



**DATA-DRIVEN LEARNING OF LOW PROFICIENCY
STUDENTS FOR SELF-CORRECTION ON GRAMMAR**

Asama Tasanameelarp, Asst. Prof. Dr. Chonlada Laohawiriyanon

1. STATEMENT OF PROBLEMS

- Thailand has been facing problems related to English education
- Thai traditional styles of teaching (deductive teaching)
- Traditional grammar book containing isolated sentences to practice
- Lack of promoting goal of English learning, life long learning
- English grammar problems have resulted in the low English achievement of Thai students (Sattayatham & Ratanapinyowong, 2008; Onodera, 2007; Udomyamokkul, 2004)

2. Computer corpora & concordances

- There have been increasing numbers of using electronic concordances in grammar teaching
 - Ss change their roles from passive to active learners
 - Concordances allow Ss to construct their own knowledge
 - Concordances help developing learner autonomy
 - Corpora contain authentic language
- John (1991) terms these processes 'Data Driven Learning: DDL'

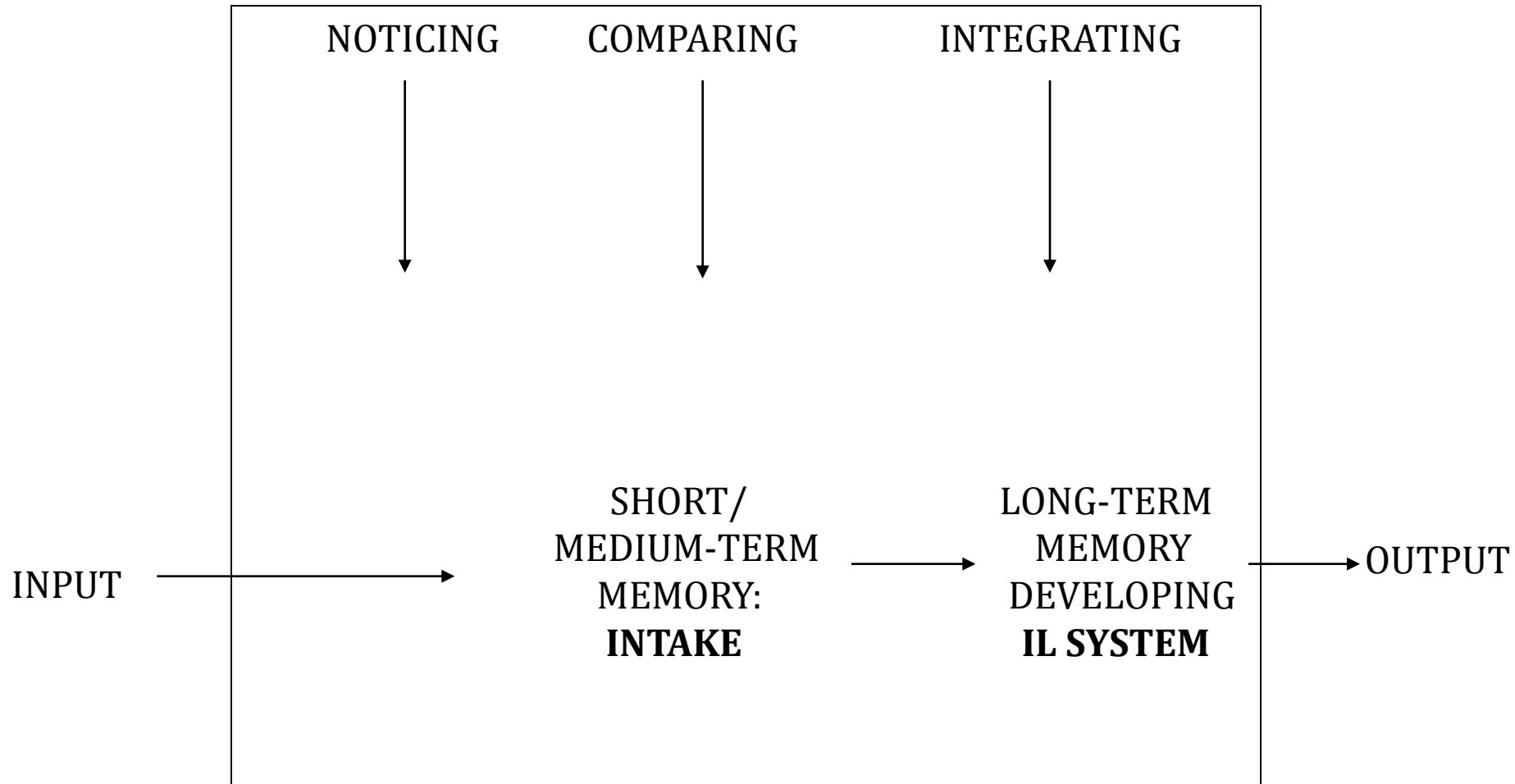
Second Language Acquisition Theories & Concordances

