

CHAPTER IV

RESULTS

This chapter presents the results of the study gathered by using both qualitative and quantitative measures based on the IST model. The results are presented in accordance with 12 evaluative dimensions: (1) needs, (2) goals and objectives, (3) teaching methods, (4) teachers, (5) tasks, (6) teaching materials, (7) resources, (8) assessment and evaluation, (9) students achievement, (10) students' autonomy in language learning, (11) students' opinions about the evaluated course, and (12) factors affecting students' learning outcome. As mentioned previously on page 44, among the 12 dimensions, goals and objectives as well as students achievement are derived from Tyler's objectives-based approach. Other dimensions are developed from Stake's responsive evaluation except for dimension 10: students' autonomy in language learning initiated by the researcher of this study.

Needs

Research question: Do the goals and objectives of the course meet the needs of the stakeholders?

The data were obtained from interviews with 3 parties of the stakeholders: audiences, English teachers, and subject teachers. They were, then, analyzed using content analysis. The Chi-square test was also applied to examine the congruence of opinions of different groups of stakeholders.

Table 4.1 Congruence of the goals and objectives of the LNG 102 course with the needs of stakeholders

Stakeholders	Opinions		
	Congruent	Incongruent	Undecided
Audience	0% (n=0)	0% (n=0)	100% (n=2)
English teachers	66.7% (n=2)	33.3% (n=1)	0% (n=0)
Subject teachers	66.7% (n=2)	33.3% (n=1)	0% (n=0)
Total	50% (n=4)	25% (n=2)	25% (n=2)
χ^2	5.64 (df = 4)		
Contingency Coefficient	0.71		

As shown in Table 4.1, the frequency data shows that 50 % of the stakeholders thought that the goals and objectives of the LNG 102 course were congruent with their pre-specified needs. The audiences (the Department Head and the Faculty Dean) were both uncertain about the answer to the question concerning students' needs. However, they all agreed (100%) that the LNG 102 course, the evaluated course, might not meet the needs of every group of the stakeholders for these reasons:

1. The Department of Language Studies did not do a needs analysis in the first place before designing their task-based English curriculum. She said:

They [needs] were anticipated by the curriculum developers that the students should learn 3 to 4 skills, and tasks were developed accordingly. There was no formal needs analysis conducted by the department of Language studies (A).

2. There was no concrete evidence of students' improvement in terms of language abilities as well as learner autonomy that are the main goals of this course. The Faculty Dean said in the interview:

Students' *immediate* achievement cannot be assessed while the students are still studying at the university but it may be measured by

interviewing graduates who can use English autonomously and effectively for daily communication and work.

The university board wants to see concrete evidence of student achievements measured by using some kinds of objective tests like exit exam or standardized tests.

Also, since the LNG 102 course has been modified many times, the department head as well as the English teachers thought that the current course was rather skill-based and their students needed training on language skills that could prepare them for more task-based courses. The English teachers' opinions about the congruence of the goals and objectives of the LNG 102 course and the students' needs varied slightly. More than 60 % of them thought that the LNG 102 course met the target needs of their students. The students need to use learning strategies and study skills in their own studies. One teacher mentioned that the resourcing task was much too difficult for the students to perform.

Two-thirds of the subject teachers thought that their students needed to study English for academic purposes, since they needed to learn study skills and learning strategies, particularly reading strategies. Reading and understanding English texts were required for students in every field of study. Other skills, namely writing, speaking and listening were not as necessary as the students rarely used English for communication outside class. In the regular programs, Thai, which is the students' first language, was used as a medium of instruction. Only some reading assignments and teaching materials were in English. However, all subject teachers agreed that the students needed to learn all four English skills, including grammar. Additionally, one of the subject teachers recommended that the third or fourth year students needed to study an English for Communication course emphasizing speaking and listening skills before they graduate to prepare them for their future careers (see Appendix O for more detail).

To investigate whether there were any differences in the attitudes of different groups of stakeholders towards the congruence of the goals and objectives of the LNG 102 course and the students' language needs, the Chi-square test (Fisher's Exact Test) was applied due to the small sample size (Wanichbancha, 2003: 311). With the χ^2

(0.05,df = 4) = 5.64, it can be concluded that the attitudes of different groups of stakeholders were not significantly different. In other words, there was, however, a rather high relationship between types of stakeholders and their opinions ($cc = 0.71$). That means types of stakeholders and their opinions were markedly congruent.

Goals and objectives

Research question: Are the goals and objectives appropriate for the specified groups of students?

The data obtained from interviews with the audiences, the English teachers, the subject teachers and the students were analyzed using content analysis. The Chi-square test was also applied to investigate the congruence of opinions of different groups of stakeholders.

Table 4.2 Appropriateness of the goals and objectives of the LNG 102 course with the specified groups of students

Stakeholders	Appropriateness		
	Yes	No	Undecided
Audience	0% (n=0)	50% (n=1)	50% (n=1)
English teachers	66.7% (n=2)	33.3% (n=1)	0% (n=0)
Subject teachers	66.7% (n=2)	33.3% (n=1)	0% (n=0)
Students	77.8% (n=14)	11.1% (n=2)	11.1% (n=2)
Total	69.2% (n=18)	19.2% (n=5)	11.5% (n=3)
$\chi^2(df=6)$	7.61		
Contingency Coefficient	0.46		

Table 4.2 shows that the stakeholders' views toward the appropriateness of the goals and objectives of the LNG 102 course with the specified groups of students (KMUTT students) were considerably different. The Department Head thought that the LNG 102 course was much too difficult compared with the students' actual level of English proficiency. She said:

I'm not so sure that the goals and objectives of the course would meet the needs of the students. We need to ask every department [to which we provide English support courses] what English skills they want their students to practice.

