

CHAPTER IV

DATA ANALYSIS AND RESULTS

This chapter presents the results of the research, according to the two main objectives, which are 1) to design a course of basic English lessons for undergraduate Architecture students in order to improve their overall performance in the English language with a primary emphasis on speaking followed by reading, listening and writing skills respectively and 2) to develop students' proficiency in using the English language in the Architecture field.

Data collecting instruments used included the lesson plan evaluation form, the proficiency test, the presentation observation form and the interview. They were employed to evaluate the effectiveness of the lessons and the proficiency of English abilities of the Architecture students who took the course of basic English for undergraduate Architecture. The data analysis and results of the research are presented as follows:

4.1 Lesson Plan Implementation

The results of the lesson plan implementation by the observer and the researcher of lesson 1 to lesson 18 are presented in Table 4. There were three lessons that were not evaluated by the observers since they were not counted as the teaching periods. Those lessons were lesson 2 (pretest), lesson 17 (project presentations) and lesson 18 (posttest). The effectiveness of each lesson plan was rated using the following mean score interval.

Mean score	Effectiveness
4.50 - 5.00	Very effective
3.50 - 4.49	Effective
2.50 - 3.49	Moderately effective
1.50 - 2.49	Fairly effective
0.00 - 1.49	Least effective

According to Table 4, all lesson plans were rated effective with the exception of lesson 1 which was rated very effective. Each of the questions received a mean score of more than 3.50 which shows that all lessons supported the learning objective well, i.e., the lessons achieved the third objectives of this research: develop students' proficiency in using the English language in the Architecture field. In addition, the assignments that learners completed had gradually improved, i.e., they explained their tasks more clearly as the course progressed.

Lessons	Area Evaluated																		Overall Effectiveness Rating
	Learning objectives		Contents		Warm-up		Instruction		Language focus		Closure		Activities		Overall				
	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ			
Lesson 1	5.00	0.00	4.83	0.37	5.00	0.00	5.00	0.00	4.17	0.37	4.50	0.50	5.00	0.00	4.79	0.33	Very effective		
Lesson 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not rated		
Lesson 3	5.00	0.00	4.33	0.47	4.25	0.43	4.00	0.00	3.83	0.69	4.00	0.00	4.38	0.48	4.26	0.38	Effective		
Lesson 4	5.00	0.00	4.33	0.47	4.00	0.71	4.25	0.43	4.33	0.75	4.00	0.00	4.25	0.43	4.31	0.34	Effective		
Lesson 5	4.50	0.50	3.83	0.69	4.00	0.71	4.25	0.83	3.83	0.69	4.50	0.50	4.50	0.50	4.20	0.31	Effective		
Lesson 6	4.00	0.00	4.00	0.58	4.25	0.43	4.25	0.43	3.67	4.47	4.50	0.50	4.25	0.43	4.13	0.27	Effective		
Lesson 7	5.00	0.00	4.17	0.37	3.75	0.43	3.25	0.43	4.17	0.37	3.50	0.50	4.38	0.48	4.03	0.59	Effective		
Lesson 8	4.50	0.50	4.33	0.47	4.25	0.83	3.50	0.50	3.83	0.69	3.00	0.00	4.25	0.66	3.95	0.54	Effective		
Lesson 9	5.00	0.00	4.50	0.50	4.00	0.71	4.50	0.50	3.67	0.75	3.50	0.50	4.13	0.33	4.19	0.52	Effective		
Lesson 10	4.50	0.50	4.33	0.47	4.00	0.71	4.50	0.50	3.83	0.69	3.50	0.50	4.13	0.60	4.11	0.37	Effective		
Lesson 11	5.00	0.00	4.50	0.50	4.25	0.83	4.00	0.00	3.67	0.47	3.00	0.00	4.13	0.60	4.08	0.63	Effective		
Lesson 12	4.50	0.50	4.67	0.47	4.25	0.43	4.00	0.00	4.00	0.58	3.50	0.50	4.25	0.43	4.17	0.38	Effective		
Lesson 13	4.50	0.50	4.00	0.58	3.75	0.43	4.25	0.43	4.00	0.58	3.50	0.50	4.38	0.70	4.05	0.35	Effective		
Lesson 14	4.50	0.50	4.17	0.69	4.25	0.43	3.75	0.43	3.50	0.50	3.50	0.50	4.25	0.43	3.99	0.40	Effective		
Lesson 15	5.00	0.00	4.67	0.47	4.25	0.43	3.75	0.43	3.50	0.50	4.00	0.00	4.63	0.48	4.26	0.54	Effective		
Lesson 16	5.00	0.00	3.83	0.37	4.50	0.50	4.75	0.43	4.00	0.58	3.50	0.50	3.88	0.33	4.21	0.55	Effective		
Lesson 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not rated		
Lesson 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not rated		
All lessons combined	4.73	0.32	4.30	0.30	4.18	0.31	4.13	0.46	3.87	0.25	3.73	0.50	4.32	0.26	4.18	0.20	Effective		

