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# The Effect of Online Planning and Strategic Planning in CALL-Based TBLT on Iranian EFL Learners' Willingness to Communicate

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#### Abstract

The current study examined the impact of online planning and strategic planning in the context of task-based computer-assisted language learning (CALL) on Willingness to Communicate (WTC). Initially, the Oxford Placement Test (OPT) was administered to 120 intermediate female English as a foreign language (EFL) learners. Then, based on the OPT scale, 90 learners were chosen and divided into two experimental groups and a control group. The participants in the assigned groups were asked to complete the WTC questionnaire as the pretest. Following that, one of the experimental groups received CALL Online Planning and the other one received CALL Strategic Planning. In the Strategic Planning group, the learners wrote an essay each session on a given topic while being allowed to think of what they were going to write (content), and what language forms (words, grammar, etc.) they wanted to use. In the other experimental group, learners had time to think about the task performance during the task, but were instructed not to write down their plan. Conventional treatment was applied to the participants in the control group. After ten sessions, the learners in the three groups were given the WTC questionnaire as the posttest. The results of ANCOVA indicated that online planning and strategic planning had considerable impact on Iranian EFL learners' WTC. Moreover, it was revealed that the effect of strategic planning was more significant compared to online planning on Iranian EFL learners' WTC. The results promise implications for EFL teachers to incorporate online planning and strategic planning in the context of CALL-based TBLT (i.e., Task-Based Language Teaching) to enhance WTC.

**Keywords:** CALL, online planning, strategic planning, TBLT, willingness to communicate (WTC)

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#### Introduction

According to MacIntyre (2007), the main objectives of learning EFL are the development of linguistic competence, attaining mastery over the linguistic forms, and above all, utilizing language for communication. As mentioned by MacIntyre et al. (2002), L2 learning is generally characterized as an individual's participation in an authentic communication with other people with different languages and cultural backgrounds. Put it another way, using target language for communication is considered as one of the core purposes for learning EFL. In consonance with the definitions found in the literature, WTC is described as readiness to engage in discourse at a specific time with an individual or individuals using an L2 (MacIntvre et al., 2002). In other words, WTC is concerned with the extent to which an individual is enthusiastic to participate in an interaction with other individuals in different communication situations. MacIntyre (2007) defines willingness to communicate as a trait-like tendency to approach or avoid communication with other people. Kang (2005) contends that WTC is of utmost importance as it can make the class atmosphere more dynamic given that the learners participate in activities. Kang (2005) also adds that learners with high levels of WTC will probably apply L2 more frequently in their communication and function as autonomous learners by making independent endeavor to learn the language.

Given the increasing changes in today's world, as well as the penetrating effect of technology, the new developments in information technology have yielded a novel paradigm of knowledge delivery modules for adult education, which has come to be called CALL-based teaching (Simuth & Sarmany-Schuller, 2014). Technologies can provide learners with opportunities to gain access to authentic materials and context for language use and interaction with native speakers (NS) and none-native speakers (NNS). It can also make teachers utilize interactive, collaborative, and learner-centered approaches (Thomas, 2011). Through applying computers in EFL classrooms, a broad range of multimedia content with exact and authentic language models could be presented and thus provide learners with another source of target language knowledge. This will relieve EFL teachers to act as the sole model of target language knowledge in classrooms (Alsied & Pathan, 2013).

TBLT is considered as one crucial approach to teaching and language learning, and great importance has been attributed to studies investigating the role of tasks in second language instruction and acquisition over the recent decades (Müller-Hartmann & Ditfurth, 2010). Attempts have been made to find out which tasks are more effective in language learning (Ellis, 2003). Similar developments also took place in CALL-based TBLT research in order to recognize the factors that affect TBLT in CALL. A number of reasons for the employment of tasks in CALL have been put forward. For instance, calling on psycholinguistic research, Peterson (2010) argues that learning in the context of CALL can be most effective if tasks include such features as "a focus on form, a close fit to learner needs, focus on meaning and active participation on the part of learners" (p. 45). Following Meskill (1999), Peterson (2010) additionally proposes that TBLT be employed in CALL by drawing on the findings of sociocultural research. Tasks are used in CALL-based teaching for the purpose of enhancing learning opportunities. Nunan (2006) describes task as a classroom work that provides learners with opportunities to comprehend, produce, and interact in the L2 while they are focused on organizing their grammatical knowledge to express meaning. Meanwhile, research shows that planning before and during language tasks would lead to a more effective task completion, and enhances language learning (Ellis, 2009).