She suggested that there should be some pre-sessional courses like Remedial English to help less proficient students improve their background knowledge. The Dean viewed self-study tasks as very important for leading to lifelong learning. More opportunities should be provided for practicing English both inside and outside class. No matter the type of course, the ultimate goal should be to enable the students to communicate in English. She said: "Actually, the university wants our graduates to be efficient in communicating, particularly verbally, in English."

On the other hand, more than half of the English teachers said that the course content was appropriate to the KMUTT students. However, they thought that some self-study tasks are too time-consuming and confusing, such as resourcing tasks and portfolio tasks. The teacher who disagreed with other teachers' opinions said:

I think the goals and objectives of the course are not appropriate, but I still don't know what our students really need to study. They [curriculum developers] themselves set goals (ET).

The majority of the subject teachers (66.7%) believed that the goals and objectives of the LNG 102 course were appropriate for their students, especially for the receptive skills of reading and writing. About 77.8% of the students revealed that they liked this course. They were fond of the course content, of groupworking, and of self-study tasks. However, the students still complained about overwork due to the amount and difficulty of the tasks. Some tasks needed to be left out or modified. If there is to be any course improvement, the teaching methods and the course content would be the two first two elements that need improving.

Overall, 69.2 % of the stakeholders reported that they thought that the goals and objectives of the LNG 102 course were appropriate for the specified groups of students. According to the Chi-square analysis (Fisher's Exact test), $\chi^2 (0.05, df 6) =$

7.61, it revealed no significant difference in the stakeholders' opinions about the appropriateness of the goals and objectives of the LNG 102 course with the specified groups of students. This means that the relationship between the types of stakeholders and their opinions was rather low (0.46). In other words, the types of stakeholders were slightly consistent with their opinions.

Teaching methods

Research question: Is the teaching method relevant to the prespecified objectives?

The data obtained from classroom observation was conducted for three classes of three different teachers. The three lessons of each class were: (1) the first lesson when the task is introduced, (2) the during-task lesson, and (3) the final lesson when students present task outcome.

Table 4.3 Findings from classroom observations

Things to be observed	Observed Frequency (f_o)	%	χ^2 values
*1. The teacher introduced the topic and task.	3	100	-
*2. The teacher identified the steps involved in doing a task.	2	66.7	0.33
*3. The teacher provided preliminary activities to introduce the topic.	2	66.7	0.33
*4. The teacher described what the task involves; what its goals are and what outcome is required.	0	0	-
5. The teacher gave clear instructions.	9	100	-
6. The teacher tried to get every student to talk.	3	33.3	1.0
7. The teacher allowed students to ask when they got stuck.	9	100	-
8. The teacher allowed enough preparation time for each task.	9	100	-
9. The teacher gave specific language guidance.	9	100	-
10. The teacher actively involved all students.	6	66.7	1.0

Things to be observed	Observed Frequency (f_o)	%	χ^2 values
11. The teacher talked in a target language (English).	9	100	-
12. The teacher talked in a mother tongue (Thai).	9	100	-
13. The teacher balanced a target language and a mother tongue.	5	55.6	0.11
14. The teacher concluded the lesson by summarizing the main points.	7	77.8	2.78
15. The teacher provided opportunities for students to learn by themselves.	7	77.8	2.78
16. The teacher motivated students.	7	77.8	2.78
17. The teacher actively involved every students in classroom activities.	6	66.7	1.00
18. The teacher had students share information in discussion tasks.	3	33.3	1.0
19. The teacher encouraged students to ask questions.	1	11.1	5.44*
20. The teacher encouraged students to speak out while being asked questions.	1	11.1	5.44*
21. The teacher allowed students to talk in a target language (English).	6	66.7	1.0
22. The teacher allowed students to talk in a mother tongue (Thai).	9	100	-
23. The teacher allowed students to use both English and Thai in communication.	9	100	-
24. The teacher encouraged students to correct their own mistakes effectively.	1	11.1	5.44*
25. The teacher encouraged students to evaluate their own performance.	0	0	-
26. The teacher had students work in pairs or small groups.	7	77.8	2.78
27. The teacher did not talk too much.	5	55.6	.11

Things to be observed	Observed Frequency (f_o)	%	χ^2 values
28. The teacher encouraged students to cope with problems and experience with solution.	7	77.8	2.78
29. The teacher provided students enough practice of language form.	5	55.6	0.11
30. The teacher enhanced students' confidence in handling the task.	7	77.8	2.78
χ^2 (df= 7)			0.78

Notes:

- The expected frequency of Items 1 to 4 = 3, but the expected frequency of Items 5 to 30 = 9

Results from the Chi-square test ($\chi^2 = 0.78$, $p > 0.05$) revealed that, in general, there was no significant difference in the teaching methods of the three teachers, except for three teaching techniques: encouraging students to ask questions, encouraging them to answer questions, and correcting their own mistakes effectively.

Table 4.4: Teachers' uses of teaching methods related to task-based instruction

Teaching methods	Mean	SD	Meaning
1. Introducing the topic and task	1.00	0.00	A lot
2. Identifying the steps involved in doing a task	0.67	0.58	A lot
3. Providing preliminary activities to introduce the topic	0.67	0.58	A lot
4. Describing what the task involves; what its goals are and what outcome is required	0.00	0.00	Not at all
5. Providing clear instructions	1.00	0.00	A lot
6. Trying to get every student to talk	0.33	0.50	Moderate
7. Allowing students to ask when stuck	1.00	0.00	A lot
8. Allowing enough preparation time for each task	1.00	0.00	A lot
9. Providing specific language guidance	1.00	0.00	A lot
10. Actively involving all students	0.67	0.50	A lot
11. Talking in a target language (English)	1.00	0.00	A lot

