The Relationship between the Ambiguity Tolerance and Incidental Vocabulary Acquisition of Advanced EFL Learners through the TED-Talk Application

Roya Khoii (PhD)<br>Naeemeh Sadat Hosseini (MA)<br>Islamic Azad University, Tehran North Branch

## InTroduchion

$>$ Vocabulary : a significant aspect of language learning

- As Wilkins (1972) succinctly notes,
"Without grammar very little can be conveyed, [but] without vocabulary nothing can be conveyed."
In order to become proficient in a foreign language a learner has to learn thousands of words because other aspects of language ability, such as grammar, are dependent on the development of the foreign language lexicon.



## How many words are there in the English language?

- The Oxford English Dictionary, 2nd edition (OED2): over 600,000 definitions.
- Webster's Third New International Dictionary, Unabridged : 475,000 main headwords, but the Preface estimates the true number to be much higher.
- In December 2010 a joint Harvard/Google study found the language to contain $1,022,000$ words and to expand at the rate of 8,500 words per year. The findings came from a computer analysis of 5,195,769 digitised books. Others have estimated a rate of growth of 25,000 words each year.
- Number of Words in the English Language: 1,025,109.8
- This is the estimate by the Global Language Monitor on January 1, 2014.
- The English Language passed the Million Word threshold on June 10, 2009 at 10:22 a.m. (GMT). The Millionth Word was the controversial 'Web 2.0'. Currently there is a new word created every 98 minutes or about 14.7 words per day.



## How Many Words are Enough?

- A large vocabulary to function in English:
- 8000-9000 word families for reading

- 5000-7000 families for oral discourse
- In addition, a number of word knowledge aspects need to be learned about each lexical item.
- These figures may seem daunting, but even so, they probably underestimate the learning challenge.
- Each word family includes Several individual word forms:
- root (stimulate)
- its inflections (stimulated, stimulating, stimulates)
- regular derivations (stimulation, stimulative).
- Nation (2006):
- the most frequent 1000 word families average about six members (types per family)
- decreasing to about three members per family at the 9000 frequency level.
- A vocabulary of 6000 word families (enabling listening) entails knowing 28,015 individual word forms, while the 8000 families (enabling wide reading) entails 34,660 words (some are very low frequency items.


## Two Contrasting Approaches to Vocabulary Acquisition

## Incidental

Intentional

Without the learner's awareness

Reading or input arising in oral interaction

Unconscious process, lack of intentionality

Explicit attention to new words

Aided by a number of conscious and planned strategies

Noticing, selective attention

## Introduction

- In FLL context there are unfamiliar lexical, grammatical, cultural, and phonological cues



## Afmbiguit Colerance

$>$ Ambiguity tolerance (AT) refers to the degree to which one is cognitively willing to tolerate ideas and propositions that run counter to their own belief system or knowledge structure .

## $>$ Caution:

$>$ Too much tolerance results in accepting every proposition

$>$ Too much intolerance results in a rigid and dogmatic mind


# I-DTALS 

## Technology, Entertainment, Design

- Run by the private nonprofit organization Founded in 1984
- Holding annual conferences under the Slogan: "Ideas Worth Spreading" since 1990
- Broad focus including many scientific, cultural, and academic topics
- Inviting innovative people to spread their novel ideas
- Addressing a wide range of topics within the research and practice of science and culture
" Transcribing and translating the talks voluntarily under the name "OTP"


## Dual Coding Theory

$>$ Cognition consists of $\mathbf{2}$ distinct mental codes:

1. Verbal code specialized for dealing with processing language.
2. Nonverbal code specialized for dealing with nonlinguistic elements.
$\checkmark$ Separate but interconnected, functioning in parallel but independently via their interconnections.
*All Knowledge, meaning, and words are represented and processed within and between these two codes.

## Cognitive Theory of Multimedia Learning (CTLM)

* Multimedia learning is learning from words and pictures.
\& 3 Assumptions

1. Dual-channel:

$>$ Working memory has auditory and visual channels.
2. Limited capacity :
$>$ Each subsystem of working memory has a limited capacity.
3. Active processing:
$>$ Deep learning depends on learners' cognitive processing during learning.

## Active processing (Meaningful Learning)

- Heading/ selecting, organizing, integrating

(Mayer, 2010a)

Reducing extraneous processing:
I. Redundancy principle: Presenting pictures/ spoken words rather than pictures, spoken words, and on-screen text
III. Temporal contiguity principle: Presenting corresponding graphics and words simultaneously

- Managing essential processing
I. Segmenting principle: Breaking a continuous lesson into learner-paced segments
III. Pre-training principle: Providing pre-training on the names, locations, and characteristics of key concepts
- Fostering generative processing
I. Multimedia principle: Presenting words and pictures rather than words alone


## Research Questions

1. Is there any relationship Between AT and incidental vocabulary acquisition of advanced EFL learners through the TED-Talk application?
2. To what extent does the use of TED application affect L2 learners'
 incidental vocabulary learning?



Level: Advanced female students

Number of the target participants: 33

Age: 19-40


## Instrumentations

I. A 69-item FCE test
II. Two AT questionnaires (SLTAS and MSTST-II)
III. Four vocabulary pre-tests

## Post-Test

IV. Five MC vocabulary post-tests


## Pre-Test

Check your progress!

## Materials

- The TED Application


## TED

- Four Lists of Questions

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FWho?
    SWhat?
    Where?
    & When?
    Why?
    How?
```

Four TED-Talk Videos


Four Video Transcripts


## Videos' Names

1. The Gentle Genius of Bonobos by Susan Savage-Rumbaugh (2007), 17:25
2. Photos that Bear Witness to Modern Slavery by Lisa Kristine (2012), 19:21
3. The Linguistic Genius of Babies by Patricia Kuhl (2011), 10:17
4. The Surprising Science of Happiness by Dan Gilbert (2006), 21:16


5. An FCE test and two AT questionnaires
6. Treatment ( 16 sessions)
7. A vocabulary pre-test in relation to the video
8. Brainstorming of the topic before the $1^{\text {st }}$ exposure
9. Watching the video
10. Answering a list of related questions before the $2^{\text {nd }}$ exposure in groups or pairs (20 minutes)
11. Listening to the video and read its transcript before the $3^{\text {rd }}$ exposure
12. Student presentation of the topics in the upcoming $2 / 3$ sessions
13. An MC vocabulary post-test
14. One delayed post-tests $(40 / 98)$ and the same two questionnaires

15. There was no correlation between AT (both before and after dividing them into three groups of high, mid, and low) and incidental vocabulary acquisition
16. The results of four paired sample t-tests indicated that all the students' had significantly improved their vocabulary knowledge at the end of the course irrespective of their differences regarding AT.

## Conclusions

$>$ The use of the TED application \& its talks fosters incidental vocabulary acquisition.
$>$ Any increase in vocabulary knowledge enhances comprehension.
$>$ The use of ICT tools (Ted Talk) in the class creates a sense of collaboration in pair/ group work.
$>$ Greater frequency of exposure to target words fosters vocabulary learning.
$>$ Frequency of exposure to target items cancels the effect of differences in ambiguity tolerance.


> Students
$>$ enjoyed a big difference to their daily lesson schedule.
$>$ showed great enthusiasm for the TED topics and Ted sessions.
$>$ demonstrated an increase in their self-confidence after the second presentations.
experienced a lively and authentic atmosphere due to TED talks use in the class.
> were eager to collaborate actively in TED video discussions.
$>$ expressed their satisfaction \& motivation at the end of the term and asked for having more TED classes.


