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Research Article

A New Tool for Prompting ZPD: Statistical Results vs. Learners' Perspectives

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ABSTRACT

Finding practical methods leading to a promising and autonomous learning is one of the significant objectives of research in the field of Foreign Language Teaching. Along with these attempts, this study tries to meet challenges by creating an alteration in the cloze procedure application. We aimed to study the effectiveness of employing a cloze procedure before teaching reading skills on Iranian engineering students' Zone of Proximal Development (ZPD). Applying quasi-experimental, pre-test, posttest, and delayed posttest design, the participants were selected using intact classes and randomly divided into the experimental and control groups. The participants were 380 B.S. Iranian first-year engineering students whose English proficiency levels were determined by using the Oxford Quick Placement Test. Except for using the cloze procedure in the experimental group (N=190), everything was similar between groups during the instruction. In addition to pre-test, posttest, and delayed posttest, the experimental group received a questionnaire to reflect on the efficacy of using the cloze procedure. The obtained data were analyzed by SPSS. The results showed that employing instructional cloze texts before teaching reading skills was significantly effective in terms of creating participants' ZPD and broadening their learning. These findings from the tests were consistent with the results obtained from questionnaires. The implication of the present study is that considering the learners' developmental level, instructors can manipulate traditional methods and use the materials innovatively to facilitate learning. Also, training learners to set goals, plan their learning, and monitor their progress during the learning process should be given surplus attention.)

Introduction

Globalization and the use of English in science and technology lead to consideration of academic reading as a foundation of learning in undergraduate studies. Consequently, attempts to find promising methods to instruct reading skills have increased. Considering reading skills as fundamental for academic success, Hermida (2009) marks that the professors mostly assume that these skills have already been learned by students in their previous educational experiences and ignore training them. In reality, most first year students are unfamiliar with reading skills, particularly academic reading, which is considerably different from other types of reading like high school reading. To learn a specific discipline, the students should be familiar with the paradigms, thinking, and the worldview of the related professionals. This familiarity is possible through reading academic texts produced by those professionals. In other words, those academic publications make possible the students' immersion in the culture of a particular discipline through which they can learn the conventions, skills, discourse, and knowledge of that discipline (Erickson, Peters, & Strommer, 2006, cited in Hermida, 2009). This type of immersion is possible only if the students

get involves in the process of reading, which requires learning of reading skills. Consequently, researchers and interested teachers make enormous attempts to find effective ways to facilitate learning reading and promote students to take responsibility for their learning.

Several researchers believe that many factors influence reading. These include but not limited to schema activating, features of reading material, reader's characteristics, individual learning styles in L2, working memories capacity, morphological awareness, and finally learning reading comprehension skills (Anderson & Pearson, 1984; Ajideh, 2003; Dunning, Johnson, Ehrlinger, & Kruger, 2003; Ehrman, Leaver, & Oxford, 2003; Hong, 2007; Unsworth & McMillan, 2013; Levesque, Kieffer, & Deacon, 2017). Grasping reading skills, both cognitive and metacognitive, is prerequisite to overcome in competency in reading (Dunning et al. 2003). Considering the importance of reading comprehension skills, Palincsar and Brown (1984, cited in Lewis, 2006) state that contrary to unskillful readers, strategic readers constantly attempt to know the origins of their comprehension problems and eliminate them. However, readers with less skill fail to use monitoring and planning strategies to deal with their comprehension problems.