Teaching methods	Mean	SD	Meaning
12. Talking in a mother tongue (Thai)	1.00	0.00	A lot
13. Balancing a target language and a mother tongue	0.56	0.53	Moderate
14. Making a conclusion of the lesson by summarizing the main points	0.78	0.44	A lot
15. Providing opportunities for students to learn by themselves	0.78	0.44	A lot
16. Motivating students	0.78	0.44	A lot
17. Actively involving every student in classroom activities	0.56	0.53	Moderate
18. Having students share information in discussion tasks	0.33	0.50	Moderate
19. Encouraging students to ask questions	0.11	0.33	Little
20. Encouraging students to speak out while being asked questions	0.22	0.44	Little
21. Allowing students to talk in a target language (English)	0.67	0.50	A lot
22. Allowing students to talk in a mother tongue (Thai)	1.00	0.00	A lot
23. Allowing students to use both English and Thai in communication	1.00	0.00	A lot
24. Encouraging students to correct their own mistakes	0.11	0.33	Little
25. Having students evaluate their own performance	0.00	0.00	Not at all
26. Having students work in pairs or small groups	0.78	0.44	A lot
27. Trying not to talk too much	0.67	0.50	A lot
28. Encouraging students to cope with problems and experiment with solutions	0.78	0.44	A lot
29. Proving students with enough practice of language form	0.44	0.53	Moderate
30. Enhancing students' confidence in handling the task	0.78	0.44	A lot

According to Table 4.4, 20 out of 30 techniques of the task-based teaching methodology were used in the observed classrooms. However, 5 of them were moderately used:

1. Balancing a target language and a mother tongue (mean = 0.56)

2. Actively involving every student in classroom activities (mean = 0.56)
3. Proving students enough practice of language form (mean = 0.44)
4. Having students share information in discussion tasks (mean = 0.33)
5. Trying to get every student to talk (mean = 0.33)

The other five teaching methods were scarcely used. They are:

1. Encouraging students to speak out while being asked questions (mean = 0.22)
2. Encouraging students to ask questions (mean = 0.11)
3. Encouraging students to correct their own mistakes (mean = 0.11)

There were two teaching methods were not used:

1. Describing what the task involves; what its goals are and what outcome is required (mean = 0.00)
2. Having students evaluate their own performance (mean = 0.00)

Teachers

Research question: Are the teachers skillful in task-based instruction?

The following table shows the three English teachers' scores obtained from classroom observation:

Table 4.5: Descriptive statistic for classroom observation data

	Lesson 1	Lesson 2	Lesson 3	Total
Teacher A	27	20	17	64
Teacher B	21	18	18	57
Teacher C	11	21	10	42
Statistics				
Mean	54.33			
SD	11.24			
SE	6.48			
Sum	163			
Variance	126.33			
χ^2 (df = 2)	0.005*			

* $p < 0.05$

Table 4.5 illustrates English teachers' obtained scores from classroom observation. Teacher A (score = 64) and Teacher B (score = 57) seemed to have better performance than teacher C (score = 42). The findings in Table 4.5 show that, in general, all of the observed English teachers were moderately skillful in task-based instruction (mean score = 54.33). Results from the chi-square test reveal that the English teachers' performances were not significantly different. It means that all of them applied task-based language teaching in their classes at some certain degree.

Tasks

Research question: Are the tasks consistent with the course objectives?

The data obtained from the interviews with teachers were analyzed using content analysis. The Chi-square test was applied to examine the congruence of the proportion of the English teachers' opinions.

Table 4.6: Opinions of the English teachers about the consistency of the tasks and the course objectives

Stakeholder	N	Opinions	
		Consistent	Inconsistent
English teachers	f_o	2 (67%)	1 (33%)
	f_e	1.5	1.5
$\chi^2 (df = 1)$		0.33	

Table 4.6 reveals the data obtained from interviews with English teachers. Most of them thought that almost all of the tasks were consistent with the course objectives of the LNG 102 course except for the *note-taking from listening* task that one teacher thought that was not relevant. She said:

Note-taking from listening is a very difficult skill and students do not need it to complete the assigned tasks. The most needed skills are reading and writing.

With $\chi^2 (0.05, df = 1) = .33$, It can be concluded that there was no difference in English teachers' attitudes towards the consistency of the tasks and the course objectives. This means their opinions were mostly related.

Teaching materials

Research question: Are the teaching materials relevant to the prespecified objectives?

Table 4.7 shows the data obtained from material evaluation. The teaching materials were reviewed and analyzed descriptively.

Table 4.7: Analysis of teaching materials

Teaching Materials	Course objectives												Total	%	Rank		
	1.1	1.2	1.3	1.4	2.1	2.2	2.3	3.1	3.2	4.1	4.2	5.1				5.2	
Introduction to resourcing task					√		√	√			√	√	√	√	6/13	46.2	4
Guidelines for portfolio task and self-study					√		√	√	√		√	√	√	√	8/13	61.5	2
Dictionary task	√	√			√			√		√	√				7/13	53.8	3
Getting main ideas and related details	√	√			√	√		√		√	√				7/13	53.8	3
Note-taking from reading	√	√			√	√		√	√	√	√				8/13	61.5	2
Note-taking from listening		√	√		√	√		√	√	√	√				8/13	61.5	2
Summary writing	√	√			√	√		√	√	√	√				8/13	61.5	2

Teaching Materials	Course objectives														Total	%	Rank
	I.1	I.2	I.3	I.4	2.1	2.2	2.3	3.1	3.2	4.1	4.2	5.1	5.2				
Grammatical mistakes		√		√	√			√		√	√	√	√	√	8/13	61.5	2
Presentation skills			√	√	√	√		√	√	√	√	√	√	√	10/13	76.9	1
<i>Total</i>	4/9	6/9	2/9	2/9	9/9	6/9	3/9	8/9	5/9	8/9	9/9	4/9	4/9	4/9			
%	44.4	66.7	22.2	22.2	100	66.7	33.3	88.9	55.6	88.9	100	44.4	44.4	44.4			
<i>Rank</i>	5	3	7	7	1	3	6	2	4	2	1	5	5	5			

To investigate how well the teaching materials fit the specified course objectives (see Appendix A for more details), material evaluation was performed. The task-related teaching materials were rated according to their coverage and relevance to the objectives of the LNG 102 course. Table 4.7 reveals that the every set of materials (100%) included teaching of cognitive strategies and teaching English for academic purposes (Objectives 2.1 and 4.2). Other objectives, for example, to enhance students' ability to think creatively and to enable students to use some of English skills in their future careers (Objectives 3.1 and 4.1) were in the second rank. Additionally, students learnt how to use different types of compensation strategies (Objective 2.2). Materials concerning listening and speaking strategies seemed to be insufficient (Objectives 1.3 and 1.4).