Planning is concerned with problem solving and influences the audience as intended by the writer. Wang (2008) says that planning makes important contributions to effective language performance. Various types of planning have been proposed including online planning and strategic planning. In on-line planning, the language learner has time to think about the task performance during the task performance (Nakakubo, 2011). In strategic planning, the language learner has time to have a cognitive plan for the language performance before doing the language task (Ellis, 2005). However, having searched the literature, the researcher has not found adequate studies to explore the impact of online planning and strategic planning in the context of CALL-based TBLT on WTC. Hence, the major contribution this study is going to make to the existing literature is to detect if online planning, and strategic planning in CALL-based TBLT can positively affect WTC.

#### Literature Review

#### Willingness to Communicate

Willingness to communicate (WTC) influences the quality of language development. Soon after being introduced, WTC caught the attention of many L2 researchers so much that it came to be viewed as an essential component of modern language teaching (MacIntyre et al., 2002). Some of the investigations carried out to assess the concept of WTC, concluded that L2 learners' WTC would determine whether individuals consider their L2 competency high and experience low communication anxiety (Clément et al., 2003). According to MacIntyre et al. (2002), the more learners' WTC is, the more frequently communication occurs in classrooms. This may encourage what Skehan (1989) describes as an individual's willingness to "talk for learning". MacIntyre et al. (1998) state that willingness to communicate is described as a variable that can impact the process of L2 instruction while it can be viewed as a final goal of L2 acquisition as well.

According to what has been stated so far, learners' WTC has gained so much attention not only as an influential factor in communication, but also as a new goal of interaction. Modern pedagogy has attributed paramount importance to communication and training language learners capable of effective interaction in target language (Riasati & Rahimi, 2018; Riasati & Noordin, 2011). Moreover, some researchers (e.g., Cao & Jiaotong, 2012; MacIntyre, 2007; MacIntyre et al., 1998) have indicated that the main objective of L2 education is supposed to be encouraging learners' enthusiasm to interact in language learning as it promotes language learning process and assists L2 learning and development. Thus, learners with higher WTC tend to have more willingness to participate in L2 and in authentic language use. Besides, Clément et al. (2003) hold that WTC affects the frequency that learners engage in language communication. Numerous factors have been mentioned in the review of related literature that directly or indirectly affect WTC. Cao (2009)

claims that learners' personality, self-confidence, emotion, topic, task type, participants, teacher, and class influence learners WTC. Some studies conducted by other researchers have indicated that social, affective, cognitive, and situational factors influence learners' WTC (Aydın, 2017; Khajavy et al., 2016; Weda et al., 2021; Xie, 2011).

Many investigations have so far been conducted with respect to WTC. In what follows, some pertinent studies carried out in Iranian context are reported. Yousefi and Kasaian (2014) conducted a study to know whether there was any correlation between WTC and Iranian EFL learners' speaking fluency and accuracy. The findings of the study revealed that there was a positive and close relation between WTC and speaking fluency and accuracy of learners. Valadi et al. (2015) conducted an investigation to examine the potential relation between WTC and L2 learners' speaking proficiency in Iran. The results indicated a rather strong correlation between the participants' WTC and their oral proficiency. Aliakbari et al. (2016) probed the effect of anxiety, self-confidence, communicative competence and international posture on Iranian EFL learners' WTC. The findings of the study suggested that there was a positive relation between participants' WTC and their attitude toward the international community, their perceived linguistic competence, and self-confidence.

# Computer-Assisted Language Learning (CALL)

Broncano and Ribeiro (1999) describe CALL as utilizing computer in teaching and language learning. Some scholars date the entrance of computers in the scene of learner instruction back to 1950s, while others trace it to the mid-1960s (Broncano & Ribeiro, 1999). CALL applicability in educational and instructional settings was the first concern in the early decades of its presence. The introduction of computers to the field of language learning supported learners with many opportunities to access copious amounts of language materials. At the same time, researchers examined the effectiveness of computer and technology in students' language learning process (McCreesh, 1998). The current philosophy of CALL underlines learning through learner-centered materials that enable learners to work on their own. Such materials mainly include two key features, namely interactive learning and individual learning (Anwar & Arifani, 2016).