Table 4: Results of lesson plan implementation by area evaluated

4.2 Results of Pretest and Posttest of Learners' Ability

The overall English proficiency of learners was assessed by using a pretest and a posttest. Learners did not know that most of the questions in the posttest were going to be the same as in the pretest. Some test items in the pretest were removed after the learners had done the pretest, to illustrate, parts A, B, D and F used all the same questions while a few test items in parts C and E were not included in the posttest. For example, in the pretest, questions about basic types of houses were presented as two questions but were combined as a single question in the posttest. The questions in the posttest were about 90% of the pretest. The percentage below shows the details of the differences between the test items in pretest and posttest.

Part	Pretest (%)	Posttest (%)
A	100	100
B	100	100
C	100	85
D	100	100
E	100	55
F	100	100
Total	100	90

Because of the time pressure, the researcher did not have a chance to try out the pretest. After the learners took the pretest, some test items were removed since the researcher found that some questions were too

difficult for the learners to answer. Nevertheless, the researcher realized that the posttest should have been the same as the pretest. Even though 10% of the questions in the pretest differed from those in the posttest, only the identical questions were counted and analyzed in this research. The maximum total score for both the pretest and the posttest was 81 points. The results of the pretest and the posttest are summarized in Table 5.

According to the results of the pretest and posttest in Table 5, it showed that the mean scores of the posttest are higher than that of the pretest. The mean score of pretest is 33.59 while the posttest mean score is 66.97. The result of the comparison between pretest and posttest was compared using a paired sample t-test. The difference between the pretest and posttest scores was highly significant ($P < 0.000$). This means that all learners had improved their proficiency after completing the course of basic English for undergraduate Architecture students.

Parts	Part A		Part B		Part C		Part D		Part E		Part F		Total		Overall	
	10 points		10 points		22 points		5 points		14 points		20 points		81 points		100%	
Learners	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
L1	3	6	10	10	12	14	0	2	3.5	8	4	9.5	21.5	49.5	26.5	61.1
L2	4	8	7	8	10	14	1	4	4	12	10	16.5	36	61	44.4	75.3
L3	4	10	8	8	12	16	1	4	9.5	14	5	17	39.5	69	48.9	85.2
L4	1	5	8	9	6	12	1	3	8	14	12	12	36	55	44.4	67.9
L5	1	5	10	10	8	12	0	3	7	12.5	8	15	34	57.5	42.0	71.0
L6	4	5	5	7	12	14	0	3	4.5	13	5	10	30.5	52	37.7	64.2
L7	0	10	7	7	6	12	0	5	1.5	11	7	17	21.5	62	26.5	76.5
L8	1	7	7	8	6	12	1	3	7	10	5	9	27	49	33.3	60.5
L9	1	10	10	10	8	16	1	2	4	13	14	18	38	69	46.9	85.2
L10	2	7	10	10	8	12	1	5	8	13.5	10	14	39	61.5	48.1	76.0
L11	1	10	3	6	2	16	1	3	2	7	4	6	13	48	16.0	59.3
L12	2	10	7	7	6	16	1	3	2.5	4.5	2	4	20.5	44.5	25.3	55.0
L13	1	10	6	6	6	12	2	3	2	11	1	7	18	49	22.2	60.5
L14	4	10	7	7	6	12	1	3	3	5.5	3	7	24	44.5	29.6	55.0
L15	3	10	8	8	4	14	0	5	9.5	13	9	13	33.5	63	41.4	77.8
L16	5	7	6	10	6	10	0	5	4	14	6	7	27	53	33.3	65.4
Mean	2.31	8.12	7.44	8.19	7.38	13.38	0.69	3.50	5.00	11.00	6.56	11.38	33.59	66.97	44.47	82.68
S.D.	1.54	2.09	1.97	1.47	2.90	1.89	0.60	1.03	2.74	3.13	3.67	4.53	9.80	10.13		

