

**On the Effects of Task Involvement Load on Iranian Intermediate
EFL Learners' Word Learning: Reading and writing Tasks vs.
Translation Tasks**

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Abstract

Due to the fact that all language learners and teachers are aware of the fact that acquiring a second language involves a learning of the large number of vocabulary items, investigating how vocabulary is learned and what the best ways are to enhance effective acquisition have been important lines of investigation in the field of second language acquisition (SLA). The present study intended to compare the effect of enhancing the quality of vocabulary acquisition by reading, writing, and translation tasks with different degrees of involvement load. To this end, 60 intermediate third grade junior high school students were randomly assigned to four groups. In each group a task with a different level of involvement, including two different reading tasks, a writing task, and a translation task was instructed over a six-month period. The results of the descriptive statistics and one-way ANOVA revealed that the group with the highest involvement load task outperformed the other groups in terms of vocabulary acquisition, but the translation task even led to a greater performance in the post-test. These unique findings shed some light on the importance and the practicality of translation tasks in ESL contexts.

Keywords: SLA, vocabulary acquisition, involvement load, task.

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1. Introduction

According to Boggards and Laufer (2004), the most prominent research area in SLA over the past two decades includes identifying and understanding the construct of vocabulary use and the process of using this knowledge.

Understanding the cognitive mechanisms, which drive second language vocabulary acquisition and figuring out new methods, techniques, and procedures for this purpose has always been of interest to SLA researchers and practitioners. For many years, the pedagogical practice has been based on the view that associating new knowledge with the existing one by language learners and paying more attention to the systemic and semantic aspects of words leads to a better retention and a more successful acquisition (Laufer & Hulstijn, 2001).

As teachers and practitioners need to enhance the level of learners' motivation through using appropriate tasks and materials, which language learners might find interesting Laufer and Hulstijn (2001) proposed the *Involvement Load Hypothesis* as well as the construct of *Task- Induced Involvement* , with three motivational and cognitive aspects, namely need, search and evaluation. The *Involvement Load Hypothesis* is based on the claim that vocabulary acquisition and retention are to a very large extent contingent on the amount of mental effort or involvement, which a task provides for a learner. Therefore, task involvement load could be considered as the combination of the presence or the absence of the involvement factors, need, search, and evaluation. Then, the absence of a factor is numbered as 0, moderate presence of a factor as 1, and strong presence of it as 2.

2. Literatue Review

Recently, the shared conviction is that acquisition is amenable to instruction and some of the interventionist approaches, which are known as focus on form, seem to provide better results (Day, 1986; Doughty & Williams, 1998; VanDen Branden, 1997). Focus on the form refers to the idea that overt attention to the linguistic elements is beneficial, if not necessary, to develop the learners' interlanguage (Doughty & Williams, 1998; Ellis, 2001; Long, 1991; Norris & Ortega, 2000). However, the issue of whether and how to focus on form has only been considered in L2 grammar and the belief is that L2 vocabulary is mostly acquired by extensive reading (Keating, 2008).

According to Keating (2008), the *Involvement Load Hypothesis* is not initially proposed in the form-focused instruction context, however, Duquette and Painchud (1996), believe due to the required mental effort of vocabulary tasks, the higher involvement load would lead to higher focus on form, which is lexical items. This is exactly the case for highly required search and evaluation, the two cognitive components of task- induced involvement. As

Keating (2008), illuminates looking up the unfamiliar words of a text in a dictionary (search), grabs learners' attention to more overt/focal form of the words.

Hulstjin and Laufer (2001), checked the effects of task induced involvement of advanced Dutch and Hebrew speaking of the English learners in two parallel experiments. The results of the study showed the composition-writing task by using the target words leads to better results. In another study, Folse (2006) examined the effects of different writing tasks on L2 vocabulary learning and the results showed using new words to write original sentences is as effective as providing new words in the blank spaces of the sentences.

Keating (2008) investigated the effect of task's involvement load on the word learning and retention in L2 learning. The results of the study revealed that according to the *Involvement Load Hypothesis* the retention level in writing tasks is the highest one.