Table 4.8: Summary of evaluation of teaching materials of each task

Teaching materials	Analysing			
	Well-matched to course objectives	Matched to course objectives but need to be supplemented	Need to be revised	Mismatched to course objectives
Introduction to resourcing task	-	-	√	-
Guidelines for portfolio task and self-study	-	√	-	-
Dictionary task	-	√	-	-
Getting main ideas and related details	-	√	-	-
Note-taking from reading	-	√	-	-
1.6 Note-taking from listening	-	√	-	-
1.7 Summary writing	-	√	-	-
1.8 Grammar mistakes	-	√	-	-
1.9 Presentation skills	√	-	-	-

As shown in the above table, in sum, 7 out of 9 sets of teaching materials (77.7%) of the teaching materials for the LNG 102 course matched to their objectives.

The materials on presentation skills were the most perfectly matched ones. However, some more supplementary materials including *Guidelines for Portfolio tasks and Self Study*, *Dictionary task*, *Getting Main Ideas and Related Details*, *Note-taking from Reading*, *Note-taking from Listening*, *Summary Writing*, and *Identifying Grammatical Mistakes*, need to be provided. For the portfolio tasks, assessment criteria together with examples should be included. The materials on *Introduction to Resourcing Task* should be revised by adding some more information on assessment criteria.

Resources

Research question: Are the resources adequate?

Table 4.9 reports the findings from interviews with teachers and students that were analyzed using content analysis.

Table 4.9: Opinions of the stakeholders about the adequacy of the resources provided

Stakeholder	Opinions		
	Adequate	Inadequate	Undecided
English teachers	100% (3)	0% (0)	0% (0)
Students	100% (18)	0% (0)	0% (0)
Total	100% (21)	0% (0)	0% (0)

Both English teachers and students had the same opinion about the adequacy of the resources including textbooks, magazines, and journals available at the main library or the Self-Access Learning Center (SALC), as well as online texts on the Internet. They all agreed that the resources provided were adequate. The two most popular resources were the Internet and the main library respectively. None of the students reported they ever used the SALC (see Appendix O for more detail). This may be due to the following reasons:

1. Even though the SALC provides ample resources, both printed and non-printed text, most of them are used for practicing English for one's own pleasure, not for academic research.
2. As the students' projects were linked with their portfolio tasks i.e., they worked on the same topics for the two tasks, the topics chosen were mostly science-oriented, for example, air pollution, nanotechnology, abortion, fermented beverages, mobile phone, coffee, and green tea. The information for such topics was quite difficult to find in the SALC.
3. The majority of the students reported that they prefer to use the Internet as it is easy-to-access and user-friendly.

Assessment and Evaluation

Research question: Are the assessment procedures appropriate to the prespecified objectives?

The data obtained from interviews with teachers were analyzed using content analysis, and the congruence of the stakeholders' opinions was, then, tested by the Chi-square test.

Table 4.10: Opinions of the stakeholders about the appropriateness of the assessment procedures

Stakeholder	Opinions		
	Appropriate	Inappropriate	Undecided
English teachers	67% (n=2)	33% (n=1)	0% (n=0)
Students	61.1% (n=11)	38.9% (n=7)	0% (n=0)
Total	61.9% (n=13)	38.1% (n=8)	0% (n=0)
χ^2 (df = 1)	0.03		
Contingency Coefficient	0.04		

The English teachers' opinions about the assessment procedures of the LNG 102 course were quite different. The majority thought that it was appropriate.

However, one teacher commented that 55 % of the total scores obtained from the objective tests (quizzes and a final exam) were considered too much and inconsistent with task-based instruction. Subjectivity in scoring was the most important but unsolved problem. She said: “To avoid subjective marking, the students need to do a lot of quizzes.”

More than 60 % of the students agreed that the assessment criteria were appropriate. They also mentioned teachers’ differences in scoring the students’ work even though they were supposed to use the same criteria. One student said:

It’s obviously seen that teachers use different criteria. I mean... the class of which the teacher is an easy grader seems to get better grades than the class of which the teacher is tougher in grading.

With χ^2 (0.05, df = 1) = 0.03, it reveals a significant difference in the stakeholders’ opinions towards the appropriateness of the assessment procedure. The relationship of the numbers of stakeholders and their opinions was extremely low (0.04). That means the numbers of the stakeholders were barely consistent with their attitudes (0%).

Student Achievement

Research question: Do the students make significant gains in their language abilities after taking this course?

The achievement tests (pre- and post-tests) were administered to the subjects to find out whether they make any gains after taking the LNG 102 course.

Table4.11: Descriptive Statistics for the Pretest and Posttest Scores

Statistic	Pretest Score	Posttest Score
N	189	189
Mean	30.73	38.22
SD	10.14	11.25
Median	30.00	39.00
Minimum	10	11
Maximum	61	67
Range	51	56
Skewness	0.225	-0.128

Statistic	Pretest Score	Posttest Score
Kurtosis	-0.246	0.020

Table 4.11 shows that the mean (30.73) and median (30.00) of the pretest were very close. The mean (38.22) and median (39.00) of the posttest were slightly different. Also, the kurtosis of the posttest was near zero. The Kolmogorov-Smirnov Test was, then, applied to investigate whether the two sets of test scores were normally distributed (see Appendix P). It was found that both pre-test and post-test scores were normally distributed ($p > 0.05$). Therefore, the test scores were analyzed using a paired-sample t-test to find out whether the subjects made any gains after taking the LNG 102 course.