Table 5: Comparison of the pretest and posttest results

4.3 Results of Learners' Project Presentation Performance Assessments

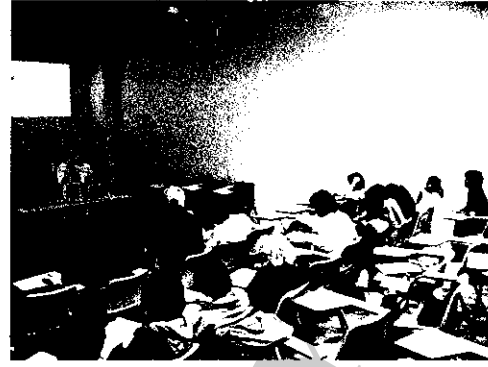
At the completion of the course, there was a project presentation when the learners' presentation performances were assessed. Two Architecture instructors, the main thesis adviser, the researcher and the peers used the presentation evaluation form in order to observe the learners' speaking abilities in the area of accuracy, fluency and comprehensibility. There were two parts of the results: 1) the one that was observed by the peer and 2) another one that was observed by the experts. The total score of the presentation was five points. Results are shown in Table 6. Table 6 presents the results of the learners' performances that were observed by the peer, the results revealed that the learners got the overall mean score of 3.55 in their presentations. The learners who got the highest score were learners 2, 11 and 10, in that order, while learners 9, 13, 5 and 14, in that order, got the lowest score.

Next, apart from the peer evaluations, the learners also were assessed by the experts. Regarding to Table 6, all learners mastered the variety of skills with an overall mean score of 3.18. More or less as same as the results of the peer evaluation, some learners got the same ranking orders. Learners 2, 11 and 3 got the highest scores while learners 9, 13 and 14 got the lowest score in their presentations.

Learners	Accuracy			Fluency			Comprehensibility			Overall		
	Learners		Experts	Learners		Experts	Learners		Experts	Learners		Experts
	Mean		Mean	Mean		Mean	Mean		Mean	R	Mean	R
L1	3.00		3.00	3.00		3.00	3.89		3.00	11	3.00	9
L2	4.60		4.00	4.67		4.25	4.78		4.50	1	4.25	1
L3	3.10		3.50	3.22		3.25	3.67		3.75	10	3.50	3
L4	3.90		3.25	3.67		3.25	4.00		3.75	4	3.42	4
L5	3.00		3.00	3.22		3.25	3.33		3.25	12	3.17	6
L6	3.17		3.00	3.42		3.25	3.42		3.25	9	3.17	6
L7	3.33		3.00	3.33		3.00	3.92		3.50	7	3.17	6
L8	3.17		3.00	3.17		2.75	3.75		2.75	8	2.83	12
L9	2.92		2.25	2.83		2.25	3.17		2.50	12	2.33	15
L10	3.83		3.00	3.92		2.75	4.00		3.25	3	3.00	9
L11	4.25		3.75	4.33		3.75	4.33		3.50	2	3.67	2
L12	3.18		3.00	3.82		3.25	3.64		2.75	6	3.00	9
L13	2.73		2.00	3.00		3.00	3.18		2.75	15	2.42	14
L14	2.82		2.50	3.27		2.75	3.45		2.25	12	2.50	13
L15	3.64		3.25	3.82		3.50	4.09		3.25	5	3.33	5
Overall	3.38		3.03	3.51		3.15	3.77		3.17	3.55	3.18	
Combined overall mean	3.21		3.33			3.47			3.37			

Table 6: Mean score and rank (R) of peer and experts' assessment of project presentations

Note: One learner did not participate in the project presentations



Experts and learners sat in the same room to observe and rate performances of the learners' presentations to control exogenous variables.

4.4 Interviews

At the end of the course, the learners were interviewed in order to know their attitudes toward the course. All of them agreed that they had learned the new knowledge that could be applied to their daily study and everyday life. Some of them responded that they had a chance to learn new and useful vocabulary and expressions, which can be used when they read textbooks or talk with NS instructors.

In addition, they also revealed that they needed more time in learning and practicing the language. Finally, all learners agreed that the course should be taught as the credit course since it would fit with other subjects in their professional studies' schedule.

In summary, the learners who gained higher scores in their presentations were the same individuals who got higher scores on both pretest and posttest evaluations. The average mean score of the peers and experts in the final presentation was 3.37 on a scale of 0 to 5. All learners

have developed their proficiency in presenting and learning English based on the results of the presentation and the proficiency test. Therefore, both pretest/posttest and presentation evaluations support the conclusion that the two objectives of this research have been achieved.

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