With a focus on the benefits of using technology in the educational structure, one can legitimate reasons for focusing thoughts and attentions on the use of computer in personal and educational settings. Another reason for such attention might be the fact that computers offer the opportunity for encompassing the time and space confinements of traditional learning setting (Inan & Lowther, 2007). Furthermore, computers can help us use a variety of tasks and they can have a prominent impact on teaching tools. Due to their special properties, they can help both teachers and learners (Wang, 2006). In addition, the particular degree of flexibility inherent in CALL for learning and conducting an online search for information has made it appropriate for student-centered learning (Inan & Lowther, 2007). It Also makes students' learning more individualized and autonomous (Anwar & Arifani, 2016).

CALL requires a particular theory of learning in order to facilitate the

process of decision making for teachers by specifying those technologies required to help in the materialization of the effective and efficient learning and instruction (Egbert et al., 1999). Furthermore, it is worth mentioning that CALL has benefited from various schools of though and has evolved based on specific technological inventions or innovations attained in every decade since the first use of computers in language pedagogy. Thus, due to the drastic changes of CALL since its earliest times to the present, it is considered essential to integrate technology meaningfully into language pedagogy (Polat, 2017).

# **Planning**

As pointed out by Newell and Simon (1972), planning is concerned with an objective-oriented mental activity whose aim is to help learners accomplish a specific objective. According to Yuan (2001), planning has to do with using attentional resources as well as regulating cognitive processes. In fact, planning in the performance of a task renders the task more goal-oriented and fruitful. According to Hayes (2000), unlike other kinds of problem-solving behavior, the space in which planning is developed is different from the task itself.

Various studies have revealed the importance of planning in L2 writing (e.g., Ellis & Yuan, 2004; Johnson et al., 2012; Ong & Zhang, 2013). Also, according to the conducted studies, it can be suggested that planning is considered as one of the important factors to determine the quality of L2 writing (Oh et al., 2015). In the view of Ellis (2005), various kinds of planning are usually characterized with respect to the timing of the planning. Pre-task planning, which has been researched in multiple studies (Ellis, 2009) precedes task performance and could be divided into two categories: (1) strategic planning, which requires the learners to become prepared to carry out the task by taking into account the content and (2) rehearsal, which has to do with task repetition, with the first performance of the task considered as a preparation for a later performance (Ellis, 2005).

Within the context of L2 learning and teaching, planning and its contributions to writing tasks have both theoretical implications and practical significance. As indicated by Ong and Zhang (2013), a writer's production and performance are affected by planning, sub-planning, and revising processes. As an effective way for enhancing learners' language performance, direct and explicit instruction of planning strategies has proved to be very helpful (Soiferman et al., 2010). Regardless of the nature of composition (generic or highly focused), the explicit teaching of strategies for planning improves the quality of L2 learners' writing, in particular. According to Skehan (2007), online planning allows the task performers to avail of the time available while doing the task to reorganize and to plan on the move. Online planning may occur either under pressure or carefully. Pressured online planning usually progresses during our communication, or alternatively during those pedagogic tasks requiring the performer to do the task using limited time. Regarding careful online planning, the speakers or task doers have ample time at their disposal to carry out the task. Therefore, the learners are likely to carefully monitor their speech online.

Compared to careful online planning which unfolds during task

performance, strategic planning involves preparing for production by focusing on content and form prior to task performance. According to Ellis (2005), strategic planning can be divided into the following two categories: guided strategic planning and online planning. In the first category, i.e., guided strategic planning, learners are offered specific advice regarding form, meaning or both, whereas, in unguided strategic planning, no advice is provided. Ellis and Yuan (2004) examined the effect of different types of planning on L2 narrative writing. To this end, learners composed a story, making use of a sixpicture set in different task conditions (no planning, pre-task planning, and online planning). The three indices of accuracy, complexity, and fluency were used to assess the quality of the participants' written outputs. As for the pre-task planned condition, the participants took part in a 10-minute planning and 7minute composition procedure in order to accomplish a task with at least 200 written words. The time pressure was intended to limit the time spent by the participants for online planning while completing their writing task. In respect of the second category, i.e., online planning condition, the students were provided with a piece of paper and requested to start writing immediately. In this phase and unlike the pre-task planning condition, learners were not limited to 200 words and no pressure was exerted on them to finish the task quickly (Ellis, 2005). As a result, learners had extensive time to enter on-line planning during task completion. The findings of an investigation conducted by Ellis and Yuan indicated that the pre-task planning condition assisted L2 learners during the formulation process of a task, with the on-line planning condition providing them with better opportunities for monitoring.

