة الضابطة وفقاً لخطة وزارة التربية والتعليم في مصر. تم اختبار المشاركين قبل وبعد. أظهرت النتائج أن البرنامج القائم على التكامل بين تدفق المدخلات وتعزيزها كان له نتائج إيجابية. وقدمت اقتراحات لمزيد من البحث.

كلمات رئيسية: تدفق المدخلات - تعزيز المدخلات - التراكيب اللغوية .

Introduction

Language has a great importance in our everyday life. It is used to inform people around us about our needs, ideas, emotions and opinions. It is a basic means of communication using sounds, gestures, signs or symbols. It distinguishes humans from all other living beings. Over the years, English language became the basic language all over the world. It became the international means of communication. It is the most commonly used language. When people from different countries want to communicate, they use English language.

The interest in the role of grammar in English language teaching has been increased (Hedge 2009). Azar (2007) shows the importance of teaching grammar as it enables learners to discover the nature of language; Language consists of predictable patterns that form what we say, read, hear and write. So without grammar there would be only individual words or sounds, pictures and only a body of expressions to communicate meaning. The primary benefit of grammar – based teaching is helping learners to understand grammar concepts such as subordination and coordination, concepts of expressing time relationships etc.

If students do not have a basic knowledge of grammar, they make mistakes in making sentences even if they have a large amount of words (Fortes, 2007). Grammar enables students to discover the nature of language. Without grammar, there is only individual words or sounds, pictures and body language to communicate meaning (Azar 2007 cited in Lin 2008). Grammar is considered one of the most basic elements that a learner has to acquire. It is a sub-skill contributing to all other main skills (Brown, 2007 cited in Mirzapour & Barjesteh, 2017). Learners fail in applying their knowledge of grammar in communication. They know the grammar at least as rules but are unable to use them in speech. They do not understand how grammar rules can be functioned in a sentence. When grammar is presented in isolated sentences, this will not give learners the chance to identify how grammatical structures work in sentences (Mart, 2013). So learning grammar in context will give them the opportunity to practice how

rules can be used in sentences and this will improve their communication skills.

Lack of exposure to language causes unsuccessful language learning for most foreign language learners. Learners should be allowed to stay at the situation filled with the target language. They should be provided with opportunities that provide them with the sufficient exposure to English with additional reading that can lead them to a real increase of English language (Schmitt, 2000 as cited in Wu, 2009). Learners should be provided with many opportunities to meet and enrich important items (Ahour, 2013). When learners are exposed to a word or language structures in a high frequency in the input, they will notice them and they have a big value and importance in learning and easily remember them (Cook, 2001) as cited in (Ahour, 2013).

There are different ways for enriching input. The first way is "input flooding" that has been enriched by presenting numerous examples of the word or the target structure without any tools of drawing attention to the word or the structure. The second way is "input enhancement" that consists of some ways to highlight the target features to draw learners' attention to it through many techniques such as (bolding, italicizing, underlining, different font, and different font size) (Amirabadi et al, 2014).

Enhanced input has effects on learning grammatical items through reading and facilitating the acquisition of the target form by exposing learners to the saliency of input (Lee and Huang, 2008). When some grammatical features are not prominent in the input, learners can not notice them. But input enhancement provides the learners with the opportunity to notice the target forms (Rashtchi & Yousef , 2016). So learning is dependent on attention and the quality of processing.

Some studies referred that input enhancement plays an effective role in leaning language features but the results are not consistent. Increasing the salience of linguistic forms through typographical enhancement is not enough to encourage great learning of language features. It might be because of the need of L2 learners something more than only enhancement of the input to foster their learning

linguistic features (Mirzapour 2016). In the other side, when learners are exposed to a rich supply of meaningful input, this benefit them in L2 acquisition but it appears that such input is not sufficient. So there is an idea that learners benefit from instructional treatment to direct their attention to the target forms to be noticed (Francis 2008). So the present study tried to investigate the effect of integration of input flooding and input enhancement on the acquisition of grammatical structures.

