

Effects of English Instruction as a Foreign Language by Using MIAP Model: A Case of Thai-Nichi Institute of Technology

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Abstract

The purposes of this study were 1) to study effects of English instruction as a foreign language by using MIAP model: a case of Thai-Nichi Institute of Technology, 2) to compare learning ability of the students before and after the class, 3) to compare learning ability of experimental group and controlled group, and 4) to investigate satisfaction with the MIAP model of the TNI students.

The research samples were 50 undergraduate students in higher education level derived through simple random sampling technique in first semester of 2016 academic year. The instrumentation for gathering the data were lesson plans based on MIAP model, a test, and a satisfaction questionnaire. Statistics used for analyzing the data were frequency, percentage, mean, standard deviation, t-test, effect size and content analysis.

Research findings were as follows:

1. Effects of English instruction as a foreign language by using MIAP model of the TNI students were at very high level.
2. The learning ability of the learners after the class was higher than before the class and there were statistically significant differences at 0.05 level.
3. The learning ability of experimental group was statistically significant differences at 0.05 level.
4. The learners was highly satisfied with the English instruction as a foreign language by using MIAP model.

Keywords: *English Instruction as a Foreign Language, Using MIAP Model.*

Introduction

Studies of second language acquisition focus primarily on the learning of oral language. They provide valuable information about how second languages are learned and the factors that influence the language learning process (Krashen, 1982).

Many of the initial studies on English language learning were aimed at defining the good language learner. As the knowledge of second language acquisition increased in the past, teachers and researchers concluded that no single method of language teaching and research findings would mark the start of worldwide success in teaching a second language (Brown, 2007). It was realized that certain learners seemed to be successful regardless of methods or teaching process (Rubin and Thompson, 1994).

Dörnyei (2002:8) advocated that motivation indicates wanting to learn a language in order to identify with the community that speaks it to promote second language acquisition regardless of the age of the learner or whether the language is being learned as a second or a foreign language. Moreover, Masgoret and Gardner (2003) advocated that teachers can help learners identify their motivations for learning English and their short-term goals and reflect on their progress and achievements.

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The MIAP instructional model can be divided into four important processes: motivation, information, application, and evaluation (Suchart Sirisukpaiboon, 2011) which initially stated that Faculty of Technical Education, King Mongkut's University of Technology, North Bangkok, Thailand. The faculty has been established for 40 years under the name of Thai-German Technical Teacher College (TGTTC), there were German teachers practiced research providing with practical industrial practice of MIAP model (M=Motivation, I=information, A=application and P=progress). It has also long widely applied as a model for vocational education.

College of General Education and Languages emphasized Japanese and English language teaching for technical and business students at Thai-Nichi Institute of Technology. The MIAP model would be suitable for the students. The researcher required to study the effectiveness of this approach with teaching languages in different situation. Thus, the MIAP model was applied to teach in English class to improve English learning ability of the students at TNI. The results of the study will be guideline to develop teaching and learning in next occasion.

Research Purposes

- 1) to study effects of English instruction as a foreign language by using MIAP model: a case of Thai-Nichi Institute of Technology
- 2) to compare learning ability of the students before and after the class
- 3) to compare learning ability of experimental group and controlled group, and
- 4) to investigate satisfaction with the MIAP model of the TNI students

Research Design

The data was gathered and analyzed as follows:

1. Population and sampling

1.1 The population is undergraduate students at Thai-Nichi Institute of Technology, Bangkok, in the first semester of 2016 academic year. There were 200 students from English classes.

1.2 The sample consisted of 50 students, and was derived from a simple random sampling technique.

2. Duration in experiment

The experiment ran for 12 weeks (2 hour per week)

3. Variables

Variables in this study were as follows:

3.1 The English learning ability of undergraduate students.

3.2 The satisfaction of undergraduate students with English language learning based on MIAP model.

4. Research Instruments

4.1 Lesson plans based on MIAP model

4.2 A 1-hour English ability test (30 items: 30 scores).

4.2 A satisfaction questionnaire constructed by the researcher assessing opinions about English language learning based on MIAP model.

5. Construction and Development of Research Instruments

The researcher constructed the English ability test and the questionnaire in the following way:

Proficiency test

Students were given pre- and post-class proficiency tests. The tests had the same format and consisted of 30 items (30 scores). The duration of each test was 60 minutes.

First, the researcher studied the objectives of English language teaching, and focused on English reading, listening, writing, grammar, and vocabulary skills and strategies. Emphasis was placed on learning for main ideas, learning for topic sentences, learning for pronoun references, learning for facts and opinions, learning for author's purposes, learning for inference.

Moreover, the researcher used the textbook, journal articles and related research as an outline to create the test. The researcher also, created a table of test specifications including language learning skills and goals for each items, and then created one set of proficiency tests following this table of test specifications.