#### **Objectives**

As a review of the previous studies reveals, most of the preceding researches concerning planning have focused on writing performance. Moreover, the area examining the effect of CALL-based teaching on WTC is rather underexplored. Hence, due to the lack of research in this area, the current research is trying to provides related empirical literature on effect of online planning and strategic planning in CALL-based TBLT on Iranian EFL learners' WTC. In accordance to the objectives of the current study following research questions are investigated:

**RQ1:** Does strategic planning (SP) in CALL-based TBLT have any significant effect on WTC of Iranian learners?

**RQ2:** Does online planning (OP) in CALL-based TBLT have any significant effect on WTC of Iranian EFL learners?

**RQ3:** Is there any significant difference between the effects of strategic planning (SP) and online planning in CALL-based TBLT on WTC of Iranian learners?

# Method *Participants*

The total number of participants for this study was 90 Iranian female EFL learners at the intermediate level of language proficiency. These participants were selected using convenience method of sampling and according to their availability. In order to have a homogeneous population

regarding individuals' language proficiency, Oxford Placement Test was given to the 120 learners and 90 participants whose scores were within the range of 28 to 36 were chosen as the intermediate level learners for the purposes of this study.

#### Instrumentation

To conduct the current study, the following two instrument were implemented:

**Oxford Placement Test.** The Oxford Placement Test (OPT) includes 60 items in three formats including multiple choice, cloze, and fill in the blanks. The test assesses learners' language performance in terms of grammar, vocabulary, and reading comprehension. According to the guidelines of the test, the language proficiency of test takers is determined regarding the following classification:

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1-17 (Beginner),
18-27 (Elementary),
28-36 (Intermediate),
37-47 (Upper-intermediate),
48-55 (Advanced),
56-60 (High advanced).
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Willingness to Communicate (WTC) Questionnaire. To assess the participants' WTC levels, the translated Persian version of a Likert-type questionnaire devised originally by MacIntyre et al. (2001) was used. The scale has 25 items and includes the factors contributing to WTC in acquiring a second language. This instrument is a Likert-type including 5 points ranging from strongly disagree (1) to strongly agree (5). This instrument has a reliability index between 72 to 86 in various contexts (MacIntyre et al., 2001).

#### Procedure

To conduct the current study, 120 female English learners were chosen from a foreign language institute. Then, the OPT was administered and based on the OPT scale, a population including 90 learners with scores within the range of 28 to 36 at the intermediate level of proficiency were chosen and placed into two experimental groups and a control group. After that, the individuals in the assigned groups were required to complete the WTC questionnaire as pretest. Following that, one of the experimental groups received CALL online planning and the other one received CALL strategic planning.

Once the groups were in place, 50 selected topics were given to three experienced instructors with a minimum of 10 years of teaching experience and they were asked to rate the topics from 1 to 5 on a scale of the least appropriate to the most appropriate. Then, the obtained scores for each topic were counted and the 20 most appropriate topics were chosen. Next, these 20 topics were rated by the students on a Likert scale from 1 to 5 from I hate this topic (1) to I love this topic (5). Following that, all the scores for each topic by the learners were added up and the 10 most popular topics were chosen for treatment which lasted for 10 sessions.

In the Strategic Planning group, the learners wrote an essay each

session on a given topic while being allowed to think of what they were going to write (content) and what language forms (word, grammar, etc.) they wanted to use in line with Ellis's (2005) definition of Strategic Planning. They were asked to write down their plan i.e., note down the words, write down the grammar to be used, think of the organization of their essays and drew a sketch if necessary. Then, they were asked to email their first drafts to the teacher. The teacher corrected the drafts via word and inserted comments on their writings and returned the corrected writings to the learners.