Sharing a common goal, teachers try to help their students to be a good reader and lifelong learners. Achieving this aim requires students to devote time to read related literature (Samuels & Wu, 2004); however, teachers should assist this allocated time to be spent with high level of success in reading activity. As most academic students, Iranian University students are in high demand to read texts in English to be aware of the improvements in their fields as well as to be able to pass the required courses offered in English. However, lack of necessary reading skills may inhibit students from reading and understanding the texts at an appropriate time. They need to learn reading skills and strategies efficiently to find the capability of meeting these demands and immersing in the culture of the related field. Over our teaching years, we used traditional techniques but without satisfying outcomes, therefore, in the present study, we aimed to examine the utility of cloze procedure in facilitating learning and bring about long-lasting skills. Understanding that learners' unawareness of their gaps is one of the reasons for not / less learning (Mozaffarzadeh, 2020), and also considering distinguished features of cloze procedure requiring various reading skills, we tried to use a cloze procedure before starting to teach the reading skills to the necessary ZPD in students. Thus, our study intended to investigate the following research questions:

1. Is engaging in a cloze procedure before teaching effective in creating ZPD for learning reading skills in different proficiency levels?
2. What is the learners' perspective on using a cloze procedure before reading skill instruction?

Literature Review

Grounding on the principle of indirect connection between human being and their internal and external world, sociocultural theory of Vygotsky emphasizes that individuals' inside and outside world connects through 'sociocultural artifact' and social interaction leading to the immergence of cultural development (Miri, Alibakhshi, Kushki, & Bavarsad, 2017, p.3). According to Vygotsky (1978), the development firatly appears in the social level and interpsycholocially, then this co-built knowledge internalized by the individuals at the intra-psychological horizon. However, this internalization only occures when the co-constructed knowledge is within the individual's ZPD.

Reflecting on the dissatisfaction of Vygotsky against the psychometric tests, ZPD was initially introduced by Vygotsky as a diagnostic method to detect the distance between real and potential developmental levels (Lavin & Nakano, 2017). Therefore, Vygotsky (1978, p. 86) defines ZPD as "the distance between the actual development level as determined by independent problem-solving and the level of potential development as determined through problem solving under adult guidance." In the Vygotskian- inspired SCT, learners are individuals in need of a more capable other to aid them in improving their learning within the ZPD. This determination of ZPD and consequently, learners' gaps in their interlanguage can be detected through interaction between the learner and a more proficient individual. Thus, it will be possible to plan an appropriate schedule to scaffold him/her according to their needs. This type of planning provides the teacher with the possibility of knowing about the already matured processes as well as the processes that are currently evolving or in the state of formation (Aggarwal, 2016). In other words, because of these types of interactions learners' gaps are understood both by teachers and by learners themselves whereby an internal need is generated to adjust information from different sources to have an appropriate interpretation. Therefore, in Vygotsky's view ZPD provides us with an effective tool offering the opportunity of understanding learners' needs and the possibility of planning for better learning on the part of learners and promising teaching on the part of teachers.

Besides two important steps in working within ZPD, estimating and activating, Moll (2013) believes that 'change' and 'deliberate creation of circumstances' are two principle factors in the notion of Zone. Wells (1983, p. 345 cited in Ellis, 2003) argues that ZPD is an attribution of a task which is 'task-specific, reciprocal, open-ended' and consequently 'emergent' in its nature. When the tasks are designed to be within the ZPD, the learners are posed to an appropriate challenge making possible the learning of further skills. However, the first step in working within the ZPD is defining mechanisms to estimate it and then to activate or create it. For assessing ZPD, Aggarwal (2016) suggests 'imitation', 'collaboration', and 'instruction'. For activating or creating or even 'sharpening' this tool, Zone of Proximal Development, with the aim of providing autonomous learners with the skill of detecting their gaps and enhancing their own learning, several studies have been done (McCafferty, 2002; Soto-Santiago, Rivera, & Mazak, 2015; Wass & Golding, 2014 and Aggarwal, 2016). Along the lines of these studies, we attempted to use a cloze procedure for creating ZPD and investigate its effectiveness on learning reading skills by Iranian EFL learners.

Reading as one of the cornerstones of students' success and achievement in academic contexts is considered an important source of expansive cultural world from Vygotskian perspective. It provides the students with the opportunity to reconstruct writers' intended cultural knowledge (Van Oers, 2009). Hong believes "reading is a conversation between reader and author" (2007, p. 15). Most known models of reading consider it as processes of interacting with the text features.

