Measuring Involvement Load - 'Evaluation'

Matthew Walsh - University of Birmingham
Saturday, November 1st, 2:35 PM - 3:00 PM (25 minutes) Room: 406,
PAC7 at JALT2008

This short presentation will summarize quantitative research comparing task characteristics in terms of factors leading to incidental vocabulary acquisition in EFL. The investigation uses Laufer and Hulstijn's (2001) construct of Task-Induced Involvement. 240 tenth grade high school learners from two different schools were tested pre-post tasks for receptive knowledge of 15 vocabulary items found within a pedagogical text. The two populations varied in levels of vocabulary knowledge. Two conditions were compared; a task that creates 'moderate evaluation', and a task that creates 'strong evaluation'. In both populations, the task creating a 'strong evaluation' (Original Sentences) was found to be more effective at enabling retention one-week post task than the 'moderate evaluation' (Gap Fill) task. Furthermore, the population with the higher initial level of vocabulary knowledge seemed to benefit relatively more from the strong evaluation task.

Involvement Load

	Need	Search	Evaluation
none	()	()	()
moderate	(+)	(+)	(+)
strong	(++)		(++)

Background leading to construct:

questions about explicit knowledge transferring to implicit

strong, weak, or no interface

noticing and attention

length of time in short term memory VS. depth of processing hypothesis

What's a 'level' of depth? Which level is deeper? We need an operationalisable definition.

Need = need to achieve, drive to comply with task requirements.

Search = attempt to find meaning of unknown L2 word, or L2 word expressing concept

Evaluation = comparison of a given word with other words, meanings, contexts.

Moderate/Strong distinction = learner initiated vs. externally provided i.e. original

compositions vs. gap fill texts.

- 1) Retention when incidental is conditional upon task factors: need, search, evaluation.
- 2) Other factors being equal, level of involvement will determine retention.
- 3) Other factors being equal, tasks designed with higher involvement will be more effective for vocabulary retention.

Task	Status of target words	Need	Search	Evaluation
Reading and comprehension questions	Glossed in text but irrelevant to task	-	-	-
Reading and comprehension questions	Glossed in text and relevant to task	+	-	-
3. Reading and comprehension questions	Not glossed but relevant to task	+	+	-/+ (depending on word and context)
4. Reading and comprehension questions and filling gaps	Relevant to reading comprehension. Listed with glosses at the end of text	+	-	+
5. Writing original sentences	Listed with glosses	+	-	++
6. Writing a composition	Concepts selected by the teacher (and provided in L1). The L2 learner— writer must look up the L2 form	+	+	++
7. Writing a composition	Concepts selected (and looked up) by L2 learner–writer	++	+	++

The more effective task	The less effective task	Reference
Meaning selected from several options +evaluation	Meaning explained by synonym	Hulstijn 1992
Meaning looked up in a dictionary +search	Reading with/without guessing +/–search	Knight 1994; Luppescu and Day 1993
Meaning looked up in a dictionary +search	Meaning provided in a marginal gloss	Hulstijn <i>et al.</i> 1996
Meaning negotiated ++ need, +search	Meaning not negotiated	Newton 1995
Negotiated input +search	Premodified input	R. Ellis <i>et al.</i> 1994
Used in original sentences ++evaluation	Used in non-original sentences	Joe 1995, 1998
Used in a composition (L1–L2 look up) ++evaluation	Encountered in a reading task (L2–L1 look up) –/+evaluation	Hulstijn and Trompetter 1998
Interactionally modified output ++evaluation	Interactionally modified input	R. Ellis and He 1999
Reading and a series of vocabulary exercises +evaluation/++evaluation	Reading only (and inferring meaning) -/+evaluation	Paribakht and Wesche 1997
Reading, words looked up in a dictionary +search	Reading only, words not looked up	Cho and Krashen 1994

Words to be targeted in research: Peer Selected

Problems with nonsense words...

Frequency (web: lextutor, vocabprofiler) K2 & AWL vs. Peer Selected. 56% hit (claimed unknown), 31% miss (not claimed).