In another group, during ten sessions, the language learners had time to think about the task performance during the task but instructed not to write down their plan in line with Nakakubo (2011) of online planning. After finalizing their writings, they were required to send their writings to the teacher via email and received feedback similar to strategic planning group.

For the individuals in the control group conventional treatment was administered. They were given the 10 topics to write about but there were no restrictions or instructions concerning planning. Moreover, they did not receive any comments via email and just received feedback on the paper. After ten sessions, the learners were given the WTC questionnaires as a post-test. The questionnaires were scored and made ready for statistical analysis using SPSS 21.

# Data Analysis

In the current study, a quasi-experimental type of research with pretest-posttest design is employed. The initial participants were selected based on convenient non-random sampling due to availability and manageability reasons. Types of planning were the independent variables and WTC was the dependent variable. To analyze the data, the researchers used both descriptive and inferential statistics. As for descriptive statistics, means, standards deviation and variances were used. Concerning inferential statistics, ANCOVA was run to address the research questions.

#### Results

# Reliability of the Instruments

Two scales, OPT test and WTC questionnaire, were implemented in the current study. Prior to administrating the instruments in the study, to measure their Cronbach's Alpha, they were piloted on 30 participants with similar characteristics to the main participants. Table 1 displays the Cronbach Alpha statistics for the instruments of the study.

**Table 1**Cronbach's Alpha of the Instruments

Instruments	Cronbach's Alpha	N of Items
OPT	0.78	60
WTC	0.82	25

As it can be seen in Table 1, the Cronbach's Alpha indices are above 0.70 which are at a satisfactory level of reliability.

# Selecting the Participants

To select the participants of this study, OPT was administered to 120 learners and the individuals whose scores were within the range of 28 to 36 were chosen for the purpose of the current study. Table 2 displays the descriptive statistics of the 90 selected participants.

**Table 2**Descriptive Statistics of the 90 Selected Participants

	N	Minimum	Maximum	Mean	Std. Deviation
OPT	90	28.00	36.00	33.42	8.22
Valid N (listwise)	90				

To investigate the research questions, an ANCOVA was run on the WTC pretest and posttest scores of the three groups. ANCOVA has a several assumptions as normality, reliability of co-variates, multicollinearity, linearity, homogeneity of regression, and homogeneity of variance. The assumption of normality was probed through the ratios of Skewness and Kurtosis. The results are presented in Table 3.

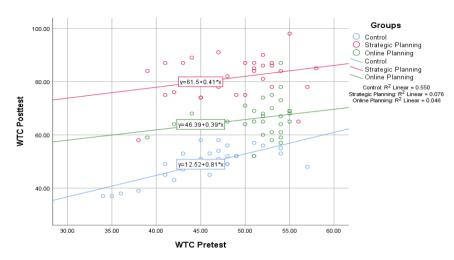
**Table 3**Descriptive Statistics and Skewness and Kurtosis Values for the WTC Pretest and Posttest Scores

	Std.							
	N	Minimum	Maximum	Mean	Deviation	Variance	Skewness	Kurtosis
WTC	90	34.00	58.00	48.77	5.47	29.97	27	50
Pretest								
WTC	90	37.00	98.00	65.81	14.86	220.85	22	51
Posttest								
Valid N	90							
(listwise)								

As displayed in Table 3, the ratio of Skewness and Kurtosis for the WTC pretest and posttest scores are all within the range of +/- 1.96. Thus, it could be concluded that the WTC pretest and posttest scores of the three group didn't show any deviation from the normal distribution and were normally distributed.

To probe the second assumption, namely the reliability of co-variates, a reliable and well-constructed WTC questionnaire was administered (Pallant, 2016) (WTC questionnaire). Since there was only one covariate, the assumption of multicollinearity was already assured. Also, considering the linearity, scatterplot of the variables was examined.

Figure 1
Scatterplot of WTC



As presented in Figure 1, the straight forward lines between the dependent variable (WTC posttest) and covariate (WTC pretest) indicates that the relationships are linier. Thus, the assumption of linearity was met. The homogeneity of regression slopes was indicated through the Tests of Between-Subjects Effects, presented in Table 4.

