

The Role of Imitation in Teaching English Adjectives in the Realm of ZPD

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Abstract

The educational concept of the zone of proximal development of the Russian psychologist Lev S. Vygotsky (1896-1934) has been applied in a number of language studies that show the capability of learner with equal levels of mental development to learn under a teacher's guidance enhances. Vygotsky addresses the role that communication and imitation play in development learning and further explains that children can imitate a variety of actions that go well beyond the limits of their own capabilities. Learning by imitation presents a rich domain for teaching and learning via interactions. Imitation even in its simple forms is a faster and more efficient form of acquiring new behaviours than its traditional classical conditioning and reinforcement learning counterparts; in humans it is critical during development and remains an important aspect of social interaction and adaptation throughout life. High school students are cooperated in this study to investigate the role of imitation in ZPD. After dividing the students into ZPD Imitative and Non-ZPD Imitative groups two tests were administered to see the possible differences between them and to see whether imitative learning through mentoring teaching provided within learners' ZPD improve their knowledge of adjectives. It was found that students learn better and deeper if they are taught English adjectives, within their ZPD. Learning is significantly enhanced when the class atmosphere is ready for imitative learning.

Keywords: ZPD in pedagogy, mentoring teaching, Neo-Vygotskian view.

1. Introduction

The notion of the ZPD reflects Vygotsky's view on the nature of human development and interrelation between learning and development. Learning, which is distinct from development, may lead to development and ZPD is the abstraction that describes the mechanism and potential effect of learning on development.

Wertsch and Stone (1985) believe that research on teaching has been galvanized in the past few years by some seminal concepts from recently translated works of Vygotsky. His thoughts affect our understanding of learning and teaching. Vygotsky's insights have also affected our understanding of teaching. In his theory, what a learner can learn without the help of others can be considered as developmental level.

1.1 ZPD in Pedagogy

Schutz (2004) points out that ZPD is the difference between the child's capacity to solve problems on his own, and his capacity to solve them with assistance. In other words, the actual developmental level refers to all the functions and activities that a child can perform independently, without the help of anyone else. As explained above, it is clear that ZPD emphasizes the distance between what a learner can learn by him/herself and what he/she can learn by assistance of teacher or peers. In this range problem solving and corrective feedback have essential roles which are explained below. According to Holzman and Newman (as cited in Hough, 1997) " ZPD is not just a diagnostic measure of development; it is also the crucial variable to take into account in creating pedagogy" (p. 11).

Hough (1997, p. 16) says that socially constructed ZPD helps teachers to develop pedagogy from individual student or student-teacher dyad to collective social interactions and group working in the classroom context. (Hough, 1997, p. 16). Hayward (1995, p. 13) supposes that the ZPD is a dynamic region of learning in which learners develop through participation with more experienced ones. Learners will understand a task by engaging in meaningful group activity.

Smith (1996, p. 95) emphasizes that Vygotsky's concept of the zone of proximal development is key theory in education. Vygotsky viewed matching learning tasks to developmental levels already reached as ineffective. The idea of developmental appropriateness assumes that learning experiences for children should be designed according to their appropriate stage of development. Seng (1997, p. 384) concerns that in the process of learning, children can perform much more skillfully together with others than they can do alone. Students require help and supervision in the process of learning. In this way they can reach to a higher level of understanding and also they can learn one special point sooner and more easily than what they can do in isolation.

1.2 Mentoring Teaching

Through different steps of teaching, learners learn so many things that increase maturity of their minds. In the learning context different points can be learnt from imitations. In other words, imitation is a salient source of learning. Also, Teaching consists in assisting performance through ZPD. Indeed in the realm of teaching assistance and getting help from others (teacher or peers) are necessary. So mentoring as well as teaching should be considered in the classroom context. McCafferty (2000, p. 4) believes that Vygotsky suggests that imitation is a key aspect of learning arguing that a person can imitate only what is within her developmental level .