001. aged woman opened a window on the THIRD FLOOR of her house which wa
002. e city. Marmara Gazinosu, it is on the THIRD FLOOR, with signs pointing th
005. Mrsome space was allocated on the THIRD FLOOR east to Joseph Steward
029. rightful p the oval Blue Room on the first FLOOR of the White House. But it s
037. l sh from fallout radiation. On the ground FLOOR the radiation would be abo
041. an issue reached its test on the House FLOOR. He expected Democrats to do
061. ld cloin the Green Suite on the second FLOOR, and play the piano she had b
071. bobjects in a room on the seventeenth FLOOR of the Hotel Dumont and ble
151. Called the Gazinosu, it is on the third FLOOR, with signs pointing the way t

According to Chujo and Oghigian (2008), four steps of teaching;

- (1) allowing students to formulate the rules from concordances
- (2) explaining or correcting the students' patterns induction
- (3) providing follow-up exercises to check and test understanding
- (4) allowing students to produce the language

The process of learning implicit knowledge (Ellis, 1997:119)



[3. Research Questions]

- To what extent are low proficiency Thai EFL learners able to self-correct grammatical errors and retain required grammatical rules after using concordances?
- Which grammatical errors are corrected and retained most accurately, and which least accurately?
- To what extent can the learners' ability to self-correct the grammatical patterns become implicit knowledge? In what way?

4. Research Methodology

4.1 Subjects of the study

37 Grade 11 EFL students at a private high school in southern Thailand

Studying English for an average of eleven years

Low-proficiency level, English mean score was 59.32%

Familiar with using computers and the Internet

4.2 Instruments

Instruments	Purposes
<i><u>1. Research Instruments</u></i> a. Picture Prompts Writing Exercise	Selected five common types of grammatical errors (articles, prepositions, nouns, verbs & subject-verb agreement)
b. Concordancer	www.lex tutor .ca searched for concordances
c. Lesson Plans	Trained the learners to deal with concordancer & concordances
<i><u>2. Data Collection Instruments</u></i> a. Three ongoing tasks	Practiced error-correction by using concordances
b. Post-test	Measured Ss' ability in using concordances for self-correction
c. Retention-test	Investigated Ss' retention
d. Teacher's observation notes	Record processes & attitudes while working
e. Stimulated recall interviews	To elicit in depth information .

Corpus Concordance English (v.5)

And precast link extractor [?]

French German

Mar 09 - FULL Bimodal Search! Keyword and Associated Word BOTH do families Jan 09 - N-word L+R sort.