Table1: Table of Test specification

Skills	Mode	Type of Text	Cog. Level	Item type	Total No. of item	Weight %	Scoring	Times Mns
Reading	R	Passage	Comprehension	M/C	6	20	1-0	18
Listening	L	Dialogue	Comprehension	M/C	6	20	1-0	12
Writing	W	Error Identifications	Critical	M/C	6	20	1-0	10
Grammar	G	Structures	Critical	M/C	6	20	1-0	10
Vocabulary	V	Incomplete sentences	Comprehension	M/C	6	20	1-0	10
Total					30	100		60

Then, the researcher derived the difficulty and discrimination of the tests (P-R value) from standard criteria consisting of 30 items. Five experts examined, corrected and improved the accuracy, validity and reliability of the language and contents of the test. The test had a difficulty level between 0.20-0.80 and a rank of discrimination at 0.20 or over. The calculation of the test reliability was used K-R 20 by Kuder-Richardson (Cited Boonriang Khajonsil 2000: 165). Then, the English ability test was used to sampling of the research. The data obtained from a small group experiment was analyzed to find reliability by using α -Coefficient formula stated by Cronbach (1974: 161). Coefficient of reliability was 0.89.

The table following demonstrated the difficulty of test items (p) and the discrimination of test items (r) of English learning ability test.

Table 2: The difficulty of test items (p) and the discrimination of test items (r) of English learning ability test

Item	p	r	Item	p	r
1	0.40	0.49	16	0.46	0.66
2	0.70	0.67	17	0.45	0.62
3	0.63	0.47	18	0.43	0.61
4	0.33	0.71	19	0.60	0.61
5	0.67	0.40	20	0.73	0.62
6	0.53	0.43	21	0.33	0.26
7	0.53	0.49	22	0.63	0.63
8	0.33	0.66	23	0.53	0.74
9	0.47	0.67	24	0.80	0.40

10	0.67	0.53	25	0.47	0.80
11	0.71	0.37	26	0.20	0.40
12	0.63	0.67	27	0.73	0.40
13	0.67	0.53	28	0.28	0.29
14	0.68	0.53	29	0.51	0.52
15	0.29	0.27	30	0.49	0.78

The Questionnaire

The researcher created a questionnaire to investigate students' opinions about English language teaching. The questionnaire was constructed using opened-end questions.

The data from the experts was applied with the following formula:

$$IOC = \frac{\sum R}{N}$$

IOC replaces Index of item-Objective Congruence

R replaces Experts' opinions

N replaces Number of experts

Questions rated less than 0.5 by the experts were considered and improved.

Statistic Used in Data Analysis

1. Frequency, percentage, mean, standard deviation was used for the English learning scores.
2. The comparison between pretest and posttest scores was done using t-test, which was calculated by computer program.
3. The comparison of the scores between a controlled group and an experimental group was done using t-test.
4. Effect size was used to measure the effect size of population from learning by this method.
5. The data from the questionnaire were analyzed by using content analysis method.

Results

Results of the data analysis

Phase 1: Results of English ability test scores analysis of undergraduate students

The assessment of English learning ability of undergraduate students at TNI, the researcher used English learning ability test which created according to test procedure. Therefore, percentage of scores was calculated from criteria as following; (adapted from Thaweerat, 2000; Wongsothorn, 1995)

- 81-100 means very high
- 61-80 means high
- 41-60 means moderate
- 21-40 means low
- 1-20 means very low

Table3: results of English ability test of 50 undergraduate students from post-test.

No.	Listening (6)	Reading (6)	Writing (6)	Grammar (6)	Vocabulary (6)	Scores (30)	percentage
1	4	5	4	5	6	24	80.00
2	6	5	5	6	6	28	93.33
3	5	5	6	6	6	28	93.33
4	6	5	4	5	6	26	86.66
5	4	5	5	6	6	26	86.66
6	4	5	4	4	4	21	70.00
7	5	5	5	5	6	26	86.66
8	6	6	5	5	5	27	90.00
9	5	5	5	6	5	26	86.66
10	6	6	4	4	5	25	83.33
11	6	4	4	5	5	24	80.00
12	5	5	4	4	5	23	76.66
13	4	5	5	5	5	24	80.00
14	4	4	4	4	4	20	66.66
15	4	5	5	6	6	26	86.66
16	4	4	4	4	5	21	70.00
17	4	5	5	6	5	25	83.33
18	4	4	4	4	4	20	66.66
19	5	4	4	4	5	22	73.33
20	4	5	6	4	5	24	80.00
21	4	4	4	5	6	23	76.66
22	4	5	6	6	6	27	90.00
23	4	4	5	5	4	22	73.33
24	5	6	6	6	5	28	93.33
25	6	4	5	5	6	26	86.66
26	5	3	4	4	4	20	66.66
27	6	4	4	4	4	22	73.33
28	5	5	5	6	6	27	90.00
29	4	4	5	5	4	22	73.33
30	5	4	4	5	4	22	73.33
31	4	4	4	5	4	21	70.00
32	3	5	4	5	4	21	70.00
33	4	6	4	4	4	22	73.33
34	5	5	6	6	4	26	86.66
35	4	4	5	5	5	23	76.66
36	5	5	5	5	5	25	83.33
37	4	4	4	5	5	22	73.33
38	5	5	4	4	5	23	76.66
39	5	5	6	6	5	27	90.00
40	4	5	5	5	5	24	80.00
41	5	5	6	6	6	28	93.33
42	6	5	4	4	5	24	80.00
43	6	5	5	5	6	27	90.00
44	4	4	5	6	5	24	80.00
45	5	4	5	4	4	22	73.33
46	6	6	5	4	5	26	86.66
47	5	5	5	5	6	26	86.66

48	4	5	6	6	5	26	86.66
49	5	5	5	5	5	25	83.33
50	4	4	5	5	5	23	76.66
Total						1,210	80.66%

The table showed that the total scores of the 50 undergraduate students were 1,210 and 80.66% for the total percentage which effects of English learning ability of undergraduate students were at very high level.