Context of the problem:-

In spite of the importance of grammatical structures, the researcher has observed that first year prep school students at Bani-Khaled Preparatory School have problems in their grammatical structures. She has observed this problem through her teaching. To verify the problem, the researcher used different procedures:- The researcher has conducted a diagnostic exam of grammatical structures on first year preparatory school. The results showed that 5 students got 38%, 5 students got 41%, 7 students got 47%, 3 students got 34%, 8 students got 32% and 2 students got 65%. The results show that they have problem in acquiring grammar. After analyzing the results of tests, the results showed that the students have problem in acquiring grammatical structures as shown in the following table:

	Category	Difficulty
١	Tenses	25%
٢	Wh-questions	%٢٥
٣	Using adjectives	%٢٥
٤	Imperative clauses	%٨
٥	conjunctions	%٨
٦	Possessives	%٨
٧	Expressions with be	%١

The problem

The problem is that first grade preparatory school students of Bani Khaled Preparatory School have problems with their grammatical structures. The present study tried to investigate using a program based on integration of input flooding and input enhancement for the acquisition of grammatical structures.

Questions

The present research attempted to provide plausible answer to the following question:

How effective would a program based on integration of input flooding and input enhancement be in the acquisition of grammatical structures?

Hypotheses

The following hypotheses were tested:

There would be a statistically significant difference (favoring the experimental group) between means of scores obtained by the experimental and the control groups in the grammatical structures post-test.

Significance

The present study would develop vocabulary of first preparatory graders of Bani - Khaled Preparatory School. The present study would provide teachers with motivated and popular techniques for developing grammatical structures of their students. The program of the present study would help teachers adopt new roles such as a facilitator and a guider.

Limitations

The study was limited to:

First preparatory graders at Bani - Khaled Preparatory School.

Lessons of the second term of first year preparatory content were taught using a program based on integration of input flood and input enhancement specified.

Methods and procedures

A pre-post quasi experimental design was used in the present study. The treatment and the non-treatment groups would be exposed to pre-post means of collecting data (A test in grammatical structures). The treatment group would be taught using a program based on integration of input flooding and input enhancement while the non - treatment group would be taught using the conventional methods followed when teaching EFL to first preparatory graders.

Variables:

* Independent Variable:

A program based on integration of input flooding and input enhancement.

* **Dependent Variables:**

Acquisition of grammatical structures

* **Control Variables:**

To ensure equivalence among the members of the two groups, the following variables were controlled:

a. Performance on the pre – test of grammar

- English proficiency level - Gender - Age

Tools of the study

To achieve the objectives of the present study the researcher prepared the following tools:-

A test in grammatical structures

A. Objectives:

- Identifying adverbs and questions of measurement
- Identifying zero conditional
- Identifying will/won` t for future prediction and can/ can`t/ could/ couldn`t/ will be able to .. for talking about abilities and possibilities
- Identifying question tags
- Identifying reflexive pronouns and the first conditional
- Identifying can/can`t/must/ mustn`t for permission and obligation

The grammatical structures test consists of 2 types of questions (Multiple choice – Rewrite items) with 60 items based on the learning outcomes and the objectives of the program.

B. Construction:

- The test was designed on the basis of a table of specifications.
- A panel of TEFL and EFL staff members evaluated the test in the light of the table of specifications and recommended editing of some items.
- The test in its final form consisted of 60 items covering the six units.

C. Item Type:

The items are Multiple choice and Rewrite items.

D. Scoring:

One point was given for each correct answer; This is explained in the table of specifications. The total score of this test is (60) marks.

E. Instructions:

Instructions of the test are written in English in an easily and simple way to avoid any ambiguity.

F. Duration:

Ninety five minutes were assigned for answering the grammatical structures test. The researcher calculated the time between each student in the group. The average was taken.