Hazenberg and Hulstjin (1997) as well as Hu and Nation (2000) investigated the role of word frequency in vocabulary learning. The role of interactive tasks (Ellis, Tanaka & Yamazaki, 1994), explicit vs. implicit learning (Ellis, 1994), incidental vs. intentional learning (Ellis & Hu, 1999; Horst, Cobb & Meara, 1998; Qian, 1996), learning new vocabularies vs. learning the new meanings of already known vocabularies (Boggards, 2001), patterns of developing vocabulary over time (Laufer, 1998; Meara, 1997; Palmberg, 1987; Schmitt, 1998) have also been examined. In addition, Cohen and Apek (1981), Sanaoi (1995) and Schmitt (1997) studied the strategies, which the learners used to comprehend and learn new vocabularies. Testing the size and the depth, receptive and productive aspects of the vocabulary knowledge have been investigated by Boggards (2004), Laufer and Nation (1995, 1999) Read (1993, 2000), and Wesche and Paribakht (1996, 2007).

Due to the importance of vocabulary learning as a part of SLA, it is important to find the best means of achieving it, since it depends on a wide variety of factors. However, virtually all the textbooks and syllabi have been negligent in providing clear guidelines and descriptions. According to Nation (2008) much of the research has been slow to filter into mainstream pedagogy.

Most importantly, learners need the willingness to be active in a long period of time to achieve such a large number of lexical items, regardless of the quality of instruction. Instructors and teachers are in an appropriate place to provide the guidance, but their experience may not be enough (Ellis, 1994, 1995, 2008).

As Nation (2008) postulates, target vocabulary items should be met in the four strands of learning through meaning- focused input, meaning-focused output, deliberate study, and fluency-focused activities. When learners have the opportunity to negotiate the meaning of an unknown vocabulary item with the teacher (Ellis & Heimbach, 1997; Ellis, Tanaka & Yamazaki, 1994) or with

each other (Newton, 1995), there would be conditions that are more favorable and the increased likelihood of learning.

Negotiation, which involves working out the meaning through discussion, provides all the conditions needed for an effective learning, which are interest, understanding, repetition, deliberate attention, and generative use in new contexts (Nation, 2008). In addition, those learners who quietly observe negotiation and have a stake in the task seem to learn better (Stahl & Clarck, 1987).

When the goal is to learn new vocabulary items through reading the unknown one should not appear at the density of more than every 50 words (Hu & Nation, 2000). Vocabulary instruction before a listening comprehension task would be less helpful than listening to the input twice or reading and discussing the topic beforehand (Chang & Read, 2006). In Milton and Hopkins (2006) study, the comparison of written and spoken discourse revealed that the size and the depth of the vocabulary items are generally larger in written one.

Farajee and Arabmofrad (2015) investigated the effect of collaborative strategic vocabulary learning on EFL learners' self-efficacy. Their findings suggested collaborative strategic vocabulary learning did not have any effects on learners' self-efficacy. Ebrahimzadeh (2016) examined the effect of writing composition on Iranian young EFL learners' 12 vocabulary learning and concluded that writing compositions enhances vocabulary learning, notably because when learners are asked to write through using new words, there is a contextualized way for word acquisition. Contextualized learning enhances the meaningfulness of the instruction. Ziyaemehr (2013) studied the effectiveness of task types on vocabulary learning in multilevel language ability classes and the results indicated no statistically significant difference among students' performance across the three task types; however, their language proficiency level significantly influenced their performance in vocabulary learning. Implications for curriculum development and policy making in EFL/ESL education have been discussed.

Yaqubi, Rayati and Allemzade Gorgi (2010) investigate the involvement load hypothesis and vocabulary learning: the effect of task types and involvement load index on 12 vocabulary acquisition. Contrary to the prediction of the involvement load hypothesis, Task 2 with an involvement index of two was superior to Task 1, which had a higher index. Vosoughi and Mehdipour (2013) examined the effects of recognition task and production task on incidental vocabulary learning of Iranian EFL learners. The results indicated that both treatments had a significant effect on incidental vocabulary learning, but this effect was greater in production group. It was concluded that those who did the production task through reading outperformed those who did recognition group in vocabulary test.

Therefore, task-induced involvement is a motivational- cognitive construct, which is consists of three task factors, namely, need, search, and

evaluation. The *need* component is the motivational, non-cognitive component, which refers to whether knowledge of novel words is required to complete a task. The *need* may be moderate or strong. Search and evaluation are the cognitive components of involvement as they entail information processing by noticing the new words and allocating attention to them.

A task involvement load, then, is the combination of the absence or the presence of the involvement factors, where the absence of a factor is scored as 0, moderate presence as 1 and strong presence as 2 (Laufer & Hulstijn, 2001). It should be noted that none of the involvement factors take priority over the others. What matters is the amount of involvement that is induced by the task, as indicated by tasks involvement index.