Table 4: results of mean scores and standard deviation of 60 graduate students in each skill and in the total

No.	Skills	Mean (\bar{x})	S.D
1	Listening	4.72	0.80
2	Reading	4.72	0.67
3	Writing	4.76	0.71
4	Grammar	4.98	0.76
5	Vocabulary	5.02	0.74
Total		4.84	0.73

The table showed that the total of mean scores was 4.84 (S.D=0.73) which in skills ranged from (\bar{x} =5.02) for vocabulary, (\bar{x} =4.98) for grammar, (\bar{x} =4.76) for writing, (\bar{x} =4.72) for reading, and (\bar{x} =4.72) for listening respectively.

Phase 2: The comparison of pretest and posttest scores of the 50 undergraduate students. The statistics used in the data analysis consisted of mean (\bar{x}), standard deviation (S.D), and t-test

Table5: The comparison of pretest and posttest scores of the 50 undergraduate students

Scores	Number of students	Total score	(\bar{x})	S.D	t	Sig
Pretest	50	30	18.27	5.41	32.014*	0.00
Posttest	50	30	24.20	2.35		

*Statistical significance at 0.05 level

The table showed that the learning ability of undergraduate students after the class was higher than before the class and there were statistically significant differences at 0.05 level.

Phase 3: Comparison English learning ability based on MIAP model of experimental group and controlled group

The table of score comparison English learning ability based on MIAP model between experimental group and controlled group, standard deviation, difference and t-test of the 50 samplings

Test	N	Total score	(\bar{x})	S.D	t	Sig
Experimental group	50	30	24.20	2.35	39.714*	0.000

Controlled group	50	30	17.82	5.29		
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* Statistical significance at 0.05 level

This table illustrated that the posttest scores of experimental group were higher than posttest scores of controlled group at statistical significance at 0.05 level ($Sig = 0.000 < 0.05$). The mean score of experimental group's posttest equaled to 24.20 which was higher than controlled group's posttest pretest score (17.82 out of 30). The t-test was 39.714. It indicated that the ability in English learning based on MIAP model was more effective than before learning and the experimental group's English learning ability was higher than controlled group's English learning ability which followed hypothesis 3

Phase 4: The results of the student satisfaction questionnaire were as follows:

	Mean	S.D.	Meaning
1. Content	4.55	0.70	highest
2. Teaching Materials	4.47	0.65	high
3. Instructor	4.62	0.59	highest
4. Teaching- learning activity	4.58	0.70	highest
4.1 Motivation stage	4.53	0.69	highest
4.2 Information stage	4.62	0.58	highest
4.3 Application stage	4.56	0.71	highest
4.4 Progress stage	4.62	0.82	highest
Total	4.55	0.66	highest

According to the table, it was demonstrated that the students' satisfaction based on MIAP model was at the highest level on the overall. When considered in each aspect, it was found that content, instructor, and teaching-learning activity were at the highest level. For the rest aspect, it was at high level. The results indicate high student satisfaction with the course, affirming hypothesis.

Conclusions

1. Effects of English instruction as a foreign language by using MIAP model of the TNI students were at very high level.
2. The learning ability of the learners after the class was higher than before the class and there were statistically significant differences at 0.05 level.
3. The learning ability of experimental group was statistically significant differences at 0.05 level.
4. The learners were highly satisfied with the English instruction as a foreign language by using MIAP model.

Discussion

According to the study and data analysis, the results of this study could be discussed as follows.

1. The result of hypothesis 1 presented the effects of English instruction as a foreign language by using MIAP model of the samples was at very high level. In this way, it might concern with the teaching-learning activity based on MIAP model constructed from the view of Williams (1994) and Suchart (2011) who anticipated that teaching-learning activity consisted of opening the chance of the learners to study from easy activity to difficult activity. Moreover, the MIAP instructional model can be divided into four important processes:

motivation, information, application, and evaluation which are very useful for teaching and learning languages.

2. The scores of learning ability of undergraduate students after the class were higher than before the class with statistical significance at 0.05 level. In this way, it might be because TNI students used learning strategies to improve their skills which related to the view of Stern (1975) who produced language learning strategies. He believed that the good language learner is characterized by a personal learning style or positive learning strategies, an active approach to the learning task.

3. The scores of learning ability of experimental group students were higher than control group students with statistical significance at 0.05 level. In this way, it might be because experimental group students had used an appropriate language learning strategy which related to the notion of Richard (1994) who advocated that language learners will be successful in the tasks due to use of an appropriate language learning strategy.

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Bio data

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