Keyword(s): equals In corpus : Brown (1,000,000 words)

CONTROLS: Sort By Words left of keyword Line Width (chars.) 100 Number of Lines

OPTION: With associated Word within 4 words

- Brown (1,000,000 words)
- Brown (1,000,000 words)
- BNC Written (1,007,000)
- BNC Spoken (965,000)
- US TV Talk (2,000,000)
- All of above (c. 4 million)
- Brown + BNC Written (2+ million)
- NEW 1k Graded Corpus (530,000)
- NEW 2k Graded Corpus (920,000)
- BNC Law (2,287,000)
- BNC Med (1,450,000)
- 2000 list corpus (240,000)
- Univ. Word List (550,000)
- TV Corpus Marise
- Focus on Vocab (82,300)
- Call of the Wild (24,000)
- Learner (Student) (150,000)
- Learner (Teacher) (61,000)
- JPU Learner (300,000)
- Sheridan Book 1 (108k)
- Sheridan Book 2 (128k)
- Sheridan Book 3 (147k)

Get concordance Reset Demo 1 Demo 2 Demo 3

Link Extractor

Select parameters above, test, then: Show Full URL Test URL Select

Keyword(s)

Corpora

With associated

Get concordance

4.3. Data Collection

Introductory Phase, weeks 1-13, (50 minutes-period)

Writing a story (wk 1)

Tutorial how to use concordancer & how to deal with concordances
Lessons 1-4 (wks 2-13)

The experimental process, weeks 14-17

Three tasks of error-correction (wks 14-16)

Post-test (self-correction) (wks 17)

The post- experimental process, weeks 17-18

The stimulated recall interviews (wks 18)

Retention-test (six weeks later)

5.1 Number of Errors Corrected and Mean Difference Between the Post-Test and the Retention Test

Test	No. of grammatical errors	Mean	SD	Mean Difference	t	Sig. (2-tailed)
Post-test	11.89*	64.34	20.65	10.01	2.021	.05**
Retention test	10	54.32	18.79			

** Significant at 0.05 level

After six weeks of learning by using concordances, Ss could retain only a half of all grammatical rules

5.2 Types of Grammatical Corrected the Most and Least Often and Mean Differences between the Post-Test and the Retention Test

Types of errors	Post-test		Retention test		Mean Difference	t	Sig. (2-tailed)
	Mean	SD	Mean	SD			
Nouns	83.11	35.38	87.84	21.74	<u>4.73</u>	.721	.48
Articles	<u>84.16</u>	25.03	72.97	32.48	11.19	1.451	.16
Sub-v. agreement	78.87	33.51	<u>91.89</u>	27.67	13.02	1.787	.08
Prep	<u>47.07</u>	41.86	<u>29.73</u>	34.28	<u>17.34</u>	1.955	.06
Verb	<u>48.29</u>	40.23	<u>23.42</u>	30.29	<u>24.86</u>	3.054	.00**
Total	64.34	20.65	54.32	18.79	10.01	2.021	.05*

** Significant at 0.01 level

* Significant at 0.05 level

5.3 Percentage of Grammatical Errors Corrected based on Stages of Learning Implicit Knowledge

Grammatical errors	Noticing		Comparing		Integrating	
	No. of SS	%	No. of SS	%	No. of SS	%
Subject-verb agreement			3	8%	34	<u>92%</u>
Articles			5	14%	32	<u>86%</u>
Nouns			7	19%	30	<u>81%</u>
Verb	32	<u>86%</u>	4	11%	1	3%
Prep	29	<u>78%</u>	5	14%	3	8%

6. Conclusion & discussion

- Ss learned and induced correct usage of subj-v. agreement, art. & n. because of their sufficient background knowledge
- Prepositions and verbs were difficult to correct
- L1 interference and Ss' overgeneralization of grammatical rules
- The complexity of concordances lines
- Unfamiliarity with inductive learning

7. PEDAGOGICAL IMPLICATIONS

- Simplify task by controlling the amount of language inputs and present concordance lines with simple language structures in the form of printouts
- Adapt the use of concordances by discussing with them rather than purely promote autonomous learning
- Give learners psychological preparation by telling the advantages that they will receive from independent learning and motivate them by telling them that everyone has the ability to take responsibility for their own learning

8. Recommendation for Further Study

- Think-aloud protocol
- A small number of participants (5-6) for better observation results
- Investigate strategies are most useful in dealing with concordances