Table 4.12: Analysis of student achievement on the LNG 102 course

	k	Mean	SD	Mean Difference	<i>t</i>	drm
Student Achievement	80	Pre-test = 30.73 Post-test = 38.22	10.14 11.25	7.5	11.14*	0.81

* $p < 0.05$

Table 4.12 shows that the students' scores on the two tests were significantly different ($p < 0.05$). The students' gain scores was approximately 8 (10 %) of the score they gain on the pretest (mean difference = 7.5). Additionally, to measure the magnitude of the treatment effect, an effect size was utilized. The formula is (<http://web.uccs.edu/lbecker/Psy590/escalc3.htm>):

$$\text{drm} = (\text{mean 1} - \text{mean 2}) / \text{SDdiff}$$

Result from the calculation ($t = 11.14$, $df = 188$, $p = 0.005$, $d = 0.81$) revealed that there was a very large effect. In other words, there was a few chance of failing to detect the effect. The reliability of the findings is very high.

Table 4.13: Gained Scores from Different Components

Components	k	Pretest		Posttest		Differences in mean
		Mean	SD	Mean	SD	
Using the dictionary	30	10.80	4.69	12.56	5.15	1.76 (6%)
Getting main ideas and related details	30	14.53	5.14	16.09	5.34	1.46(5%)
Note-taking and summary writing	20	5.33	3.75	9.35	4.18	4.02(20%)

As shown in Table 4.13 among the three parts of the achievement tests including using the dictionary, getting main ideas and related details and note-taking and summary writing, the students gained the highest scores on the note-taking and summary writing (20%), followed by using the dictionary (6%) and getting main idea and related details (5%) respectively.

Student Autonomy

Research question: Do the students develop their autonomy in language learning during and after taking this course?

Students' autonomy in language learning was investigated using the self-assessment checklist and portfolio assessment. The Chi-square test was employed to test whether the proportions of the students' responses obtained from the self-assessment checklist were different.

Table 4.14: Findings from self- assessment checklist

No.	Students' perceptions towards Self-directed learning	Responses			χ^2 (df = 2)
		Yes	No	Undecided	
1	I can learn English by myself without teacher supervision.	72	103	14	64.79*
2	I can learn English by working alone at my own pace.	18	76	95	51.08*
3	I can choose my own way of learning English.	19	65	104	57.78*
4	I can choose my own learning situation suitable to my way of learning English.	11	75	103	70.60*

No.	Students' perceptions towards Self-directed learning	Responses			χ^2 (df = 2)
		Yes	No	Undecided	
5	A big problem in most classes is that students have different levels.	17	32	140	142.95*
6	If I had the right materials, I would prefer to spend some time studying alone.	33	77	79	21.46*
7	I don't have enough choice about what I study.	50	89	50	16.10*
8	I don't have enough choice about how I study.	60	78	51	6.00
9	Besides language class, I always plan activities that give me a chance to use English.	52	79	58	6.38*
10	Besides language class, I always plan activities that give me a chance to learn English.	46	80	63	9.18*
11	CDs are good resources for me to learn English.	54	67	68	1.94
12	Videos are good resources for me to learn English.	27	73	89	32.89*
13	Computers are good resources for me to learn English.	9	26	154	199.46*
14	The library is a good resource for me to learn English.	36	83	70	18.70*
15	Self-Access Learning Center (SALC) is a good resource for me to learn English.	32	95	62	31.52*
16	I can set my own goals and objectives of learning.	10	91	86	66.10*
17	I can check whether I accomplished my goals and objectives of learning.	16	79	93	53.69*
18	I can figure out my special problems.	11	43	134	129.97*
19	I can deal with my special problems.	21	102	66	52.29*
20	I can develop my own techniques to practice listening.	15	88	83	53.65*
21	I can develop my own techniques to practice speaking.	19	80	87	45.13*

No.	Students' perceptions towards Self-directed learning	Responses			χ^2 (df = 2)
		Yes	No	Undecided	
22	I can develop my own techniques to practice reading.	10	62	114	87.23*
23	I can develop my own techniques to practice writing.	24	92	70	38.84*
24	I can develop my own techniques to improve my pronunciation.	19	88	79	45.39*
25	I can develop my own techniques to improve my grammar.	36	117	33	73.26*
26	I can develop my own techniques to improve my vocabulary.	18	82	86	46.97*
27	If I make a mistake, I always ask people to correct me.	26	63	96	39.77*
28	I can correct my own mistakes.	52	108	26	56.65*
29	I can learn English from my own mistakes.	15	71	100	60.22*
30	I think I am a competent student with good study habits.	18	84	84	46.84*
χ^2 (df = 36)					99.36*

*p < 0.05

Table 4.14 shows students' own rating of their perception on self-directed learning. Results showed that the current students' overall perceptions were significantly different at 0.05 level. With regard to the Chi-square values of most items except items 8 and 11, it can be concluded that the students' perceptions towards each statement were also significantly different. They seemed to agree that they did not have enough choice about how to study and CDs were their best resources for learning English.