Altogether, the present study will attempt to answer the following research questions and the corresponding hypotheses.

1. Do intermediate third grade junior high school students who assigned to reading, writing and translation tasks with different involvement loads reveal differential gains in vocabulary learning on the short-term word retention tests?
2. Do intermediate third grade junior high school students who assigned to reading, writing, and translation tasks with different involvement loads reveal differential gains in vocabulary learning on the long-term word retention tests?

3. Methodology

3.1 Participants

Sixty intermediate third grade junior high school students were recruited from a private high school in Iran by administering OPT. The participants declare that none of them had been to an English-speaking country and had many opportunities to use English language for communicative purposes. They were randomly assigned to four groups. In each group a task with a different level of involvement, including three reading tasks and a translation task was instructed over a six month period.

3.2 Procedure

To enhance the comparability of the research findings the same three tasks with different involvement loads of those used by Keating (2008) and a translation task were used. The first task was reading comprehension with L1 marginal glosses, which was read by the learners. The directions of the comprehension questions did not permit them to refer back to the text while answering the questions. The second task was reading comprehension plus eight fill in the blank questions, which was followed by a brief definition in English. The third task was writing original sentences by using the eight out of twelve already reviewed target words in ten minutes.

The fourth task was a translation task. The text consisted of 12 lines with the same subject to the previous tasks. The learners were supposed to translate it in twenty minutes.

3.3 Data Analysis

In order to answer the questions, the obtained data were presented in descriptive statistics and in order to check the significance of them one-way ANOVA was run. The inter-rater reliability was estimated with the agreement of about 90% (M= 89%) for all tasks and measures.

4. Results and Discussion

As the descriptive statistics in Table 1 show, the participants who were assigned to reading, writing and translation tasks with different involvement loads had differential gains in vocabulary learning on the short-term word retention tests. To be more accurate, the translation task has helped them to receive the highest mean among the four groups (M4= 55.95).

Table 1

Descriptive statistics of the four tasks by using short-term retention tests

Tasks	95% Confidence Interval for Mean		
	N	Mean	Std. Deviation
Task 4	15	55.9528	0.41531
Task 3	15	54.0728	0.45332
Task 2	15	53.3568	0.6582
Task 1	15	51.9957	0.66325
Total	60	53.9636	1.59984

Table 2

One-way ANOVA for the four tasks by using short-term retention tests

	Sum of the Squares	df	Mean Square	F	Sig.
Between the Groups	40.321	2	19.928	75.695	0.000*
Within the Groups	12.198	43	0.258		
Total	52.519	45			

In order to make inferential interpretations and to reject the first null hypothesis, one-way ANOVA was performed. As Table 2 shows the fourth groups revealed statistically significant differences in terms of short-term retention test results ($p < 0.005$).

The post hoc analysis, in Table 3, shows the statistically significant differences between the tasks with high and low involvement loads of 1 and 4.

These findings might indicate that the higher involvement load of a task would facilitate the short-term retention of the words. Then, the first null hypothesis was rejected safely. Accordingly, reading, writing, and translation tasks with different involvement loads have statistically significant effects on the vocabulary learning in the short-term vocabulary retention tests.

Table 3
Post-hoc scheffe for the four tasks using short-term retention tests

<i>Dependent Variable</i>	<i>(I)group</i>	<i>Mean Difference (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
Task 1	Task 1	2.69851*	0.68154	0.729
Task 2	Task 2	-3.26511	0.59302	0.000*
Task 3	Task 3	1.58126*	0.87561	0.076
Task 4	Task 4	1.65398*	0.89697	0.816

The purpose of the second question was to check if involvement load had an effect on long-term word retention, from a pedagogical and practical point of view, many teachers, and learners believe that a real learning of words occurs when long-term retention happens.

As Table 3 shows, the more involvement loads the more long-term retention of the vocabulary items.

Table 4
Descriptive statistics of the four tasks by using long-term retention tests

<i>Tasks</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Std. Error</i>	<i>95% Confidence Interval for Mean</i>		
					<i>Lower Bound</i>	<i>Upper Bound</i>	
Task 4	15	37.0150	0.96032	0.15422	33.0289	35.8738	32.73
Task 3	15	36.2231	0.95644	0.17582	32.2251	34.6518	31.02
Task 2	15	31.9854	0.88412	0.09365	30.2545	32.0176	29.75
Task 1	15	33.6517	0.62311	0.34414	29.8722	31.0325	27.98
Total	60	36.3025	2.86954	0.19584	33.0225	35.5063	36.19

The results of one-way ANOVA in Table 5, showed statistically significant differences of the four tasks, then, the second null hypothesis again could be rejected safely. Therefore, reading, writing, and translation tasks with different involvement loads have statistically significant effects on the vocabulary learning in the long-term vocabulary retention tests.