Lewis (2016) considers academic reading materials primarily expository which informs, describes, explains, and sometimes persuades. Lewis continues that less strategic learners often neglect specific significant features added to these types of materials, having the capacity of enhancing readers' focus and comprehension of content. 'Reciprocal teaching' designed by Palinscsar and Brown (1984, cited in Lewis, 2016) is a useful approach for teaching reading skills. Its target is to improve 'questioning', 'classifying', and 'predicting' which are essentials of monitoring and improving reading skills (Ajideh, Ansarin, & Mozaffarzadeh, 2020, p. 648). In other words, reading comprehension skills can be considered as strategies to foster metacognitive comprehension. Given the characteristics of academic texts, interaction with the text, learners should be supplied with reading strategies to be able comprehend these texts effectively (Rijk, De Mey, De Hann, Van Oers, & Volman, 2017).

Believing in learning as a dynamic process, students' learning in academic levels is not considered as an artless process of information transition from teacher to the students anymore. In the new tenets known as 'student-centered-learning', students contribute actively in their learning process. Students can internalize the learned meaning and connect it with their schema by interacting with the subjects and others (Nicol & Macfarlane-Dick, 2006). To put differently, instructors should try to channel their learners toward self-regulation by contributing to their learning by setting their goals, planning to use specific strategies to reach their goals, and monitoring their learning progress. As Seufert (2018) argues, I order to set goals, students need to analyze the targeted task. Then, they plan on the strategies they need to use to reach their objectives. After planning, the primary learning process occurs in which the students have to apply their planned tactics and strategy to deal with the task, and simultaneously, they should monitor their own learning (Zimmerman, 2005 cited in Seufert, 2018). Therefore, to self-regulate the learning process, learners need to be cognitively and metacognitively active.

Besides its uses as an instrument for assessing reading comprehension (Anderson J. C., 1980; Mariotti & Homan, 2005; William, Ari, & Santamaria, 2011; Schumm, 2006; Lapp, Fisher, & Wolsey, 2009), the cloze procedure has been employed and examined as an instructional tool (Raymond, 1988; Barnitz, 1988; Blachowicz & Ogle, 2008). Blachowicz and Ogle (2008) believe that the cloze procedure is a useful strategy for instruction, particularly for adapted contexts, because it requires activating a network between cognitive and linguistic processes to make meaning from the text. In these authors' notion, reading comprehension is actively connecting ideas across sentences and paragraphs while monitoring the meaning-making process. Emphasizing the crucial contribution of the cloze procedure in teaching of reading comprehension, Barnitz (1988) argues that the cloze procedure is a practical means of accelerating comprehension. Therefore, it can be said that cloze activities do not teach by themselves, but they can be used in the comprehension strategy instruction. Also, due to its characteristics, cloze procedure plays role in the task-based approach as pre-task activity helping students to prepare themselves by panning their learning (Ellis, 2003).

As with most EFL readers, a primary problem is confronted by Iranian engineering student is reading and comprehending reading text, particularly academic texts provided for them in English, when they experience time limitations. They usually have difficulty in how to improve their reading comprehension skills and how to use them efficiently. Intending to foster a self-regulated learning environment, which seems to be a challenging job in university-level teaching and learning, especially in contexts with teacher-oriented culture, we decided to do this study. Regarding students' needs to be aware of what they are going to learn and what they know previously about it, we decide to use a cloze procedure as a pre-task activity and ask them

to apply reading skills on it before teaching reading skills on primary texts. We, as instructors, need to assist our students in being strategic learners through developing and implementing an efficient intervention. Since the strategic reading aims to train students to be automatic readers, this type of intervention is characterized by recognizing the learners' needs and the expectation of helping learners with improving their reading comprehension skills and their general academic performances.