Table 4.15: Analysis of students' perceptions towards self-directed learning

No.	Students' perceptions towards Self-directed learning	Mean	SD	Meaning
1	I can learn English by myself without teacher supervision.	1.69	0.60	Undecided
2	I can learn English by working alone at my own pace.	2.40	0.66	Undecided

No.	Students' perceptions towards Self-directed learning	Mean	SD	Meaning
3	I can choose my own way of learning English.	2.45	0.67	Undecided
4	I can choose my own learning situation suitable to my way of learning English.	2.49	0.61	Undecided
5	A big problem in most classes is that students have different levels.	2.65	0.63	Yes
6	If I had the right materials, I would prefer to spend some time studying alone.	2.24	0.73	Undecided
7	I don't have enough choice about what I study.	2.00	0.73	Undecided
8	I don't have enough choice about how I study.	1.95	0.77	Undecided
9	Besides language class, I always plan activities that give me a chance to use English.	2.03	0.76	Undecided
10	Besides language class, I always plan activities that give me a chance to learn English.	2.08	0.76	Undecided
11	CDs are good resources for me to learn English.	2.07	0.80	Undecided
12	Videos are good resources for me to learn English.	2.33	0.71	Undecided
13	Computers are good resources for me to learn English.	2.77	0.52	Yes
14	The library is a good resource for me to learn English.	2.17	0.73	Undecided
15	Self-Access Learning Center (SALC) is a good resource for me to learn English.	2.15	0.69	Undecided
16	I can set my own goals and objectives of learning.	2.41	0.59	Undecided
17	I can check whether I accomplished my goals and objectives of learning.	2.41	0.64	Undecided
18	I can figure out my special problems.	2.65	0.59	Yes
19	I can deal with my special problems.	2.24	0.64	Undecided
20	I can develop my own techniques to practice listening.	2.36	0.62	Undecided
21	I can develop my own techniques to practice speaking.	2.36	0.66	Undecided
22	I can develop my own techniques to practice reading.	2.56	0.60	Undecided
23	I can develop my own techniques to practice writing.	2.25	0.67	Undecided
24	I can develop my own techniques to improve my pronunciation.	2.32	0.65	Undecided

No.	Students' perceptions towards Self-directed learning	Mean	SD	Meaning
25	I can develop my own techniques to improve my grammar.	1.98	0.61	Undecided
26	I can develop my own techniques to improve my vocabulary.	2.36	0.65	Undecided
27	If I make a mistake, I always ask people to correct me.	2.38	0.72	Undecided
28	I can correct my own mistakes.	1.86	0.63	Undecided
29	I can learn English from my own mistakes.	2.46	0.64	Undecided
30	I think I am a competent student with good study habits.	2.35	0.65	Undecided

Table 4.15 reveals that the students had neutral (undecided) opinions about self-directed learning (27 items). There were only three items that the students strongly agreed with (items 5, 13, and 18). They thought that most classes were mixed-ability classes (mean = 2.65). Computers were their best resources for learning English (mean = 2.77). They could figure out their own problems (mean = 2.65). Also, the statement in item 30 revealed the extent the students were focused on learning goals. In addition, the students generally agreed with three statements (items 16, 17, and 29): (1) I can set my own goals and objectives of learning (mean = 2.41); (2) I can check whether I accomplished my goals and objectives of learning (mean = 2.41); and (3) I can learn English from my own mistakes (mean = 2.46). These statements revealed that the students were really aware of independent learning. They knew how to plan, perform and evaluate their own work. However, there were 3 items about which the students seemed be very uncertain: (1) I can learn without teacher supervision (mean = 1.69); (2) I can correct my own mistakes (mean = 1.86); and (3) I can develop my own techniques to improve my grammar (mean = 1.98). According to Littlewood (1996:428), two main components of autonomy are ability and willingness. Ability includes knowledge and skills for carrying out whatever choices seem most appropriate. Willingness includes motivation and confidence to take responsible for the choice required. It can be concluded that the results showed that the students had some degree of autonomy. They did possess some knowledge and skills needed for carrying out what they wanted to learn. However, they had quite low motivation to take responsible for their own learning and very low confidence in their own language abilities as well as autonomy.

Table 4.16: Summary of student performance on portfolio tasks

The students' portfolio scores on both product and process portfolios revealed their performance on portfolio tasks. The findings (see Appendix Q) were analyzed as follows:

No.	Product#1	Product#2	Process#1	Process#2
1	High	High	Average	Average
2	High	High	Average	Average
3	Average	Average	Average	Average
4	High	High	Average	Average
5	High	Average	Average	Average
6	Average	Average	Average	Average
7	High	Average	Average	Average
8	Average	Average	Average	Average
9	Average	Average	Low	Average
10	Average	Average	Low	Average
11	Average	High	Average	Low
12	High	High	High	High
13	Average	High	Average	Average
14	Average	Average	Low	Low
15	High	High	High	High
16	Average	Average	Average	Average
17	Average	Average	Average	Average
18	Average	Average	Average	High
19	Average	High	High	High
20	Average	Average	Average	Average

According to Table 4.16, most of the students' portfolio assignments (66.3%) were rated *average*. The second and third ranks were *high* and *low* respectively. Results from portfolio assessment confirmed those obtained from self-assessment checklists that the students acquired learner autonomy at some certain degree while they were taking the LNG 102 course.

Table 4.17: Comparison of means of total scores of product portfolios and process portfolios

	k	Mean	SD	N	r
Product #1 and 2	60	39.40	4.83	20	0.574*
Process #1 and 2	60	32.30	8.25	20	