**Table 4** *Tests of Between-Subjects Effects for WTC Pretest and Posttest Scores* 

Dependent Variable: WTC Posttest						
	Type III Sum o	of			_	
Source	Squares	df	Mean Square	F	Sig.	
Corrected Model	16127.97	5	3225.59	76.80	.00	
Intercept	1259.77	1	1259.77	29.99	.00	
Groups	474.33	2	237.16	5.64	.00	
preWTC	554.39	1	554.39	13.20	.00	
Groups * preWTC	85.87	2	42.93	1.022	.36	
Error	3527.81	84	41.99			
Total	409455.00	90				
Corrected Total	19655.78	89				
a. R Squared = .821	(Adjusted R Sq	uared = .810	)			

As presented in Table 4, due to the higher value of the observed significant value of Groups \* preWTC than 0.05, the assumption of the homogeneity of regression slopes was assured. Finally, the Levene's test of variances was run to probe the assumption of the homogeneity of the variances (see Table 5).

 Table 5

 Levene's Test of Equality of Error Variance for WTC.

Dependent Vai	riable: WTC Posttest			
F	df1	df2	Sig.	
2.914	2	87	.1 60	

Tests the null hypothesis showed that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + preWTC + Groups

According to the obtained results of the Levene's test, the equal variances of the dependent and covariate variable suggest the assumption of homogeneity of variances was also met (F =  $2.91\ P > .05$ ). Finally, the main ANCOVA output was examined after assuring all assumptions were successfully met. The results of ANCOVA for the WTC pretest and posttest scores are provided in Table 6.

**Table 6**The Results of ANCOVA for the WTC Pretest and Posttest Scores

Tests of Between-Subjects Effects							
Dependent Variab	le: WTC Post	test					
Type III Sum Mean						Partial Eta	
Source	of Squares	Df	Square	F	Sig.	Squared	
Corrected Model	16042.10	3	5347.36	127.25	.00	.81	
Intercept	1305.88	1	1305.88	31.07	.00	.26	
preWTC	698.48	1	698.48	16.62	.00	.16	
Groups	13284.46	2	6642.23	158.07	.00	.78	
Error	3613.68	86	42.02				
Total	409455.00	90					
Corrected Total	19655.78	89					

a. R Squared = .816 (Adjusted R Squared = .810)

According to Table 6, the observed sig value of the groups turned out to be lower than the critical value of p=.000<.05 indicates a significant difference between the performances of the three groups. In order to detect the exact place of difference across the groups the test of multiple contrasts was performed. Table 7 presents the results of multiple contrasts for the WTC pretest and posttest scores.

**Table 7**Results of Multiple Contrasts for the WTC Pretest and Posttest Scores

Pairwise Con	nparisons						
Dependent Variable: WTC Posttest							
(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.b	95% Conf Interval fo Lower Bound	idence or Difference <sup>b</sup> Upper Bound	
Control	Strategic Planning	-30.30*	1.72	.00	-33.72	-26.87	
	Online Planning	-13.57*	1.85	.0	-17.26	-9.87	
Strategic	Control	30.30*	1.72	.00	26.87	33.72	
Planning	Online Planning	16.72*	1.72	.00	13.30	20.15	
Online	Control	13.57*	1.85	.00	9.87	17.26	
Planning	Strategic Planning	-16.72*	1.72	.00	-20.15	-13.30	

Based on estimated marginal means

Considering Table 7, all the contrasts (strategic planning/control, online planning/control, and strategic planning/online planning) are significant (p < 0.05). To investigate the performance of the groups, and detecting the groups with better performance, estimated marginal means were compared. The results of the estimated marginal means are presented in Table 8.

**Table 8**Estimated Marginal Means of the Three Groups of the Study for the WTC Scores

Estimates						
Dependent Variable:	WTC Posttest					
Crounc	Mean	Std. Error	95% Confide	95% Confidence Interval		
Groups	Mean	Stu. El l'ol	Lower Bound	Upper Bound		
Control	51.18a	1.25	48.70	53.67		
Strategic Planning	81.48a	1.18	79.13	83.84		
Online Planning	64.75a	1.25	62.27	67.24		

a. Covariates appearing in the model are evaluated at the following values: WTC Pretest = 48.7778.