Table 5
One-way ANOVA for the four tasks by using long-term retention tests

	<i>Sum of the Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Between the Groups	38.671	2	16.025	85.691	0.000*
Within the Groups	12.029	42	0.261		
Total	50.70	46			

In order to find out where the statistical significance actually lies, the post-hoc analysis was run. As the Table 6 shows, task 4 with the highest involvement load is the most effective task on long-term retention of the vocabulary items. These results are in line with the first question findings, which generally imply that involvement load has positive effect on both short-term and long-term vocabulary items retention.

Table 6
Post-hoc scheffe for the four tasks using long-term retention tests

<i>Dependent Variable</i>	<i>(I)group</i>	<i>Mean Difference (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
Task 1	Task 1	3.26954*	0.54122	0.087
Task 2	Task 2	-5.69514	0.21654	0.000*
Task 3	Task 3	2.15416*	0.46258	0.751
Task 4	Task 4	2.89125*	0.48953	0.792

Overall, the intermediate third grade junior high school students revealed more gains in vocabulary learning by translation task. Then the third null hypothesis that implies the translation task has no statistically significant impacts on the vocabulary learning could be rejected safely.

Therefore, the results of the descriptive statistics and one-way ANOVA revealed that the group with the highest involvement load reading task outperformed the other groups in terms of vocabulary acquisition.

5. Conclusions and Implications

As it was presented in the previous tables, it could be concluded that involvement load affects both short-term and long-term retention of vocabulary items in a positive manner. Then, the answers of the three research questions would be affirmative.

In the present study, the intermediate third grade junior high school students revealed remarkable performance on task 4, 3, and even 2 in short term retention tests. Regarding their passive knowledge of the target words, these results are in line with Hulstijn and Laufer (2001). The results of the learners' long-term retention tests also maintain the claim that task 3 and 4 are more effective, although some of the differences were not statistically

significant. However, the most effective task was the translating one, which had the most involvement load and resulted in greater gains in passive and active vocabulary knowledge.

According to Hulstijn (2001), due to the absence of exposure to the target vocabulary items, a decrease in knowledge occurs over the time. Similarly, as the participants of the present study were not exposed to the target words between testing intervals, a decline in knowledge was observed.

The findings of the present study indicate the learners draw more benefit from the tasks, which induce comparison of novel vocabulary items with already known words, as it is observed in the translation task. In addition, productive use of the target words in a new context is more beneficial than reading glossed vocabulary items for basic comprehension.

Following the form-focused instruction, the results of the present study is in line with the claim that word learning and retention occurred better when vocabulary instruction includes a focus on form component. Accordingly, translation task was superior to the reading and writing tasks, as it required high degrees of evaluation.

All in all, instructors and teachers can stimulate larger initial gains in vocabulary learning and curb precipitous declines of word retention by recycling vocabulary items frequently via tasks with a high involvement load such as translation tasks.

References

- Boggards, P., (1991). *Dictionary of pedagogic vocabulary*. Cahiers lexicology. 59. 93-107.
- Boggards, p., (2001). Dictionary use while reading. *The Modern Language Journal*. 78, 285-299.
- Boggards, P., Laufer, B., (2004). *Vocabulary in the second language. Selection, acquisition and testing*. John Benjamins pub.
- Cohen, A., Aphek, K., (1981). Examining the effectiveness of bilingual dictionary. *International Journal of Lexicography*. 19, 135-155.
- Day, R., (2000). *English dictionaries for foreign learners: A history*. Oxford: Clarendon press.
- Doughty, C. J., Williams, J., (1998). *Focus on form in classroom of SLA*. Cambridge: Cambridge University Press.
- Duquette, L., Painchaud, G., (1996). A comparison of vocabulary acquisition in contexts. *The Canadian Modern Language Review*, 53, 143-172.
- Ebrahimzadeh. A.T. (2016). The effect of writing composition on Iranian young EFL learners' L2 vocabulary learning. *Journal of Applied Linguistics and Language Research*, 3, 96-101.