Methodology

Design

Intending to investigate the usefulness of engaging in cloze procedure as ZPD activator from both statistical and participants' perspectives, we used a quasi-experimental method including pre-test, post-test, and delayed post-test along with a Likert scale questionnaire. In addition, Cronbach's alpha was employed to test reliability of tests. The data collection in this study was conducted during typical university class sessions.

Participants

This study carried out at two Iranian state universities, Sahand University of Technology and the University of Tabriz. The participants were selected based on six intact classes of first-year engineering students (N = 380). This intact classes, including both genders (F=177 and M=203), randomly considered as the experimental and control groups. Although reaching a complete homogeneity in the applied linguistic field is impossible, a relative homogeneity in language proficiency was achieved by administering the Oxford Quick Placement Test. regarding the manual of the placement test, firstly we had five proficiency level, but two proficiency levels were removed from data analysis because the number of participants in these levels could not form statistically independent groups. All the participants were taking a three-credited general English course, as one of the compulsory subjects, lasting 17 weeks. Table 1 below displays the characteristics of participants.

Table 1. Participants' characteristics

Characteristics of participants		N
Age	Mean (years): 20.17 Range: 18-22	
Gender	Male	203
	Female	177
Mother Tongue	Persian	130
	Turkish	198
	Kurdish	62
Total		380

Materials and Instruments

Oxford Quick Placement Test (OQPT)

To reach a relative homogeneity and eliminate the effects of language proficiency levels of participants on their performance and assessment, OQPT (version 2) was administered before the study. OQPT consists of two parts, including 60 multiple-choice items, supposed to be completed with 30-45 minutes. This test places the test-takers in the basic, breakthrough, elementary, intermediate, high intermediate, advanced, and more advanced proficiency levels. Since in the present study, the number of participants with the proficiencies of breakthrough, upper intermediate, and advanced were few and statistically unimportant, we only used three levels of proficiency, i.e. basic, elementary, and intermediate, which included more participants. However, the other students were present in the class and during the study but the data related to them were excluded from the study.

Reading comprehension texts

Some twenty-seven reading comprehension texts accompanying explanatory questions relating to a particular skill were used as a pre-test, post-test, and delayed post-test. To deal with the issues of authenticity and readability of the texts, the used texts in this study were taken from *Inside Academic Reading Series* published by Oxford for academic reading purposes for different proficiency levels used by most of the EFL teachers in Iran for general English courses. Besides, to assure validity and reliability issues, the questions and their answers were taken from these books.

Cloze texts

In the present study, we used another nine cloze texts as pre-reading activity and before teaching reading skills. Since these clozes were not used with the purpose of testing reading comprehension but as a pre-reading activity, we decided to name them cloze texts. The deletion of the words was based on rational deletion. Because in this type of deletion, "linguistic reasoning is used to decide on deletions, and so it is easier to say what each test is intended to measure" (Mousavi, 2009, p. 443). Rational deletion enables the test developer to decide about the deletions and focus on prior-selected items as considered essential to a particular target test taker. Besides, it is useful in measuring global comprehension ability requiring text level understanding (Yamashita, 2003). We tried not to delete the keywords of the texts helping the reader to recognize the topic, main idea, and the specific information helping to answer the related questions. If the n^{th} deletion rule were followed, most of the information required to answer the questions related to skills would have been deleted. It would have made the procedure of understanding and assessment more complex because the participants needed to cope with the skills and strategies of answering the cloze test, not the skills required for reading comprehension. The prepared cloze texts were just for development and making participants curious about the ways to reach answers to the accompanying questions. They were not expected to fill in the blanks in the texts. They were only assessed by answering the accompanying questions.

Likert Scale Questionnaires

Due to having access to different sources of data to conclude about the effectiveness of cloze texts, we decided to have the participants' voices, too. However, a large population of the study forced us to use Likert Scale questionnaires to check all participants' points of view. In the questionnaire, we used statements about participants' familiarity with the cloze procedure in overall, their experience on using the cloze for learning reading skills, and finally effect of utilizing the cloze texts before teaching reading skills and its efficiency in helping learners to find the knowledge gaps and planning for their learning process.