Test Validity:

A pilot study was conducted about 15 days before administrating the program to estimate the validity and the reliability of the test

Face validity:

The researcher distributed the test to five of a panel of TEFL and EFL experts to judge the linguistic stating of the items, suitability of the items to the participants and to the objectives. Their suggestions were taken into consideration. These suggestions were represented in the shortening of the number of items as it was too long, replacing some words in some questions , writing instructions of the test in the first page and numbering the items.

The researcher arranged scores of the subjects (30) exponentially to determine the highest quarters (7 subjects) and the lowest quarters (7 subjects). Then t-value was computed between the two quarters. The following table shows the results:

Table (1)

t- value of the Highest and the Lowest Quarters in the grammatical structures Test

Test	total score	High Group (n = 7)		Low Group (n = 7)		D.f	t value	Significance
		Means	Standard Deviation	Means	Standard Deviation			
Grammar test	60	26.70	1.82	12.71	1.25	12	17.48	significant

* Significant at 0.01

The above table shows that there was significant difference between the high group and the low group in the grammatical structures Test (Favoring the high group). This assures the validity of the test.

Test Reliability:

The researcher used test – re-test method to calculate the reliability of the test. The researcher conducted the test on (30 students) and then reconducted it after 2 weeks. The correlation coefficient between the first implementation of the test and the second one (re-test) is shown in the following table:

Table (2) reveals that the correlation coefficient of the total mark reached (0.70). This is statistically significant and proves the reliability of the test. Aiken (1994), as cited in Latif (2012), stated that the test should have a reliability coefficient ranging from (0.70) and preferably closer to (0.90)

Table (2)

The Correlation Coefficient Between the Test and Re-Test of the grammatical structures Test

Test	Test		Re-Test		Pearson Correlation	Sign level
	Means	Standard Deviation	Means	Standard Deviation		
Grammar test	9.9667	1.28837	10.3000	1.36915	.707**	0.01

** Correlation is significant at the 0.01 level (2-tailed).

Item Analysis:

1- The researcher conducted the grammatical structures Test to identify the suitability of the test to the students. Thirty first year preparatory graders were chosen randomly to answer the test. Item analysis was done after scoring the test to identify suitability of the items to the students and to provide information concerning the following points:

- 1- Index of difficulty.
- 2- Index of discrimination.

Table (3) shows that:

1- Difficulty indices ranged from (0.60) to (0.80). These percentages show that the grammatical structures Test includes various questions that involve easy and difficult questions to suit the different levels of the participants. .

2- The grammatical structures test had a positive discriminating power: The discrimination indices ranged from (0.20) to (0.24).

Table (3)

Difficulty Index and Discrimination Power of the grammatical structures Test of the Pilot Study

Number Of Question	1	2	3	4	5	6	7	8	9	10
Difficulty Index	0.60	0.63	0.63	0.63	0.70	0.66	0.70	0.70	0.70	0.60
Discrimination Power	0.24	0.23	0.23	0.23	0.21	0.22	0.21	0.21	0.21	0.24
Number Of Question	11	12	13	14	15	16	17	18	19	20
Difficulty Index	0.66	0.66	0.63	0.63	0.66	0.73	0.63	0.66	0.66	0.60
Discrimination Power	0.22	0.22	0.23	0.23	0.22	0.20	0.23	0.22	0.22	0.24
Number Of Question	21	22	23	24	25	26	27	28	29	30
Difficulty Index	0.66	0.63	0.66	0.66	0.70	0.66	0.70	0.70	0.66	0.66
Discrimination Power	0.22	0.23	0.22	0.22	0.21	0.22	0.21	0.21	0.22	0.22
Number Of Question	31	32	33	34	35	36	37	38	39	40
Difficulty Index	0.63	0.76	0.70	0.66	0.66	0.66	0.66	0.66	0.70	0.63
Discrimination Power	0.23	0.20	0.21	0.22	0.22	0.22	0.22	0.22	0.21	0.23
Number Of Question	41	42	43	44	45	46	47	48	49	50
Difficulty Index	0.63	0.68	0.73	0.70	0.66	0.66	0.66	0.66	0.73	0.70
Discrimination Power	0.23	0.21	0.20	0.21	0.22	0.22	0.22	0.22	0.20	0.21
Number Of Question	51	52	53	54	55	56	57	58	59	60
Difficulty Index	0.66	0.73	0.60	0.60	0.80	0.70	0.63	0.60	0.66	0.56
Discrimination Power	0.22	0.20	0.24	0.24	0.20	0.21	0.23	0.24	0.22	0.24