Comparing the marginal means, the group receiving strategic planning had a higher WTC mean score (M = 81.48 > 51.48) than the control group. Hence, the first null hypothesis is rejected and it can be inferred that strategic planning (SP) in CALL-based TBLT has a considerable impact on WTC of Iranian learners. Moreover, the group receiving online planning had higher WTC mean score (M = 64.75 > 51.48) than the control group. Thus, the second null hypothesis of the current research is also rejected and it can be stated that online planning (OP) in CALL-based TBLT has a significant effect on WTC of

<sup>\*.</sup> The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Iranian EFL learners. Furthermore, the group receiving strategic planning had higher WTC mean score (M = 81.48 > 64.75) compared to the online planning group. Accordingly, it was perceived that there was a considerable difference between the effects of strategic planning (SP) and online planning in CALL-based TBLT on WTC of Iranian learners with the strategic planning group outperforming the online planning group.

# Discussion

The current investigation sought to shed light on the impact of online planning, and strategic planning in the context of CALL-based TBLT on WTC. The obtained findings of statistical analysis indicated that both online planning and strategic planning in CALL-based TBLT had profound influence on Iranian EFL learners' WTC. Moreover, it was revealed that strategic planning in CALL-based TBLT had a more significant effect on Iranian EFL learners' WTC compared to online planning.

The findings of the current research with respect to the positive impact of online and strategic planning on WTC confirm the outcomes of previous studies regarding the effectiveness of planning in language learning. For example, Wendel (1997) investigated the impact of strategic planning on language production. The results indicated that strategic planning contributed to greater complexity and fluency in language production tasks. Similarly, Farahani and Meraji (2011) showed that provisions of pre-task planning resulted in significantly fluent production. The results of a study conducted by Rahimpour and Safarie (2011) revealed that planning positively impacted writing fluency. In the same vein, Dellerman et al.'s (1996) results indicated the positive effect of planning in argumentative writing.

The findings of the present study can be justified drawing on Zone of Proximal Development (ZPD) introduced by Vygotsky. In other words. planning allows learners to take control of the complicated process of language learning in a stepwise and strategic manner which is in line with Vygotsky's theory of ZPD and sociocultural theory. The concept of ZPD developed by Vygotsky refers to the layer of skill or knowledge which is beyond the learner's present capability (Ellis, 2003). To help learners move beyond their actual capability and work within their ZPD, scaffolding techniques are invoked. Scaffolding can be seen as the high quality support a teacher offers to move a student towards his/her potential capability (Wood et al., 1976). Scaffolding is a kind of support which is contingent, faded, and aimed at the transfer of responsibility for a task. Through scaffolding, a teacher or a more competent peer helps learners in their ZPD and gradually decreases the amount of support as learners become skilled enough to perform the task independently (Gauvain. 2021). Goldstein (1999) described ZPD as a socially mediated space that is constructed through sensitivity and trust. This space in classrooms is established through negotiation among learners and between learners and teacher while involving in supportive activities that reinforce confidence and positive emotions

The ZPD points to the developmental and gradual process of learning which is reflected in learning through planning. Thus, it can be considered as a goal-oriented activity the aim of which is attaining one's potential and

independency in doing various tasks. Also, as mentioned earlier, planning is an objective-oriented process which aims at assisting an individual or a learner to perform a particular task (Newell & Simon, 1972). Therefore, planning can be considered as a mental process enabling an individual to obtain a goal. With respect to the fact that planning is a mental process, it can be provided by a more capable and knowledgeable peer in the ZPD to help an individual reach his/her potential and become independent in accomplishing a task.

The results of the present research can also be justified with respect to the benefits of CALL learning environments. In CALL learning environments, the students are eagerly participating in the learning process, which can help them develop WTC in learning environment as they have access to different online resources and more potentiality to communicate since CALL can provide a diverse and quality learning experience (Lim et al., 2019). In the current study, following Vygotskyan (1978) ideas, the tasks practiced in the CALL environment were truly anticipated to engender higher mental processes comprising problem-solving, logical speech, planning, and evaluation. Through CALL, SCT and TBLT could be better bound in order to re-contextualize the classroom in a CALL environment in an attempt to focus on tasks and meaning.