Procedure

The research methodology and data collection and analysis procedure adopted in the present study was a quantitative method. It included a questionnaire, along with pretest, post-test, and delayed post-test. The used materials and applied procedures were piloted with other first-year engineering student similar to the main participants. Then, the required amendments were applied. The length of the main research was three five-weeks (one semester). It should be mentioned that in this section, we only refer to taken steps for teaching previewing skills since they were the same for scanning and skimming skills.

Before initiating the study, participants received the OQPT to control the effect of English proficiency level of participants on the results of the investigation. With the intention of determining the homogeneity and removing significant differences, all the participants received a pre-test in the first week. Then, in the second week, only the experimental group was given cloze texts, appropriate to their proficiency level, adapted from the main reading that they would read as their target reading in that session. They were supposed to read the mentioned cloze text provided according to their proficiency level in five minutes and then answer the questions asked about the reading and aimed a particular skill of reading comprehension, preview, scanning, and skimming. Then, the related skills were introduced by the researchers (instructor herself), asking the participants to apply the skills on the cloze texts and answer the questions again. In the next stage, they read the primary reading texts.

The main reading texts were instructed to both groups with the same procedure and reading comprehension questions. After instruction, the participants received the post-test. Both groups practiced the targeted skills in different reading texts in the next weeks. Then, in the fifth week, they received the delayed post-test. Everything was mostly the same for both groups except the cloze procedure that was received only by the experimental group before instruction. After the post-test, the participants in the experimental group received the questionnaire to reflect on the usefulness of cloze texts.

Results

The section includes the data related to the pre-test, post-test, and delayed post-test applied through defined stages for the control and experimental groups, each with 190 participants in three proficiency levels for three reading skills, preview, scanning, and skimming. The first part of the data was gathered by applying the cloze texts before and after the teaching process to the experimental group. To define the reliability of the tests, Cronbach's alpha was performed ($r = 0.85$). The obtained data from tests were analyzed using descriptive, inferential statistics, including dependent and independent t-test, analysis of variance, and covariance for the covariate variable (pre-test). The second part of the data was collected by using a

questionnaire and analyzing it by performing descriptive and one-sample t-test. The results of the descriptive statistics for all the scores obtained by the participants throughout the study are indicated in Table 2.

Table 2. Descriptive statistics of scores for the overall skills

		N	Minimum	Maximum	Mean	Std. Deviation
Preview	Pre-test	380	.00	70.00	23.7434	14.02143
	Posttest	380	12.50	100.00	57.8653	15.99013
	Delayed posttest	380	20.00	100.00	66.4592	17.27751
Scanning	Pretest	380	.00	70.00	32.3829	14.40312
	Posttest	380	25.00	97.50	63.8184	14.20366
	Delayed posttest	380	30.00	100.00	71.8895	13.98193
Skimming	Pretest	380	.00	55.00	17.8461	13.33506
	Posttest	380	25.00	95.00	52.4118	15.41662
	Delayed posttest	380	27.50	100.00	61.3447	16.30367

As reported in Table 2, the mean score of the obtained data from the preview pre-test is 23.74, in the post-test is 57.86, and in delayed post-test it is 66.45. The mean score of the pretest of scanning is 32.38, in the post-test is 63.81, and in the delayed post-test is 71.88, while the values were 17.84, 52.41, and 61.34, respectively, for the scanning. The outcome of comparing the mean scores of post-tests and delayed post-tests to the pre-tests for preview, scanning, and skimming, is an indication of considerable increase in the differences between mean scores. However, to capture the effect of the treatment, the scores of both groups had to be compared in the three administrations. Table 3 reports the descriptive statistics of the participants' scores in both groups.