- Ellis, N., (1994). Consciousness in second language learning: Psychological perspectives on the role of conscious processes in vocabulary acquisition. *AILA Review*, 11, 37-56.
- Ellis, R., (1995). Modified oral input and output in the incidental acquisition of word meanings. *Studies in Second Language Acquisition*, 21, 285-301.
- Ellis, R., (2001). Investigating form-focused instruction. *Language Learning*, 51, 1-41.
- Ellis, R., (2008). *The study of second language acquisition*. (2nd ed.). Oxford: Oxford University Press.
- Ellis, R., Tanaka, Y., Yamakazi, A., (1994). Classroom interaction, comprehension, and L2 vocabulary acquisition. *Language learning*, 44, 449-491.
- Faragi, M. Arabmofrad, A. (2015). The effect of collaborative strategic vocabulary learning on EFL learners' self-efficacy. *Journal of Applied Linguistics and Language Research*, 2, 103-118.
- Folse, K.S., (2006). The effect of type of written exercise on L2 vocabulary retention. *TESOL Quarterly*, 40, 273-293.
- Hazenberg, M., Hulstijn, J., (1996). Acquisition of vocabulary from the sweet valley kids series: adult ESL acquisition. *Journal of Reading*, 21, 303-317.
- Horst, H., Cobb, K., Meara, P. (1998). The learning of foreign language vocabulary. In *Kroll and De Groot*, 9-29.
- Hulstijn, J., Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language Learning*, 51, 539-558.
- Hu, M., Nation, P. (2000). L2 vocabulary acquisition: A synthesis of the research. In *Second language vocabulary acquisition*: Cambridge University Press, 273-290.
- Keating, G. (2008). Task effectiveness and word learning in second language: The involvement load hypothesis on trial. *Language Teaching Research*, 12, 365-386.
- Laufer, B. (1998). Focus on form in second language vocabulary learning. *Euro SLA yearbook*, 5, 223-250.
- Laufer, B. (2006). Focus on form and focus on forms in second language vocabulary learning. *The Canadian Modern Language Review*, 63, 149-166.
- Laufer, B., Hulstijn, J. (2001). Incidental vocabulary acquisition: the construct of task-induced involvement. *Applied Linguistics*, 22, 1-26.
- Long, M. H. (1991). Focus on form: A design feature in language teaching methodology. In *Foreign language research in cross-cultural perspective*. 39-52. Amsterdam: John Benjamins.

- Milton, B., Hopkins, V. (2006). Explicitness, Intake, and the issue of awareness: Another piece to puzzle. *Studies in ALS Acquisition*, 21, 511-556.
- Nation, I.S.P. (2008). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Newton, J. (1995). Task-based interaction and incidental vocabulary learning: A case study. *Second Language Research*, 11, 159-177.
- Norris, J. M., Ortega, L. (2003). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language learning*, 50, 417-428.
- Palmberg, L. (1987). Issues concerning the acquisition of knowledge" effects of vocabulary training on reading comprehension. *Review of Educational Research*, 2, 253-279.
- Qian, D. D. (1996). ESL vocabulary acquisition: Contextualization and decontextualization. *The Canadian Modern Language Review*, 53, 112-142.
- Read, J. (1993). The impact of interaction in comprehension. *TESOL Quarterly*, 21, 737-758.
- Sanaoui, J. (1995). A review of research into vocabulary acquisition through dictionary use. *Studies in the Humanities and Sciences*, 44, 67-97.
- Schmitt, N. (1997). Tracking the incremental acquisition of second language vocabulary. *Language Learning*, 48, 281-317.
- Schmitt, N. (1998). *Handbook of bilingualism: Psycholinguistic approaches*. Oxford: OUP.
- Van den Branden, K. (1997). Effects of negotiation on language learners' output. *Language Learning*, 47, 589-636.
- Vosoughi, H., Mehdipour, Z. (2013). Effects of recognition task and production task on incidental vocabulary learning of Iranian EFL learners. *International Research Journal of Applied and Basic Sciences*.
- Wesche, M. B. Paribakht, T. (1996). Assessing second language vocabulary. *The Canadian Modern Language Review*, 53, 13-41.
- Wesche, M. B. Paribakht, T. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics*, 28, 46-65.
- Yaqubi, B., Rayati R.A, Allemzade Gorgi, N. (2010). The involvement load hypothesis and vocabulary learning: The effect of task types and involvement index on L2 vocabulary acquisition. *The Journal of Teaching Language Skills (JTLS)*, 2.
- Ziyaemehr, A. (2013). Investigating the effectiveness of task types on vocabulary learning in multilevel language ability classes. *European online Journal of Natural and Social Sciences*, 2.