Concerning mentoring teaching, Vygotsky (as cited in Nilssen, 1996) states that:

A full understanding of the concept of the zone of proximal development must result in reevaluation of the role of imitation in learning. We have to reconsider imitation as a starting point for learning. It is a sign of development when one imitates and gets help from others. Imitation can be understood as a constructive process because what is imitated is chosen by the individual; it is something the individual wants to do. The intermental process which takes place between the student teachers and their mentor is of crucial significance to how the student teachers manage to bring their potential in use and make it part of their own teaching. (p. 381)

An important point in teaching context is that imitation will give the teacher and learners good results when this imitation is under the control of teacher. Under the guidance of teachers, adults or other more capable classmates, child's potentiality for intellectual growth will be guided. In fact, mentoring teaching in this study refers to learning through imitating teacher and other classmates. As explained earlier students can learn many points and benefit from imitating and the teacher can create this opportunity in the classroom context in order to improve the students' level of learning. Mentoring teaching is a method that can be used in cooperative and group learning which are the most salient significance of teaching within ZPD.

1.3 Neo-Vygotskian View

More experienced and less experienced or more intelligent and less intelligent persons negotiate with each other and this active association causes to enhance the development of doing the task or understanding in the process of learning. A neo-Vygotskian view focuses on analysis of social,

cultural, and historical conditions which constitute the processes by which teachers learn to teach. In fact, it is the starting point of the links between culture and cognition. Recent theoretical advances according to Cole (as cited in Vare, 1993) show that the zone is constructed through a dynamic relationship whose nature changes as persons negotiate the performance of selected tasks using specific cultural artifacts.

Vare (1993) finds that the neo-Vygotskian view shows power and knowledge both constitute and emerge from the crucible of the negotiated ZPD. The neo-Vygotskian view goes beyond conceptions of the zone as a metaphorical space in which persons negotiate and construct meaning by conceptualizing the zone as a strategic relationship located in sociocultural space and historical time. In the Vygotskian cultural-historical theory, human's higher psychological processes are socioculturally based because they derive from interaction with cultural products and other beings in social settings.

Also, regarding the social relationships between persons in neo-Vygotskian view Welk (1994) argues the following:

ZPD is the notion of learning as occurring within a relationship that the faculty facilitator has with past experience, the new content, and the trainer. Vygotsky proposed that the origins of learning are social in nature and by using a language, internalization occurs. The trainer employs tools or strategies that engage the faculty facilitator in a relationship with what is to be learned. (p. 4)

2. Materials and Methods

This study intended to investigate the issue of dealing with ZPD while teaching English adjectives to the learners. It is important to encourage learners to have active participation in classroom activities and discussions in the process of teaching/learning a language. Moreover, learning in cooperative, interactive and supportive situation yields outstanding outcomes. Furthermore, by explaining human language development and cognitive development, Vygotsky's social-interactionist theory, of which ZPD is the most salient outcome, and based on which this study was conducted, serves as a strong foundation for the modern trends in applied linguistic. It lends support to teach student and more natural communicative and experimental approaches and points to the importance of real-world human interaction in foreign language learning.

The present research is an attempt to examine whether teaching adjectives concerning imitation among the learners based on the ZPD can produce better results in students' learning or not. In fact, this study is an attempt to compare students' learning of adjectives both in the domain of ZPD and out of it to conclude the role of ZPD in enhancing the learning of English adjectives by second language learners and addresses the following questions:

- 1- Does teaching adjectives within students' ZPD lead to a better learning of adjectives?
- 2- Can imitative learning through mentoring teaching provided within learners' ZPD improve their knowledge of adjectives?
- 3- Does teaching based on students' ZPD improve students' retention of learned adjectives?

The participants were three classes of students who had newly entered high school. They will be randomly divided into three groups, i.e., a control group and two experimental groups. These students will be chosen among at least 160 students. For initial homogeneity and comparison a pretest based on their previous knowledge was administered. The materials used in the present study include the grammatical points of lesson three adjectives of *English Book One* at high school. In order to examine the effect of ZPD something which is slightly above students' level of ability must be taught (Lave, 1988). Since adjectives are presented in students' official textbook, and nearly all students are unfamiliar with them, it is expected to be relevant to this study. Each week consisted of two 60-minute sessions.