Before initiating the study, an independent sample t-test was perfumed to check up the lack of significant difference regarding each skill between the groups. The results of the independent samples t-tests, Table 4, indicates a lack of significant difference for each skill between the groups ($t_{preview}$= -.0104, p = 0.917 >0.05; $t_{scanning}$= -.0.756, p = 0.45 > 0.05; $t_{skimming}$= -0.052, p = 0.959 > 0.05). Therefore, at the beginning, both control and experimental groups did not differ regarding preview, scanning, and skimming skills statistically and could be logically compared at the next stages of the study.

Table 3. Descriptive statistics of the participants' scores in both groups

			N	Mean	SD	Std. Error of Mean
Preview	Pre-test	Control	190	23.6684	12.95027	.93951
		experimental	190	23.8184	15.05060	1.09188
	Posttest	Control	190	59.7763	13.32524	.96671
		experimental	190	73.1421	18.20019	1.32038
	Delayed posttest	Control	190	59.7763	13.32524	.96671
		experimental	190	73.1421	18.20019	1.32038
Scanning	Pretest	Control	190	31.8237	13.63350	.98908
		experimental	190	32.9421	15.14915	1.09903
	Posttest	Control	190	61.1579	13.08737	.94946
		experimental	190	66.4789	14.80015	1.07372
	Delayed posttest	Control	190	66.8947	12.72613	.92325
		experimental	190	76.8842	13.41305	.97308
Skimming	Pretest	Control	190	17.8105	11.88307	.86209
		experimental	190	17.8816	14.67579	1.06469
	Posttest	Control	190	49.2842	13.45906	.97642
		experimental	190	55.5395	16.60687	1.20479
	Delayed posttest	Control	190	53.8974	14.26261	1.03472
		experimental	190	68.7921	14.76788	1.07137

Table 4. Independent sample t-test: Checking initial homogeneity

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Preview	Equal variances assumed	2.329	.128	-.104	378	.917	-.15000	1.44045	-2.98230	2.68230
	Equal variances not assumed			-.104	369.771	.917	-.15000	1.44045	-2.98250	2.68250
Scanning	Equal variances assumed	2.179	.141	-.756	378	.450	-1.11842	1.47856	-4.02566	1.78882
	Equal variances not assumed			-.756	373.876	.450	-1.11842	1.47856	-4.02576	1.78892
Skimming	Equal variances assumed	15.248	.000	-.052	378	.959	-.07105	1.36995	-2.76473	2.62263
	Equal variances not assumed			-.052	362.324	.959	-.07105	1.36995	-2.76511	2.62300

To compare the post-test mean scores of the control and experimental groups on each of the three skills, independent samples t-tests were performed (Table 5). The mean score of the previewing skill for the control group (M=54.64) is smaller than the means score of the experimental group (M=61.08) after the intervention. The result of the independent t-tests (Table 5) revealed two groups differed significantly (t= -4.00, p =0.000 < 0.05) after using cloze procedure. Moreover, the mean score for the control group in the scanning posttest (M=61.15) is smaller than the means score of the experimental group (M=66.47). In addition, the result obtained from the independent t-test revealed that the two groups differed significantly (t= -3.71, p =0.000 < 0.05) after using cloze procedure. Finally, the mean score of the experimental group (M=55.53) in the skimming posttest is larger than the mean of the control group (M=49.28). The result of the independent t-test revealed that the groups differed significantly after using the cloze procedure (t= -4.03, p =0.000 < 0.05).