Findings: Hypothesis 1

Hypothesis (1) predicted that the treatment group would surpass the non – treatment group at the (.01) level on the post test of grammatical structures. Table (4) shows the data obtained to verify this hypothesis.

Table (4)
t-Test Results of the Post – Testing of the grammatical structures
Comparing TG and NTG

Test	Total score	Treatment Group (n = 30)		Non treatment Group (n = 30)		DF	t –value	Cohen's d	Sig.
		Mean	Standard Deviation	Mean	Standard Deviation				
Grammar	60	52.7333	5.88940	35.1333	5.74596	58	11.716	3.02	0.01

Based on the data in the above table, the t-value (11.716) obtained is significant at the (0.01) level. Thus, hypothesis (1) is accepted.

Discussion

The present study set out to determine the effect of a program based on integration of flooding and enhancement input (IFEIP) on the acquisition of grammatical structures. The results showed that students learned grammar easily through this program. Table (4) shows that the treatment group outperformed the non-treatment group. Results revealed in table (4) confirmed hypothesis 1. Participants of the treatment group (who were taught by the program) surpassed their counterparts in the non – treatment group (who were taught by the conventional methods), in the grammar test.

Lee, Sang (2008, p.6) referred to the importance of integration of flooding and enhancement input as follows: "Increasing the typographical salience of input should assist bottom-up and exemplar – based learning, and that frequently presented input also may heighten the formal salience of the input." So some studies tried to investigate the effect of integration of flooding and enhancement input:

Arani (2016) showed that textual enhancement and input flooding have positive effects on the recognition and production of syntactic development. Balcom (2015) referred that input flooding and instruction were beneficial in learning of adverb placement and led to positive results related to the treatment group. Amirabadi et al (2014) showed that the combination of input flood and input enhancement had positive effects on learners` long term retention of structures. Hernandez`s (2011) showed that the combination of explicit instruction on learners` improvements in discourse marking. Afraz and

Ebrahmi (2017) indicated that input enhancement and input flooding were both effective on learning causative structures. William and Evans (1998) showed that input flooding and explicit instruction had positive effects on the acquisition of structure. White (1998) showed positive effects of the enhanced text with input flooding. Other studies had negative studies such as (Reinders and Ellis (2009) and Zyzik and Marques (2012).

The findings of the present study coincide with the literature reviewed. The results coincide with the results of those studies investigating the effects of using (IFEIP) on developing grammatical structures. There is a consensus between the results of the present study and those of other studies investigating the positive effects of (IFEIP) on vocabulary or grammatical structures:

The researcher noted that the program of integration of input flooding and input enhancement motivated students to use language and participate. Rayan and Deci (2000) stated that where there is motivation, it leads to productivity. Using the program of the present study had a positive effect on increasing motivation of students of the treatment group. It leads to the development of acquiring grammatical structures. It was further noted that confidence increased among pupils of the treatment group. They were provided with enrich input that enabled them to depend on themselves in producing language.

Conclusion

The discussion above demonstrated that using the IFEIP could be effective in developing grammatical structures. Teachers should integrate input flood and input enhancement inside their English language classes. **Suggestions for further research:**

- A replication of the present study to be implemented on a wide number of pupils and different grades.
- The effect of a program based on integration of input flooding and input enhancement on the retention of grammar.
- The effect of a program based on integration of input flooding and input enhancement on the retention of vocabulary.
- The effect of a program based on integration of input flooding and input enhancement on reading comprehension..

- The effect of a program based on integration of input flooding and input enhancement on creative writing.

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