There were several features in the CALL-based TBLT employed in the current study, which seemed to contribute to the development of WTC in learners. First of all, CALL environment could help researchers/teachers to opt for a variety of tasks in the multimodal settings of CALL-based classes. Secondly, the instructors adopted a multimodal approach and as Hampel (2006) has clarified, a multimodal approach in a CALL environment bolsters oral/communicative language use. Also, the multimodal environment of CALL can provide teachers and learners with a richer context to negotiate tasks, and this, according to Müller-Hartmann and Ditfurth (2010), can have a positive effect on motivation and performance. They argued that tasks as processes could better be monitored in a CALL environment and further task support could be provided as multiple modes are available. Finally, in CALL-oriented TBLT, scaffolding is of prime significance. Considering the sort of interaction among learners, instructor, and computer in the current study, it can be stated that there exist a kind of triadic interaction (Van Lier, 2002) or triadic scaffold (Meskill, 2005). The triadic scaffolds, thus, comprised the instructor's role as a capable peer providing feedbacks, contribution of computer (E-mail) as an authentic means of receiving guided feedbacks, and learners' role in using strategic planning and their accomplishment in the interaction. According to Meskill (2005), functions and forms of triadic scaffold (instructor, learners, and computer) are considered for their potential unique role in second language and literacy instructions. In the current study, the teachers mainly provided both technical and task support to help learners pursue their collaborativecommunicative tasks independently. This left enough space for learners to scaffold each other more, and this way, they expected less task monitoring from the teachers. This is in line with Liaw (1998) and Shekary and Tahririan (2006). They argued that teachers' support could help revive communication, and the more communication is conducted by the learners, the less monitoring is required from the teachers. Considering the role of computer (E-mail) as an authentic means of interaction in triadic scaffold, conducted researches have

revealed that using computer motivates learners and anchors learners' attention (Meskill, 2005). Hegelheimer and Tower (2004) also claimed that CALL offers an ideal medium for interaction in an authentic way and using computer provides unique learning opportunities for meaningful language use (Van Lier, 2002). Moreover, it has been observed that interaction in a context that utilizes computer creates unique learning and the type of language produced there is linguistically different from the produced language in more traditional contexts (Meskill, 2005). (Mokhtari, 2013) suggested that students in general have positive attitude towards the integration of CALL into their language learning course and this will lead to increasing their tendency to communicate. As suggested by August and Hakuta (1998), language learning and literacy context that provide and sustain the social construction and negotiation of meaning-making are highly considered as optimal. All in all, it can be concluded that when TBLT and SCT are integrated in a CALL-based program, learners' WTC can get enhanced.

### Conclusion

Technology offers an authentic and natural context to fulfill methodological concepts of TBLT (Doughty & Long, 2003). Also, Thomas (2013) stated that technology breaks all the limitations and boundaries of traditional classrooms and elevates learners' role in learning context. According to Tavakoli et al. (2019), CALL can have great contributions to the enhancement of TBLT. Due to the importance of both CALL and TBLT, this study decided to use a task- based CALL context to find out whether strategic planning and online planning have any positive influence on EFL students' WTC and which one has a more significant effect on learners' WTC. Conducted researches in the CALL settings have proved to be effective in enhancing learners' WTC. It is also considered to be exciting for both teachers and learners owing to its dynamic and complex nature. In the current study, learners were required to send their writings to the teacher via e-mail. Further studies are suggested to employ other forms of technology or applications to detect whether there will be any difference in the obtained results of the current study. Also, in accordance to the findings of the current research, the incorporation of planning in language teaching curriculum is recommended and teachers are encouraged to take advantage of planning strategies when it comes to improving WTC. Similarly, more training on the planning for L2 teachers seems beneficial. The study also contributes to the L2 pedagogy by proposing TBLT-based planning exercises that can be potentially used for developing and improving learners' WTC. Moreover, foreign language teachers are required to be willing to implement planning in instructional context and their classrooms, and this in turn places more responsibility on teacher trainers and teacher training systems. In order to propose stronger statements and conclusions concerning the effectiveness of planning in enhancing WTC, researches with longer span of time are suggested. The population of the current research mainly included individuals within the age range of 18 to 42. In future, studies replicating the present investigation with various age groups will present a more detailed and thorough outcomes regarding the role of planning in developing WTC. Hence, the results can be more reliable and also generalizable. Future studies with respect to other aspects of language learning such as reading comprehension, listening comprehension, speaking, and grammar are suggested. As a result, L2 professionals and trainers can adopt more reliable decisions considering implementing planning into language curriculum.

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