Table 5. Independent sample t-tests of participants' post-test scores

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Preview	Equal variances assumed	14.513	.000	-4.000	378	.000	-6.43684	1.60901	-9.60058	-3.27311
	Equal variances not assumed			-4.000	354.432	.000	-6.43684	1.60901	-9.60125	-3.27243
Scanning	Equal variances assumed	.794	.373	-3.712	378	.000	-5.32105	1.43330	-8.13928	-2.50282
	Equal variances not assumed			-3.712	372.423	.000	-5.32105	1.43330	-8.13942	-2.50269

Skimming	Equal variances assumed	11.971	.001	-4.034	378	.000	-6.25526	1.55078	-9.30450	-3.20603
	Equal variances not assumed			-4.034	362.451	.000	-6.25526	1.55078	-9.30492	-3.20561

Table 6. Independent sample t-tests of delayed post-test scores

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Preview	Equal variances assumed	18.239	.000	-8.168	378	.000	-13.36579	1.63644	-16.58346	-10.14812
	Equal variances not assumed			-8.168	346.397	.000	-13.36579	1.63644	-16.58440	-10.14718
Scanning	Equal variances assumed	.049	.825	-7.447	378	.000	-9.98947	1.34137	-12.62696	-7.35198
	Equal variances not assumed			-7.447	376.960	.000	-9.98947	1.34137	-12.62699	-7.35196
Skimming	Equal variances assumed	.229	.633	-10.000	378	.001	-14.89474	1.48946	-17.82340	-11.96608
	Equal variances not assumed			-10.000	377.543	.001	-14.89474	1.48946	-17.82341	-11.96606

Table 7. Descriptive statistics for the participant's perspective

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
RS1	190	3.22	1.123	.081
RS2	190	2.58	.988	.072
RS3	190	3.81	.746	.054
RS4	190	3.68	.833	.060
RS5	190	3.80	.818	.059
RS6	190	3.71	.808	.059
RS7	190	3.87	.731	.053
RS8	190	3.77	.753	.055
RS9	190	3.78	.832	.060
RS10	190	3.41	1.145	.083
RS11	190	3.95	.862	.063
NP1	190	3.66	.868	.063
NP2	190	3.51	.907	.066

NP3	190	3.66	.875	.063
NS1	190	3.98	.694	.050
NS2	190	3.85	.729	.053
NS3	190	3.86	.814	.059
NK1	190	4.15	.720	.052
NK2	190	3.95	.729	.053
NK3	190	4.02	.832	.060

Table 7 presents the descriptive statistics of the participants' perspective on using the cloze texts before instructing reading skills on complete texts. The mean scores of the questions are more than three except for item RS2, in which we asked whether they have already used the cloze procedure for learning reading skills, and they answered mostly 'no'. In item RS1, we asked participants about their familiarity with the cloze procedure, overall. Items RS3-RS11 relates to the questions asking the participants' reflection on using the cloze texts and their effectiveness in preparing students to set goals and plan their learning of skills. Questions NP1-NP3, NS1-NS3, and NK1-NK3 ask about the effect of cloze text on learning previewing, scanning, and skimming skills, respectively.

As indicated in table 8, the significant value obtained from one-sample t-test for questionnaire is more than 0.05. Subsequently, the use of the cloze texts before instructing reading skills on main texts is effective in participants' opinions.

Table 8. One-sample t-test for the participants' perspective on using the cloze texts

One-Sample Test						
	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
RS1	2.650	189	.009	.216	.06	.38
RS2	-5.877	189	.000	-.421	-.56	-.28
RS3	14.977	189	.000	.811	.70	.92
RS4	11.326	189	.000	.684	.57	.80
RS5	13.484	189	.000	.800	.68	.92
RS6	12.026	189	.000	.705	.59	.82
RS7	16.477	189	.000	.874	.77	.98
RS8	14.156	189	.000	.774	.67	.88
RS9	12.911	189	.000	.779	.66	.90
RS10	4.940	189	.000	.411	.25	.57
RS11	15.226	189	.000	.953	.83	1.08
NP1	10.529	189	.000	.663	.54	.79
NP2	7.678	189	.000	.505	.38	.64
NP3	10.362	189	.000	.658	.53	.78
NS1	19.556	189	.000	.984	.88	1.08
NS2	16.012	189	.000	.847	.74	.95
NS3	14.531	189	.000	.858	.74	.97
NK1	21.977	189	.000	1.147	1.04	1.25
NK2	18.001	189	.000	.953	.85	1.06
NK3	16.821	189	.000	1.016	.90	1.13