* $p < 0.05$

Table 4.17 reveals that the students' performance on the product portfolios was markedly better than their performance on process portfolios. Moreover, the two mean scores were significantly correlated at the significance level at 0.05. The relationship of the two scores, however, was moderate ($r = 0.57$). These findings indicated that the students who had positive perceptions towards self-directed learning and learner autonomy were likely to work well on their assigned tasks. To estimate reliability of the designed rubrics for both types of portfolio, generalizability coefficients were calculated. Results showed that the generalizability coefficient of the analytic scale for product portfolio was 0.89 which is higher than the criteria set ($r > 0.75$). That of the holistic scale for process portfolio was 0.73 which is slightly lower than the criteria set ($r > 0.75$). However, Spearman-Brown prophecy formula, which is comparable to G-theory, can be used to estimate changes in several facets (e.g., test items or raters) to increase generalizability coefficient (Bachman, 1990:197). Henning (1987 cited in Hatch and Lazaraton, 1991: 536-537) suggests the following Spearman formula for determining the optimal number of items, or raters, to reach the reliability that has been set:

$$n = \frac{r_{ud}(1-r_u)}{r_u(1-r_{ud})}$$

n = the numbers of items that the test must be increased with similar items or raters

r_{ud} = the desired level of reliability

r_u = the present level of reliability or correlation between two raters or sets of items

To increase inter-rater reliability of the holistic scale for scoring process portfolios, the above formula was applied as follows:

$$n = \frac{0.75(1-0.73)}{0.73(1-0.75)}$$

$$n = 1$$

It can be concluded that in order to obtain data with a 0.75 reliability estimate, one more rater should be added. In other words, the scores on process portfolio will be more reliable if there are four raters marking the same pieces of portfolios. But, only three raters are sufficient for rating product portfolios. Also, additional training in rating procedure should be provided to raters to improve reliability.

Table 4.18: Ex-students' opinions about use and practice of English

Activities	Yes	No	Undecided
Using English for academic Purposes	100% (n = 5)	0% (n = 0)	0% (n = 0)
Using English for future careers	100% (n = 5)	0% (n = 0)	0% (n = 0)
Keeping on practicing English through self-study tasks	25% (n = 1)	75% (n = 4)	0% (n = 0)
Continue keeping Portfolios	0% (n = 0)	100% (n = 5)	0% (n = 0)
χ^2 (df = 3)	16.07*		
Contingency Coefficient	0.67		

*p < 0.05

Regarding Table 4.18, it was found that all of the subjects –the ex-students— thought that they could use English for academic studies and future careers. All of them also realized that self- study tasks were very important, but only one person kept on doing them after finishing their studies. He said: “I adapt self-study skills I have learnt in the LNG 102 course to practice my English, but I do not use any form like portfolios.” However, none of them reported that they still worked on portfolios. One student stated her reason for not doing it: “I know how important self-study is, but I’m too lazy to do it.”

The Chi-square test (*Fisher's Exact test*) was applied to investigate whether there was a difference of their opinions of the ex-students about their use and practice of English. With the χ^2 (0.05, df =3) =16.07, it can be concluded that the proportions

of attitudes of the ex-students were significantly different. There was, also, a moderate relationship between their opinions and responses (0.67) indicating that the two variables are moderately congruent (44%).

Student opinions about the evaluated course

Research question: Do the learners think the course is appropriate?

The data were obtained from the interviews with current students who took the LNG 102 course in semester 2, academic year 2006. The Chi-square test was employed to test whether the proportions of the students' response were different.

Table 4.19: Appropriateness of the LNG 102 course

Stakeholder	Opinions		
	Appropriate	Inappropriate	Undecided
Students	50% (n =9)	50% (n =9)	0% (n =0)
χ^2 (df = 1)	0.05		

Half of the students thought that the evaluated course was not appropriate and should be improved. The chi-square test was applied to determine difference in students' attitudes (i.e. how well they went together). With the χ^2 (0.05, df = 1), it can be concluded that the proportions of the students' responses were not significantly different.

Table 4.20: List of course elements the students thought should be improved

Course elements	N	%	Rank
Teaching method	5	27.8	1
Assessment criteria	4	22.2	2
Content	3	16.7	3
Amount of task	2	11.1	4
Teaching materials	2	11.1	4
Others	2	11.1	4
χ^2 (df = 5)	2.66		

The students thought that the first three elements of the course that needed improving were teaching methods, assessment criteria and course content respectively. They mentioned that the teachers used different types of teaching methods. Some teachers seemed to be more effective than the others. Some provided supplementary exercises to their own students that enabled them have advantages over the other students. One student said: "In spite of teaching the same course, the individual teachers teach each class differently. As a result, we have different assignments." The students also reported that they were confused with the assessment criteria. One said: "I want to know how the teacher masks each task. I worked very hard, but I got very low scores." Subjectivity in scoring was also raised as the most important issue. One student mentioned:

I don't like the assessment procedure. I don't know what criteria the teachers use in marking our assignments. Some teachers are tough graders. Some are not.

The course content is another element that students mentioned. They asked for more listening and speaking tasks. Some said they needed more training on grammar.

With the χ^2 (0.05, df = 5) = 2.66, it reveals that there was no difference in the proportions of the responses concerning course elements that needs improving.

Factors affecting students' learning outcomes

Research question: Is the student learning the result of instruction or extraneous factors?

The data were obtained from interviews with current students who were studying the LNG 102 course in the second semester of the academic year 2006, and ex-students, who had already passed that course.

Table 4.21: Students' opinions about the factors affecting their learning outcome

Stakeholder	Opinions		
	Improved	Not improved	Undecided
Students	67% (n=16)	33% (n=2)	0% (n=0)
χ^2 (df = 1)	10.89*		

*p < 0.05

The majority of the current students (67%) agreed that the LNG 102 course could help improve their English skills. The skill they improved most was reading followed by writing, listening, and speaking respectively. They claimed that they learnt a lot of new vocabulary and practised some grammar, especially while they were working on the resourcing and the portfolio tasks. One student said: "I needed to search information when doing the resourcing and the portfolio tasks; so I learnt a lot of new vocabulary." Another said: "We learnt some grammar when the teacher gave feedback on our portfolios and projects."

With the χ^2 (0.05, df = 1) = 10.89, it can be concluded that there was a significant difference in proportions of the responses.