Each group received the followings:

- 1- The control group received explicit instruction, a traditional grammar lecture followed by translation exercises. The rules were taught deductively. The learners' native language was used without any limitation. Students were asked to do the exercises individually and imitation took place on the spot from the teacher. Students were also required to find the adjectives from the reading text in their textbook and write them down in a table in each session.
- 2- The two experimental groups received the treatment. Both groups were engaged in the same treatment except for the imitation section (to be explained later in this paper). After a brief explanation of adjectives by the teacher in English, they dealt with doing tasks in reading and writing phases. In the reading phase, students read the reading text in their textbook. They were asked to find the intended adjectives and write them down in their notebooks in a table while they provided the missing parts.
- 3- As said above, another treatment was imitation. One experimental group did imitation from teacher and more intelligent students within its ZPD and the other experimental group did imitation from teacher and more intelligent students randomly and irrelevant of its ZPD.
- 4- The control group received explicit instruction, a traditional grammar lecture followed by translation exercises. The rules were taught deductively. The learners' native language was used without any limitation. Students were asked to do the exercises individually and imitation took place on the spot from the teacher. Students were also required to find the adjectives from the reading text in their textbook and write them down in a table in each session.
- 5- The two experimental groups received the treatment. Both groups were engaged in the same treatment except for the imitation section (to be explained later in this paper). After a brief explanation of adjectives by the teacher in English, they dealt with doing tasks in reading and writing phases. In the reading phase, students read the reading text in their textbook. They were asked to find the intended adjectives and write them down in their notebooks in a table while they provided the missing parts.
- 6- As said above, another treatment was imitation. One experimental group did imitation from teacher and more intelligent students within its ZPD and the other experimental group did imitation from teacher and more intelligent students randomly and irrelevant of its ZPD.

The treatment lasts for a month in a real context of Iranian teaching classes. The adjectives were taught to the three mentioned groups. Two experimental groups worked within the ZPD with implicit teacher supports only when necessary.

One of the techniques for the two experimental groups was eight written sentences with one mistake in the adjective and the students were supposed to correct the mistakes. Therefore, in certain cases, the teachers provided help and support in accomplishing this task. However, for the ZPD imitative group, beginning from zero level and grew up little by little where and when necessary. But for the non-ZPD imitative group the teacher offered help randomly.

Then, after five weeks a post test was administered which contained 40 grammatical points, here adjective items.

3. Results and Discussions

It is necessary to say that all the scores of the students were taken within the range of 0 to 20. According to Table 1 the mean score of the control group was less than that of each of the experimental groups. Moreover, the table showed that the ZPD experimental group performed better than Non-ZPD experimental group.

Table 1- Descriptive statistics of the scores obtained by all learners in the first administration of the test

SD	Mean	Groups
3.21	14.07	The Control Group

2.98	17.07	The ZPD Imitative Experimental Group
2.72	16.60	The Non-ZPD Imitative Experimental Group
2.98	17.07	The Two Experimental Groups

Then, the result of the t-test in Table 2 indicated the difference between the performance of the control group and that of the both experimental groups which was significant.

Table 2-Results of the comparison among the performances of the groups in the first administration of the test

df	t	Sig(t-tailed)	Sig	Standard Error Mean	SD	Mean	Groups
84	-3.82	0.001	0.59	0.78	3.21	14.07	The Control Group
					2.98	17.07	Both Experimental Groups

Moreover, the comparison between the scores obtained by the two experimental groups, i.e., ZPD experimental group and Non-ZPD experimental group, reveals that they performed very closely to each other in this test and the difference between them is not significant (Table 3).