Conclusion

In the present study, we aimed to investigate the effectiveness of the cloze procedure as a pre-reading activity in activating our participants' ZPD before learning reading comprehension skills. We took into account pre-test, posttest, delayed posttest, as well as participants' views. Below we will discuss our conclusion about the characteristics of using such tools before teaching reading skills for activating learners' ZPD. Our assumption was that the cloze texts could assist learners in learning skills deeply and meaningfully by making then aware of their gaps and needs. Comparing to rote memorization, this type of learning is more stable and secure, enabling the students to use the acquired knowledge in their real-life environment.

In Smagorinsky's view (2011), reading is an activity wherein the reader involves him/herself in a text enabling him/her to access the content to generate meaning, which includes complex thinking processes. In this study, we tried to choose those texts, which are meaningful for the participants; so, the instructors (researchers themselves) attempted to seize opportunities to instruct and support when the participants needed a strategy for a better understanding of text other than

assessed skills. To have an efficient instruction, we followed specific stages to help the participants to understand 'what' as well as 'how' and 'when' to use what they are learning. We intended to channel the participants to autonomy in reading comprehension in their real-life after completing the course through successful learning reading skills even when the texts are beyond their reading capability. In this study, we tried conversations in both groups to understand their problems and needs and provide the necessary strategies and skills to guide them through the passage of becoming autonomous, a dynamic switch between instruction and support (Rijk et.al. 2017), which is the core of the concept of ZPD.

Cloze procedure's potentiality to be used as pre-task activity, prompt 'thinks about thinking' or metacognitive awareness and enable the participants to plan for their learning make it perhaps of the most credible contentions of using them for fostering reading comprehension (Burley, Brown, & Suanders, 1985). Our findings supported the hypothesis that engaging in cloze procedure as a pre-reading activity is effective in activating ZPD for learning reading skills in different proficiency levels (Ajideh et al 2020; Mozaffarzadeh, 2020). In the experimental group, participants' learning of reading skills facilitated, and they outperformed in posttest and delayed posttest comparing to the participants in the control group.

Considering the significance of work inside ZPD, Vygotsky (1978, p. 39) discusses that "creation and use of artificial stimuli … become the immediate causes of behavior." In this study, we mean to create a potential learning site or the required ZPD for learning reading skills before instructing them in teacher-fronted classes. Wells (1999, cited in Khosravi, 2017) defining it as an "enlarged notion of ZPD", writes, "a site of potential learning that is created when participants of all ages … collaborate in understanding a concept or solving a problem" (pp. 79-80). Besides the results obtained from the pre-test, post-test, and delayed post-test, the results attained from the questionnaire also were an indication of the promising effect of applying cloze texts before teaching reading skills. Our findings give credence to Mozaffarzadeh (2020) in which her participants talked about the state of their minds in the interviews done after the instruction. They recount that after using the cloze procedure, they were ready to learn the knowledge they needed to fill in the gap during the instruction.

To sum up, our findings indicated the existence of a significant effect in the use of the cloze tasks as a tool for stimulating participants' ZPD before instruction of skills in three levels of English proficiency. In this study, we did not compare the proficiency groups with each other, but it can be done in future studies to see in which level using of cloze texts can be more useful. The finding of this study also implies that being creative and doing action reseach even in the teacher-fronted classes are possible. Instructors can make productive alterations in the materials and their use with the aim of improving learning. This research itself was the result of the writers' observations during teaching reading comprehension with the traditional methods of teaching reading skills in the EFL context and their attempts to explore innovative processes to teach reading skills. However, due to crowded classes, we couldn't do case studies or observations to consider the participants' behavior of learning in more detail. One of our suggestions for the future studies is doing a qualitative, maybe 'think aloud' work, to look at the learners' mind to see what happens when they face with a text with questions at the end which they don't know how to answer them and its effect on their future learning.

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