Top peer selected as unknown	(out of 28 students)	Status of peer selected word in 'vocabprofiler' lists	All content words in text on 'vocabprofiler lists minus K1 (0-1000)
gymnasium	(16)	Off-list	From AWL
agriculture	(16)	K2 (1001-2000)	aware
(cash) crops	(15)	K2 (1001-2000)	demonstrations
to be aware	(15)	AWL	globalization
blame	(15)	K2 (1001-2000)	labor *
demonstration	(14)	AWL	From <u>K2(1001-2000)</u>
fiber	(13)	Off-list	agriculture
increase	(12)	K1 (1-1000)	blame
plantation	(10)	Off-list	clothing
warmth	(8)	K2 (1001-2000)	coffee *
globalization	(8)	AWL	crop
sweatshop	(8)	AWL	gap *
partly	(8)	K1 (1-1000)	international *
shrimp	(7)	Off-list	typical
clothing	(6)	K2 (1001-2000)	warmth
typical	(6)	K2 (1001-2000)	From 'Off-List'
			bananas *
			cash
			coconut *
			fiber
			gymnasium
			Japan *
			Nike *
			plantation
			shrimp
			soccer *
			* = Not peer selected as unknown

Examples of tasks

Moderate Evaluation, Need:

She () him for their () tr	roubles.		
A: fill the blanks above with one of the words to the financial 金銭上の			
right.	blame ~の責任にする/一のせいにする		
B: Answer the questions below.			
Q 1 : Is she angry?			
Q2: What does she think he did?			

Strong Evaluation, Need:

She (blames) him for their (financial) troubles.		
A: Make original sentences with the following words from the text.		
blame ~の責任にする/~のせいにする		
financial 金銭上の		
B: Answer the questions below.		
Q 1 : Is she angry?		
Q2: What does she think he did?		

Results:

Strong Evaluation wins. Higher initial vocabulary level may increase comparative effectiveness.

	Control	Moderate	Strong
	(No-Task)	Evaluation	Evaluation
		(Gap-Fill)	(Original Sentences)
School B	Pre 2.52(17%)	Pre 1.9 (13%)	Pre 2.14 (14%)
(Vocabulary level	Post 2.7 (18%)	Post 6.24 (42%)	Post 6.79 (45%)
test score 897)	Improved 0.18 (1%)	Improved 4.34 (29%)	Improved 4.65 (31%)
School A	Pre 5.93 (40%)	Pre 6.18 (41%)	Pre 6.89 (46%)
(Vocabulary level	Post 6.43 (43%)	Post 10.11 (67%)	Post 11.81 (79%)
test score 1462)	Improved 0.5 (3%)	Improved 3.93 (26%)	Improved 4.92 (33%)

^{*} Pre and post-tests scores are out of a total of 15 possible correct answers.

^{*} Vocabulary level indicates mean score on Nation's 2000 word vocabulary test.

Comparing pre and post-tests, how much	School B	School A
better was original sentences than gap	(Vocabulary level 897)	(Vocabulary level 1462)
fill? (Moderate vs. Strong Evaluation)	= +0.31 (2%)	= +0.99 (7%)
	P=0.39	P=0.009
	(not significant)	(significant)

Possible pedagogic implications: Strong Evaluation

Productive vocabulary learning tasks over receptive tasks i.e.

Pushed output tasks

Content-based composition tasks

Tasks that make target productive use obligatory

<u>Issues with the model:</u>

How many moderates does it take to beat a strong? (Folse says 3) Doesn't a moderate happen as a precursor to a strong? Is necessarily more time spent on a strong? (Webb says this.)

Works Cited:

Folse, Keith, S. (2006) The Effect of Type of Written Exercise on L2 Vocabulary Retention, IN: TESOL

- Quarterly 40:2 pp. 273-293
- Laufer, B. Hulstijn, J. (2001a) Incidental Vocabulary Acquisition in a Second Language: The Construct of Task-Induced Involvement
- Laufer, B. Hulstijn, J. (2001b) Some Empirical Evidence for the Involvement Load Hypothesis, IN: Language Learning, 51:3 pp. 539-558
- Webb, S. (2005) Receptive and Productive Vocabulary Learning: The Effects of Reading and Writing on Word Knowledge. IN: Studies in Second Language Acquisition, 27: pp. 33-52