Table 3 -Results of the comparison between the performances of the experimental groups in the first administration of the test

df	t	Sig(2-tailed)	Sig	SD	Mean	Groups
54	0.56	0.57	0.41	2.98	17.07	The ZPD Imitative Experimental
				2.72	16.60	The Non-ZPD Imitative Experimental

In order to see how much students could recall adjectives when they had learned them based on their ZPDs, they took the same post-test six weeks after the first administration of the test. In this way, a comparison was done between the groups in the two administrations of the test. Table 4 shows the statistics regarding the performance of the students in the second administration.

Table 4 -Descriptive statistics of the scores obtained by all learners in the second administration of the test

Groups	Mean	SD
The Control Group	10.80	3.37
The ZPD Imitative Experimental Group	15.16	2.32
The Non-ZPD Imitative Experimental Group	14.71	2.74
The Two Experimental Groups	14.87	2.54

As table 4.4 shows, the students in the experimental groups obtained higher scores in the second administration of the test than the control group. Moreover, there was a slight decrease in the means of the groups compared with the first administration of the test. This might have happened due to the relative failure of retention in all groups. Results of a t-test revealed that the difference between the performances of the control group and that of the experimental groups was significant (Table 5).

Table 5 - Results of the comparison among the performances of the groups in the second administration of the test

df	T	Sig(2-tailed)	Sig	SD	Mean	Groups
54	-5.31	0.0001	0.52	3.37	10.80	The Control Group
				2.54	14.87	Both the Experimental Groups

The present study aimed at finding out whether or not teaching English adjectives within learners' ZPD would lead to better learning adjectives and longer stability of them. To this goal, three research questions were posed. The first question asked whether teaching adjectives in students' ZPD would lead to a better learning of adjectives. By analyzing the results reported in table 1, it can be understood that it does make a significant difference to teach based of learners' ZPD. It was confirmed that those students who received the treatment did much better than those who did not. Since they were taught by applying and/or activating their ZPD, they could internalize adjectives better and deeper and consequently could obtain higher scores in the test.

The second question, however, dealt with application of imitative learning through mentoring teaching provided within learners' ZPD improve their knowledge of adjectives as well as the application of imitative learning irrespective of the learners' ZPD could improve learners' knowledge of adjectives. The results showed that the students in the ZPD imitative experimental group obtained higher scores than those in the Non-ZPD imitative experimental group. However, the difference between the two groups was shown to be insignificant.

The third research question asked whether the students' retention differs when they are taught within their ZPD. In fact, after six weeks of administering the first post-test, the same test was administered again to analyze the results. It was shown that the experimental groups did much better than the control group. Another t-test was conducted to compare the experimental groups' performances against that of the control group. As indicated in table 5, the observed t is 5.31 which is higher than the critical value of $t=2.00$. So, it can be said with some degree of certainty that teaching within learners' ZPD matters and leads to better retention of the materials taught.

It was shown in the present study that the learners learn better and deeper if they are taught language components, e.g., adjectives, based on their ZPD. When the class atmosphere is in a cooperative and supportive mood and the learners themselves take the responsibility for accomplishing the learning task and also imitate from their teacher or more intelligent students, learning is enhanced. On the other hand, it does not seem that the teacher needs to explain everything in details to the learners. She can only give assistance, if needed, of course, beyond the learners' ZPD and this support gradually decreases as the learners' ability is enhanced. Also, the study indicated that giving students support based on their ZPDs to imitate grammatical points correctly has a minor role in learning grammatical points. Moreover, when learners' ZPD is taken into account, long term retention is facilitated.

The findings of the present study are to a large extent in line with the studies conducted by Deleon, I., Gregory, M., Richman, D., (2009), Gazdag, G., Warren, S., (2000) and Allott, R (2003) as they also came to the conclusion that language and imitation are closely related to each other. Deleon, I., Gregory, M., Richman, D., (2009) determined that the participants responded correctly during at least 80% of trials during matching and imitation assessments. They also concluded that imitation skill may expedite acquisition of communicative forms. Gazdag, G., Warren, S., (2000) noticed imitation as part of general interventions that results in increasing communication abilities. Allott, R (2003) concluded that imitation is a major aspect of human functioning in learning language. In fact Language and imitation are closely related aspects of human functioning.

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