Table 4.22: List of factors affecting students' learning outcome

Factors	N	%	Rank
In-class instruction	10	55.6%	1
Background knowledge	5	27.8%	2
Self-study	2	11.1%	3
Unidentified	1	5.6%	4
X^2 (df = 3)	10.89*		

*p < 0.05

Overall, all of the current students had positive opinions about the LNG 102 course. In terms of factors affecting their learning outcome, more than 50 % of the students thought that their learning was the result of in-class instruction. Some said it was due to their background knowledge or previous experiences. Only a few (10%) claimed that they learnt by themselves. With the χ^2 (0.05, df = 3) = 10.89, it can be

assumed that the frequencies in each cell were not equal. In other words, there was significantly difference in proportions of the responses.

All the findings from the study are summarized to determine the effectiveness of the LNG 102 course (see Table 4.22).

Table 4.22: Summary of the Findings

Evaluative Dimensions	Results	
	Criteria met	Criteria not met
1. Do the goals and objectives of the course meet the needs of the stakeholders?	√*	
2. Are the goals and objectives appropriate for The specified groups of students?	√	
3. Is the teaching method relevant to the prespecified objectives?	√	
4. Are the teachers skillful in task-based instruction?	√*	
5. Are the tasks related to the course objectives?	√	
6. Are the teaching materials relevant to the prespecified objectives?	√*	
7. Are the resources adequate?	√	
8. Are the assessment procedures appropriate to the prespecified objectives?	√	
9. Do the students make significant gains in their language abilities after taking this course?	√	
10. Do the students develop their autonomy in language learning during and after taking this course?	√*	
11. Do the learners think the course is appropriate?	√*	
12. Is the student learning the result of instruction or extraneous factors?	√*	

Note: The dimensions with an asterisk (*) shows that even though they met the criteria set, they did not show distinctively high scores.

Chapter summary

With regards to the context within which the curriculum is working, results from the interviews show that 50 % of the stakeholders thought that the goals and objectives of the LNG 102 course met the students' target needs. Results from the Chi-square test by Fisher's Exact test reveal that in general, the opinions on different groups of stake holders were not significantly different. It was only the audiences who had different views from the others. They reported that lack of needs analysis and evidence of students' effectiveness in using English caused them to be uncertain about their answers to this question. Also, results from the interviews show that majority of the stakeholders (69.2%) thought that the goals and objectives of the LNG 102 course were appropriate for specified groups of students (i.e. undergraduate KMUTT students). The Chi-square analysis using Fisher's Exact test showed that there was no significant difference in the stakeholders' opinions.

Concerning questions about the implementation of the curriculum, results from Chi-square test showed no significantly difference in the teaching methods of the three teachers participating in the study, except two teaching techniques: encouraging students to ask questions and having students to correct their own mistakes. In addition, results from classroom observation also revealed that two-thirds of the task-based teaching techniques were utilized in the 'real' classroom situations. However, some important techniques relevant to task-based teaching methodology were neglected, for example, describing the goals and outcomes of the task, and evaluate their own performance.

Besides, results from the classroom observation showed that generally, the English teachers were moderately skillful in task-based instruction. The Chi-square test revealed no significant difference in the observed teachers' performance. Additionally, results from the interviews reported that most of the English teachers (67%) thought that the tasks of the LNG 102 course were consistent with the course objectives, except for the note-taking from listening task. Results from the Chi-square test also showed no difference in their opinions.

Results from material evaluation showed that the two objectives that were covered in every sets of teaching materials were teaching cognitive strategies (100%) and teaching English for academic purposes (100%), followed by teaching critical thinking (88.9%) and teaching English for future careers (88.9%) in the same rank. Additionally, 7 out of 9 sets (77.7%) of the teaching materials for the LNG 102 course matched to the course objectives. The ones which perfectly-matched to the course objectives were those on *Presentation Skills*. The materials on *Introduction to Resourcing Task* should be revised.

Results from the interviews with English teachers and students revealed that everyone (100%) thought that the resource provided were sufficient. In regard to results from the interviews with English teachers and students, most of them (61.9%) thought the assessment procedures were appropriate to the prespecified objectives. The Chi-square test (Fisher's Exact test) revealed that the attitudes of the two groups of stakeholders were significant different at the 0.05 significance level. However, the problem of subjectivity in scoring was mostly raised by both parties.

Regarding student outcomes, results obtained from the achievement tests (pre- and post-tests) showed that the students made significant gains in their language abilities after taking this course. The students' gained scores were 10% higher than those they gained on the pretest. The students' scores on the pretest and the posttest were significantly different at 0.05 level ($t=.000, p < 0.05$) with a very large effect. Among the three parts of the achievement tests, students' highest gains were scores on note-taking and summary writing task.

Results from the Chi-square test revealed that students' overall perceptions towards self-directed learning and learner autonomy were significantly different at the 0.05 level. The current students' perceptions towards self-directed learning were neutral. The three top-rated statements were: (1) most class were mixed-ability classes, (2) computers were their best resources for learning English, and (3) they were able to figure out their own problems. This finding is quite consistent with the results from portfolio assessment showing that students' performance on portfolio task was moderate. Also, there was a significant relationship between students' performance on two types of portfolios: product and process.

Results from the interviews with the ex-students to find out whether they continue developing their autonomy in language learning, they expressed that all of them (100%) realized the importance of self-study tasks for both their current studies and future careers. However, only one of them kept on doing self-study mostly for his own pleasure. None of them still worked on portfolios for practising English.

Results from the interviews with the students showed the students' different views on its appropriateness. About 50% of them thought that it was appropriate. The rest thought that it needed improvement. The Chi-square test revealed that the proportions of their responses were not different.

Results from the interviews with the students concerning factors affecting their learning outcome revealed that two-thirds of the students accepted that their language abilities improved after taking the LNG 102 course. More than 50% of the students accepted that the top-ranked factor was in-class instruction. Background knowledge and self-study were the second and third factors respectively.